Environmental Impact Report

Gran Vista Specific Plan Project

State Clearinghouse No. 2022040440

MARCH 2023

EIR (EIR22-002); Specific Plan (SP21-0003); General Plan Amendment (GP21-0007); Rezone (R21-0003); Multi-Family Site Development Plan (MFSDP21-0001); Tentative Subdivision Map (TSM21-0003)

Prepared for

CITY OF SAN MARCOS
1 Civic Center Drive
San Marcos, California 92069
Contact: Norm Pedersen

Prepared by:

DUDEK
605 Third Street
Encinitas, California 92024
Contact: Vanessa Scheidel

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Acronyms and Abbreviations

Acronym/Abbreviation	Definition
AB	Assembly Bill
ADT	average daily traffic
AERMOD	American Meteorological Society/Environmental Protection Agency Regulatory Model
APE	area of potential effect
BMP	best management practice
CAAQS	California Ambient Air Quality Standards
CalARP	California Accidental Release Prevention Program
CalEEMod	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
CALGreen	California Green Building Standards
CalRecycle	California Department of Resources Recycling and Recovery
Caltrans	California Department of Transportation
CAP	Climate Action Plan
CARB	California Air Resources Board
CBC	California Building Code
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CESA	California Endangered Species
CFC	California Fire Code
CH4	methane
City	City of San Marcos
CNDDB	California Natural Diversity Database
CNEL	community noise equivalent level
CNPS	California Native Plant Society
CO	carbon monoxide
CO2	carbon dioxide
CO2e	carbon dioxide equivalent
County	San Diego County
CPUC	California Public Utilities Commission
CRHR	California Register of Historic Resources
CWA	Clean Water Act
dB	decibel
dBA	A-weighted decibel
DPM	diesel particulate matter
DWR	California Department of Water Resources
EIA	U.S. Energy Information Administration
EIR	environmental impact report
EISA	Energy Independence and Security Act of 2007
EO	Executive Order

Acronym/Abbreviation	Definition
EOP	Emergency Operations Plan
EPA	U.S. Environmental Protection Agency
FAA	Federal Aviation Administration
FEMA	Federal Emergency Management Agency
FESA	federal Endangered Species
FTA	Federal Transit Administration
GHG	greenhouse gas
GPA	General Plan Amendment
GWP	global warming potential
HA	Hydrologic Area
HCFC	hydrochlorofluorocarbon
HFC	hydrofluorocarbon
HMBP	Hazardous Materials Business Plan
HRA	health risk assessment
HSA	Hydrologic Subarea
HU	Hydrologic Unit
I	Interstate
IBC	International Building Code
IFC	International Fire Code
ips	inches per second
ISTEA	Intermodal Surface Transportation Efficiency Act of 1991
kWh	kilowatt-hours
Ldn	day–night average noise level
Leq	equivalent noise level over a given period
LID	low impact development
LOS	level of service
LTPP	Long-Term Procurement Plan
LUST	leaking underground storage tank
MBTA	Migratory Bird Treaty Act
MGD	million gallons per day
MHCP	multiple habitat conservation program
MM	Mitigation Measure
MMT	million metric tons
MRF	Meadowlark Water Reclamation Facility
MS4	municipal separate storm sewer system
MT	metric tons
MWD	Metropolitan Water District of Southern California
N2O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NCTD	North County Transit District
NHTSA	National Highway Traffic Safety Administration
NO2	nitrogen dioxide

Acronym/Abbreviation	Definition
NOP	notice of preparation
NOx	oxides of nitrogen
NPDES	National Pollution Discharge Elimination System
NPL	National Priorities List
NRHP	National Register of Historic Places
O3	ozone
PDF	Project Design Feature
PFC	perfluorocarbon
PFF	Public Facility Fee
Phase I ESA	Phase I Environmental Site Assessment
PM10	particulate matter with a diameter less than or equal to 10 microns
PM2.5	particulate matter with a diameter less than or equal to 2.5 microns
ppm	parts per million
PPV	peak particle velocity
PRC	California Public Resources Code
project	proposed Gran Vista Specific Plan Project
RAQS	Regional Air Quality Strategy
RCRA	Resource Conservation and Recovery Act
RFS	Renewable Fuel Standard
RHNA	Regional Housing Need Allocation
RHNP	Regional Housing Needs Plan
RPS	Renewables Portfolio Standard
RTP	Regional Transportation Plan
RWQCB	Regional Water Quality Control Board
SAFE	Safer Affordable Fuel-Efficient
SANDAG	San Diego Association of Governments
SB	Senate Bill
SCAQMD	South Coast Air Quality Management District
SCS	Sustainable Communities Strategy
SDAB	San Diego Air Basin
SDAB	San Diego Air Pollution Control District
SDAPCD	San Diego Air Pollution Control District
SDCWA	San Diego County Water Authority
SDG&E	San Diego Gas & Electric
SEMS	Superfund Enterprise Management System
sf	square feet
SF6	sulfur hexafluoride
SIP	state implementation plan
SMFD	San Marcos Fire Department
SMFPD	San Marcos Fire Protection District
SMMC	San Marcos Municipal Code
SMUSD	San Marcos Unified School District
SO2	sulfur dioxide

Acronym/Abbreviation	Definition
SoCalGas	Southern California Gas
SOx	sulfur oxides
SP/yr	service population per year
SPL	sound pressure level
SR	State Route
STC	sound transmission class
SWPPP	stormwater pollution prevention plan
SWQMP	stormwater quality management plan
SWRCB	State Water Resources Control Board
TAC	toxic air contaminant
TCR	tribal cultural resource
TDM	transportation demand management
TIA	transportation impact analysis
TMDL	total maximum daily load
TSD	Treatment, Storage, and Disposal
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
UST	underground storage tank
UWMP	Urban Water Management Plan
VMT	vehicle miles traveled
VOC	volatile organic compound
VWD	Vallecitos Water District
WQIP	water quality improvement plan
ZEV	zero-emission vehicle

1 Executive Summary

1.1 Project Summary

The Gran Vista Specific Plan Project (project) proposes to develop 120 three-story townhomes and associated amenities on an approximately 7.6-acre project site in the City of San Marcos (City). The project would include approximately 92,645 square feet of common recreation area and an average of 146 square feet of private open space per unit. Amenities on site would include tot lots and recreational areas, a dog park, a community garden, and a landscaped pedestrian path along the N Las Posas Road frontage. The proposed project also includes landscaping, bio-retention areas, and circulation improvements. The proposed project would have a density of approximately 15.7 dwelling units per acre.

The adjacent CVS parcel includes 99 existing parking spaces that would remain for the exclusive and ongoing use of CVS, which only requires 53 spaces to meet the City's Parking Ordinance for commercial uses. The project site currently contains an additional 38 parking spaces that would be shared between the project site and CVS. The project would introduce an additional 20 guest spaces to meet the City's requirement for multifamily dwelling guest parking of 1 space per 3 units (120 units/3 = 40 spaces total). As required, 2 of the 20 additional guest parking spaces would include electric vehicle (EV) charging stations. The project also includes 240 garage spaces, which would provide 2 garage spaces per unit and therefore would comply with the City's Parking Ordinance.

The project site is surrounded by existing development and located in the northwestern portion of the City, at the northwest corner of N Las Posas Road and W Mission Road, comprised of Assessor's Parcel Numbers 219-121-15-00 and 219-121-16-00. The project site is bounded by N Las Posas Road along the eastern boundary, W Mission Road along the southwest boundary, an existing CVS store to the south, and existing single-family residential development to the north and west, as well as to the east across N Las Posas Road. Nearby land uses in the vicinity of the project site include industrial and commercial uses, the Santa Fe Hills residential community to the north, and Palomar College approximately 0.2 miles east. The project location and project site boundary are shown on Figures 2-1 and 2-2.

The project proposes a General Plan Amendment, Rezone, Specific Plan, Tentative Map, and Site Development Plan. The General Plan Amendment and Rezone would change the General Plan designation and zoning from Commercial (C) to Specific Plan Area (SPA). The Specific Plan serves as both a policy document and a regulatory document for the systematic implementation of the policies and goals of the General Plan (the Specific Plan is included as Appendix M to this environmental impact report [EIR]). The Tentative Map presents specific lot configuration for the site. The Site Development Plan will configure the site for townhome dwelling units, street configuration, infrastructure, recreational open space, and private open space.

1.2 Summary of Significant Effects and Mitigation Measures That Reduce or Avoid The Significant Effects

Table 1-1 provides a summary of significant environmental impacts resulting from the project, mitigation measures identified to reduce and/or avoid the environmental effects, and a determination of the level of significance of each impact following implementation of the identified mitigation measures. Detailed analyses of significant environmental effects and mitigation are provided in Chapter 3 of this EIR.

The mitigation measures listed in Table 1-1 would reduce impacts related to biological resources, cultural resources, and tribal cultural resources to below a level of significance. Impacts related to traffic would remain significant and unavoidable after implementation of proposed mitigation.

Table 1-1. Summary of Significant Environmental Impacts

Impact	Mitigation Measures	Level of Significance After Mitigation
Biological Resources		
Impact BIO-1: There is potential for project construction activities to cause disturbances that would result in impacts to adjacent habitats.	Implementation of **MM-BIO-1**, refer to Section 3.3.6	Less than significant
Impact BIO-2: There is potential for construction activities to result in indirect impacts to nesting birds.	Implementation of **MM-BIO-2,** refer to Section 3.3.6	Less than significant
Cultural Resources		
Impact CR-1: Unknown archaeological resources may occur on the project site, and the proposed project has the potential to disturb such unidentified resources during project grading.	Implementation of **MM-CR-1** through **MM-CR-4,** refer to Section 3.4.6	Less than significant
Impact CR-2: There is a potential for project construction activities to disturb previously unidentified human remains on the project site.	Implementation of **MM-CR-1** through **MM-CR-4,** refer to Section 3.4.6	Less than significant
Tribal Cultural Resources		
Impact TCR-1: There is potential for impacts to previously unidentified tribal cultural resources	Implementation of **MM-CR-1** through **MM-CR-4,** refer to Section 3.4.6	Less than significant
Traffic		
Impact TRA-1: The project VMT per resident would exceed 16.07 VMT per resident (15% below regional average) threshold.	Implementation of **MM-TRA-1** through **MM-TRA-3,** refer to Section 3.15.6	Significant and Unavoidable

In addition to the measures outlined in Table 1-1, Project Design Feature (PDF) NOI-1 and PDF-NOI-2 outlined in Section 3.11, Noise, of this EIR are proposed to ensure noise during project construction remains less than significant.

1.3 Areas of Concern

A notice of preparation (NOP) was distributed on April 20, 2022, for a 30-day public review and comment period. Additionally, a public information meeting was held on May 12th, 2022, at 6:00 p.m. at the San Marcos City Hall in the Valley of Discovery Room located at 1 Civic Center Drive in San Marcos.

Public comments were received on the NOP for this EIR and reflect concern over a number of environmental issues (refer to Appendix A for the NOP and NOP comment letters). A total of 11 letters were received. Issues and concerns raised in the NOP comment letters include the following:

- Transportation: Scope of the study area, existing roadway congestion, trip generation and distribution, means of alternative transportation, project access, parking, cumulative trip generation from other projects, reducing vehicle miles traveled, pedestrian and friendly development design, pedestrian safety
- Noise: Existing noise from high traffic volumes
- Air quality: Air pollution from traffic
- Biological resources: Conversion of sensitive habitat, potential direct and indirect impacts to special-status species, and inclusion of appropriate mitigation
- Cultural and tribal cultural resources: Compliance with Assembly Bill 52 and Senate Bill 18, direct or indirect impacts to cultural resources, appropriate and adequate mitigation
- Greenhouse gas: Greenhouse gas emission reduction
- Land Use: Rezoning of the site, cumulative conversion of commercial zoning, compatibility with surround land uses/development, commercial uses that would be walkable/bikeable from surrounding residences, cumulative residential projects
- Population/housing: Cumulative residential projects
- Public utilities: Adequate water supply, cumulative water supply, general concern for utility capacity
- Public services: Potential impact to schools, impacts to police services
- Recreation: Cumulative impacts to recreational areas

1.4 Issues to be Resolved by the Decision-Making Body

An EIR is an informational document intended to inform the public agency decision makers and the public of the significant effects of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project.

The lead agency must respond to each significant effect identified in the EIR by making "Findings" for each significant effect. The issues to be resolved by the decision makers for the project include whether or how to mitigate the associated significant effects, including whether to implement a project alternative. The decision makers must determine whether any of the project alternatives would substantially reduce significant effects while still meeting key objectives of the project (see Section 2.1, Project Objectives).

1.5 Project Alternatives

Three alternatives are proposed to provide an understanding of how environmental effects could be reduced by varying the design and scope of the project. Table 1-2 provides a comparison of the impacts of project alternatives to the impacts of the proposed project. The alternatives outlined below are more fully discussed in Chapter 4 of this EIR.

1.5.1 No Project Alternative

Under the No Project Alternative, the proposed project would not be implemented and the project site would remain undeveloped in its existing condition. This alternative would eliminate all the significant impacts identified for the proposed project. Since the No Project Alternative would not provide any development, overall impacts would be reduced compared to the proposed project. However, certain benefits would not be realized under this alternative, including the provision of housing units as identified in the General Plan in an infill and transit area. As the No Project Alternative would not develop the site or allow for housing, this alternative would not fulfill any of the project objectives. This alternative is further described in Section 4.4.3 in Chapter 4 of this EIR.

1.5.2 Existing Land Use Designation Alternative

Under the Existing Land Use Designation Alternative, the project site would be developed per the City's General Plan as a Commercial (C) land use. The project site would be developed as previously processed with the existing CVS Conditional Use Permit. The Existing Land Use Designation Alternative would include 69,000 square feet of grocery store and gas station uses and 23,000 square feet of office space. This alternative would include 276 parking spaces. This alternative could be processed with a Conditional Use Permit and Site Development Plan and would not require a General Plan Amendment or Rezone of the site.

Other improvements, such as circulation, landscaping, and utility connections would occur as required. Off-site improvements beyond those required by mitigation measures would not occur under this alternative. No open space uses would occur on site.

1.5.3 Reduced Density Alternative

The Reduced Density Alternative would reduce the density on site in comparison to the project by changing the General Plan land use designation to Low Density Residential (LDR) and changing the zoning to Residential 1 (R-1-7.5), which "provides for low-density, single family detached homes that are suitable in massing and character or inclusion in single-family detached neighborhoods." Under this alternative, the site would accommodate approximately 33 single-family homes for a total residential density of 4.34 dwelling units per acre. The Reduced Density Alternative would not incorporate private useable open space area within the residential community since each single-family home would have a backyard. The access points and internal streets would be configured to fit the 33 single-family home layout. This alternative would utilize the entire 7.6-acre site.

1.5.4 Environmentally Superior Alternative

Table 1-2 provides a qualitative comparison of the impacts for each alternative compared to the proposed project. As shown in Table 1-2, the No Project Alternative would eliminate all of the significant impacts identified for the project. However, the No Project Alternative would not meet any of the project objectives. California Environmental Quality Act Guidelines Section 15126.6(e)(2) states that if the No Project Alternative is identified as the environmentally superior alternative, then an environmentally superior alternative should be identified among the other alternatives.

Among the other alternatives, not including the proposed project, the Reduced Density Alternative would be considered the environmentally superior alternative because it would potentially provide a reduced level of impact in some environmental analysis areas including air quality, greenhouse gas, and noise. However, such impacts under this alternative would still remain less than significant, similar to the proposed project. The Reduced Density Alternative would cover the same development footprint as the proposed project, but would result in

decreased unit count and population count on site. Because the Reduced Density Alternative would cover the same development footprint as the project, impacts to biological resources, cultural resources, geology and soils, and tribal cultural resources would remain the same as the proposed project, and mitigation measures would still be required to mitigate impacts to these environmental resources. The Reduced Density Alternative would not meet project objectives 1, 2, and 4. Furthermore, due to the project site being located in an urban setting and the limited options available to mitigate vehicle miles traveled impacts for residential projects, the Reduced Density Alternative would still result in a significant and unavoidable transportation impact due to vehicle miles traveled.

For the Existing Land Use Designation Alternative, although this alternative would be consistent with the existing land use and zoning designation for the site and would promote infill development on site, it would not fulfill any of the project objectives, would not reduce or avoid significant environmental impacts, would not aid the City in achieving its Regional Housing Needs Assessment allocation, and may result in new or more severe impacts related to air quality, greenhouse gas emissions, and hazards.

Table 1-2. Comparison of Impacts of Proposed Project and Alternatives

Environmental Topic	Proposed Project	No Project Alternative	Existing Land Use Designation Alternative	Reduced Density Alternative
Aesthetics	LTS	No Impact (Reduced)	LTS (Same)	LTS (Same)
Air Quality	LTS	No Impact (Reduced)	LTS (Same/Greater)	LTS (Same/Reduced)
Biological Resources	LTSM	No Impact (Reduced)	LTSM (Same/Greater)	LTSM (Same/Reduced)
Cultural Resources	LTSM	No Impact (Reduced)	LTSM (Same)	LTSM (Same/Reduced)
Energy	LTS	No Impact (Reduced)	LTS (Same/Greater)	LTS (Same)
Geology and Soils	LTS	No Impact (Reduced)	LTS (Same)	LTS (Same/Reduced)
Greenhouse Gas Emissions	LTS	No Impact (Reduced)	LTS (Same/Greater)	LTS (Same/Reduced)
Hazards and Hazardous Materials	LTS	No Impact (Reduced)	LTS (Same/Greater)	LTS (Same)
Hydrology and Water Quality	LTS	No Impact (Reduced)	LTS (Same)	LTS (Same/Reduced)
Land Use	LTS	No Impact (Reduced)	LTS (Same/Reduced)	LTS (Same)
Noise	LTS	No Impact (Reduced)	LTS (Same)	LTS (Same/Reduced)
Population and Housing	LTS	No Impact (Reduced)	LTS (Same/Reduced)	LTS (Same)
Public Services	LTS	No Impact (Reduced)	LTS (Same/Reduced)	LTS (Same)
Recreation	LTS	No Impact (Reduced)	LTS (Same/Reduced)	LTS (Same)
Transportation	SU	No Impact (Reduced)	SU (Same)	LTSM (Same)
Tribal Cultural Resources	LTSM	No Impact (Reduced)	LTSM (Same)	LTSM (Same/Reduced)
Utilities and Service Systems	LTS	No Impact (Reduced)	LTS (same)	LTS (Same)

Notes: LTS = Less Than Significant Impact; LTSM = Less Than Significant with Mitigation; SU = Significant and Unavoidable

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2 Project Description, Location, and Environmental Setting

As required by Section 15124 of the California Environmental Quality Act (CEQA) Guidelines, this section describes the proposed Gran Vista Specific Plan Project (project) and includes a statement of the project objectives; a general description of the proposed project's technical, economic, and environmental characteristics; and a summary of the discretionary actions required to approve the proposed project. The proposed project provides guidelines and standards for the implementation of future development of the project site.

2.1 Project Objectives

Section 15124(b) of the CEQA Guidelines requires that an environmental impact report (EIR) include a statement of the project objectives. The project objectives include the following:

1. Maximize residential densities, to the extent feasible, within proximity to major transit, education facilities, commercial uses, and trails to reduce reliance on automobiles and potentially minimize greenhouse gas emissions.
2. Create a highly connected and efficient system of sidewalks and pathways supported by pedestrian friendly architecture and landscaping to promote walkability and connect people to surrounding transit and destinations.
3. Design a vehicular circulation system that adequately accommodates traffic and minimizes traffic impacts in and around the project site.
4. Support the housing needs of the City of San Marcos (City) and the region by developing high-quality workforce housing that balances density with price-points and long-term maintenance costs, such that new homes remain financially attainable to entry-level home buyers.
5. Establish development standards and design guidelines that ensure distinctive architecture, landscaping, and recreational amenities that complement and enhance the existing surrounding neighborhood while providing a desirable living environment.
6. Identify a program for the long-term maintenance of the community to ensure all facilities are adequately maintained to City standards.
7. Finance or contribute a fair share of funding to all community services and infrastructure needed to support development proposed by the project to promote economic stability.

2.2 Project Description

The approximately 7.6-acre project site is located in the undeveloped northwest corner of the N Las Posas Road/ W Mission Road intersection in the City of San Marcos, California. The project site is bounded by N Las Posas Road along the eastern boundary, W Mission Road along the southwest boundary, an existing CVS Pharmacy to the south, and existing single-family residential development to the north and west, as well as to the east across N Las Posas Road.

The project proposes development of 120 multifamily residential dwelling units on 7.6 acres for an approximate total density of 15.8 dwelling units per acre. The project would include approximately 92,645 square feet of recreation area and an average of146 square feet of private open space per unit. Amenities on site would include

tot lots and recreational areas, a dog park, a community garden, and a landscaped pedestrian path along the N Las Posas Road frontage. The proposed project also includes landscaping, bio-retention areas, and circulation improvements. The project would include two points of entry, the first located off N Las Posas Road and the second located off W Mission Road (please refer to Figure 2-1, Conceptual Site Plan).

The project would include a variety of floorplans for the proposed townhomes. Floorplans include two- and three-bedroom units that vary in size from approximately 1,200 square feet to 1,800 square feet and include differing garage configurations. All townhomes would be three stories high. The number of townhomes per building would vary from 4 to 10. Proposed residential units are designed as entry-level market-rate housing with a range of unit sizes and price points in order to create opportunities for home ownership that would be attractive to varying income levels. The proposed townhomes would also provide for a transition between single-family homes to the north and high-density apartments to the southeast across W Mission Road. All proposed buildings would be equipped with photovoltaic panels (solar panels) on the rooftops to provide solar energy to the proposed homes, in accordance with current California Building Code.

Nearby land uses in the vicinity of the project site include industrial and commercial uses to the west and south on the other side of W Mission Road, the Santa Fe Hills residential community to the north, and Palomar College approximately 0.2 miles to the east. The project site is comprised of Assessor's Parcel Numbers 219-121-15-00 and 219-121-16-00. The project location and project site boundary are shown on Figures 2-2 and 2-3.

The project site is currently zoned for Commercial (C) use with an existing General Plan designation of Commercial. The project site is within the General Plan's College Area Neighborhood. The project proposes a General Plan Amendment and Rezone to change the land use designation to Specific Plan Area (SPA) (refer to Figures 2-4 through 2-7). Design of the project would be required to follow the design guidelines outlined in the Gran Vista Specific Plan, prepared for the project site (Appendix M). The design guidelines propose transitional architectural styles for the project to allow the project to blend in with the surrounding neighborhood. Landscape screening would be provided along the top of the drainage channel slope to preserve the privacy of adjacent neighbors.

The project site is designated as a High-Quality Transit Area due to its proximity to transit and other facilities and services that support alternatives to vehicle use. Palomar College, a public community college consisting of a 200-acre campus, is located east of the project site. Palomar College Transit Center, a North County Transit District hub, is located less than 0.25 miles from the project site. Palomar College Transit Center consists of a bus depot on the north side of W Mission Road, near the main entrance to Palomar College, and a train station on the south side of W Mission Road that serves the SPRINTER hybrid rail train. Rail service and bus transit service offered at the Transit Center provide local and regional connections to schools, employment, shopping, and entertainment options within the City, as well as San Diego and Riverside Counties. An existing bus turnout and stop are also located on W Mission Road in front of CVS. The Inland Rail Trail, a proposed 21-mile Class I bikeway, runs along the south side of W Mission Road and connects the Cities of Oceanside, Vista, San Marcos, and Escondido, as well us areas of unincorporated San Diego County.

2.2.1 Discretionary Actions Required of the City

The project proposes a General Plan Amendment, Zoning Amendment, Specific Plan, Tentative Map, and Site Development Plan. The General Plan Amendment and Rezone would change the General Plan designation and zoning from Commercial (C) to Specific Plan Area (SPA). The Specific Plan (Appendix M to this EIR) serves as both a policy document and a regulatory document for the systematic implementation of the policies and goals of the

General Plan. The Tentative Map presents specific lot configuration for the site. The Site Development Plan will configure the site for townhome dwelling units, street configuration, infrastructure, recreational open space, and private open space.

The requested project entitlements/discretionary actions by the City include the following:

- General Plan Amendment
- Zoning Amendment (Rezone)
- Specific Plan
- Tentative Subdivision Map
- Multi-Family Site Development Plan

2.2.2 Project Characteristics

Residential Uses

As described above, the project consists of a residential development of 120 townhomes and associated amenities on a currently vacant site. The townhomes are proposed to be located throughout the project site. The disturbance area associated with project construction would encompass most of the project site.

The number of townhomes per building would vary from 4 to 10. Floorplans include two- and three-bedroom units that vary in size from approximately 1,200 square feet to 1,800 square feet and include differing garage configurations as shown in Table 2-1. Each home would include private open space averaging 146 square feet per unit in the form of a patio and/or deck.

Amenities on the project site would include a community garden, dog park, tot lot/exercise station, central recreation area, children's play area, turf play area, and barbecue areas. A total of 92,645 square feet of common open space would be provided throughout the project site through these amenities.

Table 2-1. Conceptual Floor Plan Summary

Square Footage	Bedroom Count	Garage Configuration	Unit Count
1,213	2	2- Car, Side-by-Side	30
1,505	3	2- Car, Tandem	45
1,802	3	2- Car, Side-by-Side	45
		Total	**120**

Circulation and Access

The proposed project is located on a vacant parcel adjacent to W Mission Road to the south. W Mission Road is classified as an arterial four-lane roadway in the City of San Marcos General Plan Mobility Element (City of San Marcos 2012). W Mission Road is a four-lane roadway for its entire length from N Rancho Santa Fe Road to east of W San Marcos Boulevard. W Mission Road transitions to S Santa Fe Ave approximately 0.5 miles northwest of the project site. S Santa Fe Avenue transitions from a four-lane to a two-lane road after Bosstick Boulevard. The Inland Rail Trail Class I Bicycle trail runs along W Mission Road along the project site; additionally, W Mission Road

provides pedestrian facilities. N Las Posas Road borders the northeastern boundary of the project site. N Las Posas Road is currently classified as a six-lane roadway between the State Route 78 westbound ramps and Avenida Azul and a four-lane roadway between Avenida Azul and Avenida Leon. The posted speed limit is 45 mph. On-street parking is prohibited. Class II bike lanes are provided.

The proposed project would be accessible from two points, as shown on Figure 2-1, that are shared with the neighboring CVS parcel. The primary entry to the project site is via a driveway at the signalized intersection of N Las Posas Road and Palm Road and the secondary access point is from a driveway on W Mission Road that includes a left-turn in and right-in/right-out traffic movements. Both driveways have been improved with enhanced paving and landscaping. Shared use of these driveways is controlled through covenants, conditions, and restrictions that cover the project site and the CVS parcel.

Three external public roadways provide access to the project site. N Las Posas Road forms the project site's eastern boundary. Palm Road intersects with N Las Posas Road at the project's main entrance, which is signalized. W Mission Road forms a portion of the project site's southern boundary and provides additional access to the site.

The internal circulation system for the proposed development would consist of a combination of private drives and private drive aisles. Private drives are low-speed streets designed with a minimum curb-to-curb width of 24 feet. This width is adequate to accommodate vehicles, emergency vehicles, and other service vehicles. This cross section allows for two lanes of travel (one in each direction), as well as adequate back-up space where parking spaces are provided. Private drive aisles provide access to private garages, and are designed with a minimum width of 24 feet. A minimum dimension of 30 feet is required between garages to provide adequate back up for vehicles exiting private garages. Parking would be prohibited in private drive aisles.

The California Fire Code, along with the San Marcos Fire Department, administers the rules and regulations on fire access design. The proposed project would be designed to provide fire and emergency responders with suitable fire access roads, dimensions, and surfaces (Chapter 5, Sections 503.1 through 503.4 of the California Fire Code) and an adequate number of emergency rated entrances to the community (Appendix D, Section D106 of the California Fire Code).

Please refer to Section 3.15, Transportation, of this EIR for a detailed description and analysis of proposed access and circulation.

Parking

As described above, the adjacent CVS parcel includes 99 existing parking spaces that would remain for the exclusive and ongoing use of CVS, which only requires 53 spaces to meet the City's Parking Ordinance for commercial uses. The project site currently contains an additional 38 parking spaces that would be shared between the project site and CVS. The project would introduce an additional 20 guest spaces to meet the City's requirement for multifamily dwelling guest parking of 1 space per 3 units (120 units/3 = 40 spaces total). As required, 2 of the 20 additional guest parking spaces would include electric vehicle charging stations. The project also includes 240 garage spaces which would provide 2 garage spaces per unit and therefore would comply with the City's Parking Ordinance.

Guest parking would be evenly distributed throughout the project site, designed to occur along private drives, or divided into small landscaped parking courts to avoid the creation of large parking lots. The 2019 California Green Building Standards Code, Section 4.106.4.2.1, requires the installation of at least one electric vehicle space in common use parking. The project would install two electric vehicle charging stations in the common use parking. Additionally, bicycle racks would be provided throughout the project site. The project would comply with the Gran Vista Specific Plan required vehicle and bicycle parking ratios for development within the project site.

Pedestrian Circulation

The project design would incorporate a pedestrian circulation plan that establishes a connected circulation system of pathways supported by pedestrian friendly architecture and landscaping. Buildings on site would be arranged to create direct and frequent walkway connections throughout the site and to adjacent public sidewalks along N Las Posas Road and W Mission Road. Walkways would be designed to provide access in accordance with the Americans with Disability Act (ADA) and to promote walkability and connect people to surrounding transit and places.

Bicycle Connectivity

The project would provide shared use access for bicycles within the project's private drives that would connect to existing Class II bike lanes on N Las Posas Road and W Mission Road. These facilities also connect to the nearby Inland Rail Trail, located along the south side of W Mission Road. The Inland Rail Trail is a proposed 21-mile Class I bikeway that connects the Cities of Oceanside, Vista, San Marcos, and Escondido, as well as a portion of the unincorporated County of San Diego.

Transit Connection

Exiting public transit facilities are readily available within walking distance to the project site. An existing bus stop is located on W Mission Road, immediately in front of the CVS. Additionally, the Palomar College Transit Center is located less than 0.25 miles from the project site on W Mission Road, at the entrance to Palomar College.

Open Space

Total open space within the project site is approximately 154,743 square feet (3.55 acres), which includes private open space, common open space, and open space with grades of greater than 10%. As described above, each home would include private open space in the form of a patio and/or deck. Approximately 146 square feet of private open space would be provided per unit. Private open space would be directly accessible from the primary interior living space of the unit. Common open space on site includes usable open space areas with grades of less than 10%, which are dispersed throughout the project site amongst the proposed buildings. Common open space would provide for recreational spaces, consisting of approximately 92,645 square feet of open space designed with urban-style amenities such as tot lots, an off-leash dog space, outdoor exercise equipment, a community garden, barbecue areas, and space for a variety of outdoor games. Open space on site with grades of 10% or greater would make up approximately 44,548 square feet and would be located along the western boundary of the project site; this space would act as a buffer between the proposed development and existing single-family homes. This open space is not counted towards useable open space on site and includes slopes along the channel and adjacent to public roadways. These spaces would be landscaped, commonly owned, and maintained by the homeowners association.

All open space areas would be landscaped in accordance with the City's Water Efficient Landscape Standards. The proposed landscape palette for the project utilizes drought tolerant and California native plant palettes. No invasive plant species would be incorporated into site landscaping. All landscaping on site would be required to comply with the landscape plan provided in the Gran Vista Specific Plan (Appendix M).

Architecture

Architecture and landscaping would reflect the urban setting of the area. Buildings would be designed to engage and enhance an interconnected series of internal landscaped pathways and sidewalks along N Las Posas Road and W Mission Road to support convenient, safe, and efficient pedestrian movements that promote walkability and transit use. Development of the site would be designed to minimize walls and fences to support an open and walkable community.

Floorplans include two- and three-bedroom units that vary in size from approximately 1,200 square feet to 1,800 square feet and include differing garage configurations. All townhomes would be three stories high. The number of townhomes per building would vary from 4 to 10. The proposed townhomes would vary by building, incorporating different neutral colors and materials. Please refer to Figures 3-1A through 3-1D in Section 3.1, Aesthetics, for conceptual elevations of the proposed townhomes.

The project would provide a transition between the traditional architectural styles found in the single-family homes to the north, east, and west and the contemporary styles found in urban uses to the south. The architectural style proposed for the project would be selected based on historic and current popularity with homeowners in California. Architectural styles that may be incorporated into project design would be those such as Transitional Craftsman and Transitional Farmhouse, as outlined in Chapter 3 of the Gran Vista Specific Plan (Appendix M).

All proposed lighting on site would be designed to meet City standards and comply with design guidelines in the Gran Vista Specific Plan (Appendix M), while also enhancing the aesthetic of the community.

Public Utilities

Water Facilities

The property is within the Vallecitos Water District for both water and sewer service. Townhome residential sites in the Vallecitos Water District are typically served by on-site private water systems. Private systems consist of separate fire and domestic systems on site. Private fire systems typically supply on-site fire hydrants and building fire sprinkler systems and require a backflow preventer at the connection to the public water system.

The distribution of potable water to each home would be provided by a series of 8-inch public pipes and related infrastructure. The proposed water system would connect to an existing 8-inch pipe in N Las Posas Road. Pipes would be located within private drives and private drive aisles to create a loop system that serves the entire project site. Individual services to homes would be provided by a lateral from the main pipe to the water meter for each home.

A dedicated fire main would provide fire service to a series of new and existing fire hydrants and to the individual units for firefighting purposes. There are two existing fire hydrants on the project site that are already in service and would remain in place.

In accordance with current California Building Code, all buildings would be equipped with fire sprinklers and water conservation features such as water efficient faucets and shower heads and high-performance toilets. Homes would be Water Sense Certified to meet U.S. Environmental Protection Agency standards.

Irrigation for the site would tie into the proposed loop system. Irrigation of landscaping throughout the project site would be required to comply with the City's Water Efficient Landscape Ordinance and the City's Landscape Manual.

Sewer Facilities

There are currently no existing gravity sewer lines on the project site. Wastewater service to the project site would be provided by the Vallecitos Water District. A wastewater system would be incorporated into the project site design, which would include an 8-inch PVC sewer main to adequately service individual homes and community areas discharging wastewater. Pipes would be located underneath internal private drives and private drive aisles. The on-site system would collect wastewater and direct flows into an existing 15-inch pipe in N Las Posas Road.

Site Drainage

Water arrives on site via natural rainfall only. Rainfall runoff from the site typically only occurs during a significant storm event. Water that does accumulate on site generally drains in a southwestern direction to an existing 12-inch corrugated metal piperiser to a 12-inch corrugated metal pipe to meet up with the commercial site to the south of the project site. The total flow eventually discharges into Las Posas Creek south. Per Municipal Separate Storm Sewer System requirements, stormwater flows on site would be conveyed to biofiltration systems through storm drains throughout the project site, where water would be treated prior to being discharged. All surface runoff would be directed to catch basins in private drives and private drive aisles. Once captured, water would be conveyed through a series of 18- to 24-inch pipes to two underground vaults located below common open space areas. Within the underground vaults, water would be passed through a series of mechanical filters to remove pollutants prior to being discharged. Treated water would be conveyed through an existing outfall into the adjacent channel that forms the northwestern edge of the project site.

Storm drainage components would properly handle runoff to meet regulatory requirements and to ensure that post-development runoff quantifies and rates are similar to or less than predevelopment conditions. The project would incorporate appropriate design of on- and off-site drainage facilities and would prepare and implement a stormwater pollution prevention plan, stormwater quality management plan, and best management practices. Please refer to Section 3.17, Utilities and Service Systems, of this EIR, which describes and analyzes project utilities and service systems in detail.

Electrical, Gas, and Telecommunication

Electricity and natural gas would be provided by San Diego Gas & Electric. Electrical facilities throughout the City include a combination of aboveground and belowground electrical distribution lines and utilities structures. The City fiber-optic network is facilitated by a 72-strand fiber-optic line that runs on various streets throughout the City. All major arterials in the City have implemented fiber optics. The project would connect to an existing 12-kilovolt line in a vault on N Las Posas Road.

San Diego Gas & Electric maintains a 4-inch gas distribution system within N Las Posas Road and a 3-inch gas distribution system within W Mission Road. The gas lines would be extended to and through the project site through the same joint trench alignment as electric and telecommunication facilities. Use of gas for the project would be limited to gas cooktops and dryers.

Telecommunication would be provided through Cox Communications and AT&T. Telephone, cable, and internet connections would be available to each home.

Solid Waste

Solid waste collection and recycling services to the project would be provided by EDCO Waste & Recycling. Non-recyclable waste, including general trash and green materials, is collected and transported to the Sycamore Sanitary Landfill in Santee. Recyclable materials are transferred to the Escondido Resources Recovery Transfer Station for further processing. Residents of the City can dispose of household hazardous waste free of charge at the Vista Household Hazardous Waste Collection Facility at 1145 E Taylor Street or the Poway Household Hazardous Waste Collection Facility at 12325 Crosthwaite Circle. Service and facility fees for solid waste collection and recycling would be paid monthly by each resident.

Grading

The project site was previously graded for commercial uses and currently consists of two development pads. The project proposes to clear and grub remaining vegetation on site and alter grading to further define drainage courses and crate pads for each residential building. Proposed grading would generate a total volume of 9,335 cubic yards of cut and 9,335 cubic yards of fill, resulting in balanced earthwork that does not require any import or export of dirt. The proposed grading plan has been designed to maintain the current drainage pattern of the project site, with a high point at the north end of the site and a low point near the southwest corner of the site.

2.3 Environmental Setting

2.3.1 Existing Land Uses and Setting

The site is within the northwestern portion of the City of San Marcos, in the College Area Neighborhood. The project site is currently vacant and has no existing impervious areas. Topography within the project boundary is relatively flat with disturbed vegetation communities throughout. The site was previously graded into two separate development pads. Elevation of the site is approximately 575 feet above mean sea level with terrain sloping downward towards the southwest. Adjacent land uses include mixed commercial development to the south and southwest, residential uses to the northeast and northwest, and an undeveloped parcel located adjacent to the southwestern project boundary. The closest freeway is State Route 78 located approximately 0.4 miles south of the project site.

2.3.2 Existing Land Use and Zoning Designations

Existing General Plan Land Use Designation

As described above, the existing General Plan land use designation for the project site is Commercial. Development allowed under this land use designation must be consistent with those uses outlined in the City's Municipal Code and zoning ordinance, as well as the Commercial land use designation of the General Plan.

Existing Zoning Designation

The existing zoning of the project site is Commercial (C). The purpose of the Commercial land use designation is to "provide a business district for the full range of retail goods, services, and commercial centers that stabilize, maintain, and enhance the vitality of San Marcos in a supportive commercial setting adjacent to thoroughfares. Appropriate C Zone commercial uses will contribute to the range of service and destination retail, shopping centers, entertainment, and restaurant uses that generate a strong tax base" (City of San Marcos 2022). The Commercial zone is intended to implement and be consistent with the Commercial land use designation of the General Plan.

2.3.3 Regional Setting

The following provides a general description of various aspects of the proposed project's environmental setting. Additional descriptions of the proposed project's environmental setting as it relates to environmental issue areas can be found throughout Chapter 3 of this EIR.

Climate

The weather of the San Diego region, as in most of Southern California, is influenced by the Pacific Ocean and its semi-permanent high-pressure systems that result in dry, warm summers and mild, occasionally wet winters. The average summertime high temperature in the region is approximately 74°F. The average wintertime low temperature is approximately 49°F. Average precipitation in the local area is approximately 10 inches per year, with the bulk of precipitation falling between December and March.

Air Basin

The City and project site are within the San Diego Air Basin (SDAB) and under the jurisdiction of the San Diego Air Pollution Control District. The SDAB is 1 of 15 air basins that geographically divide the State of California. The SDAB lies in the southwest corner of California and comprises the entire San Diego region, covering 4,260 square miles; it is an area of high air pollution potential. The SDAB experiences warm summers, mild winters, infrequent rainfalls, light winds, and moderate humidity. This usually mild climatological pattern is interrupted infrequently by periods of extremely hot weather, winter storms, or Santa Ana winds.

The SDAB is currently classified as a federal nonattainment area for ozone and a state nonattainment area for particulate matter less with a diameter than or equal to 10 microns, particulate matter with a diameter less than or equal to 2.5 microns, and ozone.

Soils

Two soil series are mapped in the project boundary: Huerhuero loam (HrC), 2% to 9% slopes, and Placentia sandy loam (PeC), 2% to 9% slopes (USDA 2022). Soils within the project site have been degraded over time from disturbances such as grading and disking. As a result, the soils no longer maintain their native soil characteristics.

Terrain and Topography

The project site is characterized by undeveloped terrain and has no existing impervious areas, with the exception of a portion of the CVS parking lot. As previously described, topography within the project boundary is relatively flat with sparse vegetation throughout.

Watersheds and Hydrology

The project site occurs within the central portion of the San Marcos Creek Watershed (Hydrologic Unit Code 180703030503), within the greater boundaries of the San Marcos Creek-Frontal Gulf of Santa Catalina Parent Watershed (Hydrologic Unit Code 1807030305). The San Marcos Creek Watershed is approximately 53 square miles (34,246 acres) and consists of two major tributaries: San Marcos Creek and Encinitas Creek. These tributaries converge prior to discharging into the Pacific Ocean at Batiquitos Lagoon. The San Marcos Creek subwatershed consists of two tributaries: Las Posas Branch and Twin Oaks Branch of San Marcos Creek. These tributaries converge prior to discharging into Lake San Marcos south of the project site. The Las Posas Branch tributary to San Marcos Creek runs directly along the border of the western side of the project site.

Habitat

Within the project boundary, three vegetation communities and/or land covers were identified and categorized into non-native grassland, Diegan coastal sage scrub–*Baccharis*-dominated, and urban/developed. Please refer to Section 3.3, Biological Resources, of this EIR for a detailed analysis of biological resources.

2.3.4 Public Services

The following provides a general description of public services within the City that would serve the proposed project. Additional detail on public services can be found in Section 3.13, Public Services, of this EIR.

Fire Protection

The project site is located within the San Marcos Fire Protection District. The City of San Marcos Fire Department would provide fire protection and emergency medical services to development at the project. The City of San Marcos Fire Department provides structural fire protection and advanced life support-level emergency medical services within the City limits; unincorporated territory adjacent to the City's northern boundary; discontinuous, unincorporated areas between the City of San Marcos and the City of Escondido; and the community of Lake San Marcos. The City of San Marcos Fire Department operates four stations, the closest of which is located at 180 W Mission Road, approximately 1.7 miles from the project site.

Police Protection

Police protection services for the proposed project would be provided by the San Diego County Sheriff's Department under contract with the City. The project site would be served by the Sheriff's San Marcos Station, located at 182 Santar Place in the northeast quadrant of the City, approximately 3.2 miles from the project site.

Schools

The San Marcos Unified School District provides educational instruction for children residing within the City. Residents of the project would be served by the following schools:

- Paloma Elementary School, located at 660 Camino Magnifico, approximately 1 mile north of the project site
- San Marcos Middle School, located at 650 W Mission Road, approximately 1 mile east of the project site
- Mission Hills High School, located at 1 Mission Hills Court, approximately 3 miles from the project site

2.4 Intended Uses of the EIR

This EIR was prepared in accordance with CEQA (California Public Resources Code, Section 21000 et seq.), CEQA Guidelines (14 CCR 15000 et seq.), and the City's Environmental Review Procedures.

The EIR is an informational document that will provide the City's decision makers, public agencies, responsible and trustee agencies, and members of the public with information about (1) the potential for significant adverse environmental impacts that would result from the development of the proposed project, (2) possible ways to minimize any significant environmental impacts, and (3) feasible alternatives to the proposed project that would reduce or avoid significant impacts associated with the proposed project (California Public Resources Code,

Section 21002.1[a]; 14 CCR 15121[a]). Responsible and trustee agencies may use this EIR to fulfill their legal authority to issue permits for the proposed project. The analysis and findings in this EIR reflect the independent judgment of the City.

Lead Agency

As defined by CEQA Guidelines Section 15367, a lead agency is the public agency that has the principal responsibility for carrying out or approving a project. The City is the lead agency for the proposed project because it will perform the entitlement processing of the proposed project. As the designated lead agency, the City has assumed responsibility for preparing this EIR, and the analysis and findings in this EIR reflect the City's independent judgment. When deciding whether to approve the proposed project, the City will use the information in this EIR to consider potential impacts to the physical environment associated with the proposed project.

Responsible Agencies

As defined by CEQA Guidelines Section 15381, a responsible agency includes all public agencies other than the lead agency that have discretionary approval power over the project, such as the Vallecitos Water District. Subsequent to certification of the final EIR, agencies with permitting authority over all or portions of the proposed project will use the final EIR as the basis for their evaluation of environmental effects related to the proposed project that will culminate with the approval or denial of applicable permits.

Trustee Agencies

As defined by CEQA Guidelines Section 15386, a trustee agency is a public agency having jurisdiction by law over natural resources affected by a project that are held in trust for the people of the State of California. For example, trustee agencies include the California Department of Fish and Wildlife with regard to the fish and wildlife of the state, designated rare or endangered native plants, and game refuges, ecological reserves, and other areas administered by the California Department of Fish and Wildlife.

2.4.1 Scope of the EIR

For the proposed project, the City determined that a project EIR, as defined by CEQA Guidelines Section 15161, was required. The City made this determination based on the development proposed for the project site and the discretionary actions requested. This EIR evaluates all subject areas listed in Appendix G to the CEQA Guidelines with the exception of those subject areas determined to have no impact on the environment, which are addressed in Chapter 4 of this EIR. Chapter 3 of this EIR evaluates the following subject areas in detail: aesthetics, air quality, biological resources, cultural resources, energy, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, noise, population and housing, public services, recreation, transportation, tribal cultural resources, utilities and service systems, cumulative impacts, and growth-inducing impacts. Chapter 5 analyzes alternatives to the proposed project.

As a project EIR, this EIR is "focused primarily on the changes in the environment that would result from the project" (14 CCR 15161). In addition, as a project EIR, this EIR examines all phases of the proposed project including planning, construction, and operation (14 CCR 15161). Where environmental impacts have been determined to be significant, this EIR recommends mitigation measures directed at reducing or avoiding those significant environmental impacts. Alternatives to the proposed project are identified to evaluate whether there are ways to minimize or avoid significant impacts associated with the proposed project.

2.4.2 Notice of Preparation and Scoping

CEQA establishes mechanisms to inform the public and decision makers about the nature of the proposed project and the extent and types of impacts that the proposed project and alternatives to the proposed project would have on the environment should the proposed project or alternatives be implemented. Pursuant to Section 15082 of the CEQA Guidelines, the City circulated a notice of preparation (NOP) dated April 20, 2022, to interested agencies, organizations, and parties. The NOP was also sent to the State Clearinghouse at the California Office of Planning and Research. The State Clearinghouse assigned a state identification number (SCH No. 2022040440) to this EIR.

The NOP is intended to encourage interagency and public communication regarding the proposed action so that agencies, organizations, and individuals are afforded an opportunity to respond with specific comments and/or questions regarding the scope and content of the EIR. A public scoping meeting was held on May 12, 2022, at San Marcos City Hall (1 Civic Center Drive) to gather additional public input. The 30-day public scoping period ended on May 20, 2022. Comments received during the NOP public scoping period were considered part of the preparation of this EIR. The NOP and written comments are included in Appendix A to this EIR. Comments covered numerous topics, including transportation, noise, air quality, biological resources, cultural and tribal cultural resources, land use, population and housing, utilities, and public services. Public scoping comments regarding the proposed project's potential impact on the environment have been incorporated into the analysis in Chapters 3, 4, 5, and 6 of this EIR.

2.4.3 Draft EIR and Public Review

This draft EIR was prepared under the direction and supervision of the City. The draft EIR will be made available to members of the public, responsible agencies, and interested parties for a 45-day public review period in accordance with CEQA Guidelines Section 15105.

Public review of the Draft EIR is intended to focus "on the sufficiency of the document in identifying and analyzing the possible impacts on the environment and ways in which the significant effects of the project might be avoided or mitigated" (14 CCR 15204). The notice of completion of the draft EIR will be filed with the State Clearinghouse as required by CEQA Guidelines Section 15085. In addition, the notice of availability of the draft EIR will be distributed pursuant to CEQA Guidelines Section 15087. Interested parties may provide comments on the draft EIR in written form. This EIR and related technical appendices are available for review during the 45-day public review period at the following locations:

City of San Marcos Planning Division
1 Civic Center Drive
San Marcos, California 92069

San Diego County Library
San Marcos Branch
2 Civic Center Drive
San Marcos, California 92069

City of San Marcos website: https://www.san-marcos.net/departments/development-services/planning/environmental-review-sustainability/environmental-documents

Interested agencies and members of the public may submit written comments on the adequacy of the draft EIR to the City's Development Services Department at the address above, addressed to Norm Pedersen, Associate Planner, or emailed at npedersen@san-marcos.net. Comments on the draft EIR must be received by the close of business on the last day of the 45-day review period. Electronic filing and posting of the EIR would be in compliance with Assembly Bill 819, as applicable.

2.4.4 Final EIR Publication and Certification

Once the 45-day public review period has concluded, the City will review all public comments on the draft EIR and provide a written response to all written comments pertaining to environmental issues as part of the final EIR. The final EIR will include all written comments received during the public review period; responses to comments; and, if applicable, edits and errata made to the draft EIR. The City will then consider certification of the final EIR (14 CCR 15090). If the EIR is certified, the City may consider project approval (14 CCR 15092).

When deciding whether to approve the proposed project, the City will use the information provided in the final EIR to consider potential impacts to the physical environment. The City will also consider all written comments received on the draft EIR during the 45-day public review period in making its decision to certify the final EIR as complete and compliant with CEQA and in making its determination whether to approve or deny the proposed project. Environmental considerations, as well as economic and social factors, will be weighed by the City to determine the most appropriate course of action.

Prior to approving the proposed project, the City must make written findings and adopt a statement of overriding considerations with respect to any significant and unavoidable environmental effect identified in the draft EIR (14 CCR 15091, 15093). If the proposed project is approved, the City will file a notice of determination with the State Clearinghouse and San Diego County Clerk within 5 working days after project approval (14 CCR 15094.)

Subsequent to certification of the final EIR, agencies with permitting authority over all or portions of the proposed project may use the final EIR's evaluation of the proposed project's environmental effects in considering whether to approve or deny applicable permits.

2.4.5 Project Approvals and Permits

Consistent with the City's General Plan and San Marcos Municipal Code Zoning Ordinance Title 20, the proposed project requires certain entitlements be submitted, reviewed, and approved by the City. The requested entitlements include a General Plan Amendment and Rezone to change the General Plan designation and zoning from Commercial (C) to Specific Plan Area (SPA); a Tentative Subdivision Map, which will present specific lot configurations for the site; a Multi-Family Site Development Plan, will configure the site for townhome dwelling units, street configuration, infrastructure, recreational open space, and private open space; and a Specific Plan, which will be required to provide a comprehensive plan to ensure the efficient development of a new residential community within the Specific Plan Area. The City will use this EIR and associated documentation in its decision to approve or deny the required discretionary permits. The City may also use this EIR in its consideration of any future development proposal, together with any additional or supplemental information or CEQA analysis as may be required. Other responsible and/or trustee agencies can use this EIR and supporting documentation in their decision-making process to issue additional approvals. These additional approvals may include, but are not limited to, approval of sewer and water connections, approval of signage permits, and approval of biological resources mitigation.

2.5 Project Inconsistencies with Applicable Regional and General Plans

Throughout Chapter 3 of this EIR, the proposed project has been evaluated in relation to the applicable goals, policies, and objectives of the City's General Plan and San Marcos Municipal Code Zoning Ordinance Title 20 (Section 3.10, Land Use and Planning); San Diego Forward: The Regional Plan (Section 3.10); Regional Air Quality

Strategy (Section 3.2, Air Quality); San Diego Air Pollution Control District policies (Section 3.2); City's Climate Action Plan (Section 3.7, Greenhouse Gas Emissions); Regional Water Quality Control Board plans and permits (Section 3.9, Hydrology and Water Quality); the Multiple Habitat Conservation Program (Section 3.3, Biological Resources); Airport Land Use Compatibility Plans (Sections 3.8, Hazards and Hazardous Materials; Section 3.10; and Section 3.11, Noise); and various other applicable regional and local plans and policies.

As described previously, a General Plan Amendment and Rezone is proposed in order to change the designated land use and zoning for the site from Commercial (C) to Specific Plan Area (SPA), to allow for the proposed residential development of the project site. As discussed in Section 3.10 of the EIR, the proposed project would be consistent with the applicable goals of the various elements and overall vision of the City's General Plan, including the General Plan Housing Element.

2.6 List of Past, Present, and Reasonably Anticipated Future Projects in the Project Area

CEQA requires an EIR to analyze cumulative impacts. Section 15355 of the CEQA Guidelines defines cumulative impacts as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts." Section 15130 of the CEQA Guidelines provides guidance for analyzing significant cumulative impacts in an EIR. The discussion of cumulative impacts "need not provide as great detail as is provided for the effects attributable to the project alone," but instead is to be "be guided by standards of practicality and reasonableness" (14 CCR 15130[b]). The discussion should also focus only on significant effects resulting from the project's incremental effects and the effects of other projects. According to Section 15130(a)(1), "an EIR should not discuss impacts which do not result in part from the project evaluated in the EIR."

Cumulative impacts can result from the combined effect of past, present, and future projects located in proximity to the project under review. Therefore, it is important for a cumulative impacts analysis to be viewed over time and in conjunction with other related past, present, and reasonably foreseeable future developments whose impacts might compound or interrelate with those of the project under review.

According to Section 15130(b)(1) of the CEQA Guidelines, a cumulative impact analysis may be conducted and presented by either of two methods:

(A) a list of past, present, and probable activities producing related or cumulative impacts; or

(B) a summary of projections contained in an adopted general plan or related planning document, or in a prior environmental document that has been adopted or certified, which described or evaluated regional or area-wide conditions contributing to the cumulative impact.

With the exception of the air quality and greenhouse gas emissions impact analyses, the cumulative list approach has been used in this cumulative analysis, as discussed below. The cumulative impacts of air quality and greenhouse gas emissions have been evaluated using the summary of projections method because the geographic scope of such impacts are on an air basin and global scale.

An inventory of past, present, and reasonably foreseeable future projects within the vicinity of the project site is presented in Table 2-2 and Figure 2-8, Cumulative Projects.

Table 2-2. Cumulative Projects

No.	Status	Project Name/ Developer	Location	Description
City of San Marcos				
1	Under Construction	Block 3 Student Housing	NW corner of Campus Way and Barham Drive	342-bed student housing development, with a buildout year of 2022
2	Approved	Carmel Street Apartments	SW corner of Industrial St. and Carmel Street	170-unit multifamily affordable housing development, with a buildout year of 2023
3	Under Construction	Kaiser Permanente Plan	Craven Rd.	206-bed hospital, with a buildout year of 2023
4	Approved	Discovery Village North	Craven Rd.	Office/Commercial/Residential on 41 acres
5	Proposed	Main Square	SE corner of San Marcos Blvd. and McMahr Rd.	Mixed-use development with a 468-unit apartment complex and 44,007 sf of commercial space
6	Approved	San Elijo Hills	San Elijo Rd.	11,711 sf Commercial development with a buildout year of 2022
7	Approved	Pacific Commercial	NE corner of Grand Ave. and Pacific St.	122-room hotel, with a buildout year of 2022
8	Under Construction	Brookfield Residential	S Twin Oaks Valley Rd.	220-unit multifamily residential development, with a buildout year of 2021
9	Under Construction	San Marcos Highlands	North end of N Las Posas Rd.	187-unit single-family residential development, with a buildout year of 2023
10	Approved	Villa Serena	Richmar Ave. and Marcos St.	Demolishes 136 units and builds a 148-unit apartment complex, with a buildout year of 2023
11	Approved	Montiel Rd Partners	Montiel Rd.	8-unit single-family residential development, with a buildout year of 2022
12	Approved	Meadowlark Canyon LLC	San Marcos Blvd.	33-unit single-family residential development
13	Under Construction	Mariposa- Phase 1	Richmar Ave. and Los Olivos Dr.	Demolition of 40 units and construction of a 100-unit apartment development, with a buildout year of 2022
14	Approved	Mariposa- Phase 2	Richmar Ave. and Los Olivos Dr.	Demolition of 30 units and building of a 96-unit apartment development
15	Under Construction	Murai-Sab	N Las Posas Rd.	89-unit single-family residential with a buildout year of 2022
16	Approved	Pacifica San Marcos	S Rancho Santa Fe Rd. and Creek St.	Mixed-use development of 31-unit apartment complex and 4,375 sf commercial space with a buildout year of 2022

Table 2-2. Cumulative Projects

No.	Status	Project Name/ Developer	Location	Description
17	Under Construction	Discovery Village South	Future Discovery St.	220-unit single-family residential, with a buildout year of 2022
18	Approved	Breaker Real Estate	SE corner of Twin Oaks Valley Rd and Richmar Ave.	174-bed assisted living facility
19	Approved	Hall Land Company	Barham Dr., east of Woodland Pkwy.	151-unit multifamily condominium development
20	Under Construction	Carkel SM- Starbucks	SE corner of San Marcos Blvd. and Bent Ave.	Drive-thru restaurant with a buildout year of 2023
21	Approved	Southlake Park Phase 1	Twin Oaks Valley Rd., South of Village Dr.	Parking lot, fishing dock
22	Approved	MacDonald Group	San Marcos Blvd. (former Sears site)	Mixed-use development with 82-unit apartment complex and 5,000 sf of commercial space
23	Under Construction	Mission 316 West	Mission Rd. at Woodward St. (east side)	67-dwelling-unit multifamily condominium development with a buildout year of 2021
24	Proposed	Lanikai	Mission Rd. at Woodward St. (west side)	115-unit senior living complex
25	Approved	Artis Senior Housing	San Elijo Rd. at Paseo Plomo	64-bed assisted living facility
26	Under Construction	Sunrise	Barham Dr. (near east city limit)	192-dwelling-unit multi-family condominiums
27	Under Construction	Jump Ball LLC	W San Marcos Blvd. at Bent Ave.	Drive-thru restaurant
28	Proposed	Montiel Commercial	2355/2357 Montiel Rd.	32,971 sf office building
29	Under Construction	California Allstars	East side of Twin Oaks Valley Rd.	28,137 sf industrial building to be completed in 2022
30	Proposed	Budhi Hill Buddhist Center	Poinsettia Ave. south of Linda Vista Dr.	Development of a 36,501 sf. Fellowship Hall and 7,612 sf monk dormitory
31	Proposed	Mercy Hill and Marian Center	Borden Rd.	31,105 sf Christian center
32	Under Construction	Karl Strauss Brewery	Las Posas Rd. and Los Vallecitos Blvd.	10,528 sf tasting room, commercial kitchen, entertainment room within existing commercial building with a buildout year of 2023

Table 2-2. Cumulative Projects

No.	Status	Project Name/ Developer	Location	Description
33	Proposed	Kiddie Academy	Twin Oaks Valley Rd., northeast of Windy Way	11,430 sf preschool
34	Proposed	Edenpark	1601 San Elijo Rd.	Adaptive reuse of existing structures for recreation, sports, and related personal services, and related commercial uses with a buildout year of 2022
35	Under Construction	San Marcos Creek Phase 1 CIP - various numbers	Discovery St. (east–west segment), Bent Ave. to Discovery St. (north–south segment)	San Marcos Creek Phase 1 Infrastructure, Via Vera Cruz Bridge, Bent Avenue Bridge, Discovery Street widening, Levee construction, Promenade, and Creek Channel Wetland Restoration
36	Funded	CIP 88179	Smilax Rd./South Santa Fe Ave. intersection	Smilax Road/South Santa Fe Avenue intersection re-alignment
37	Under Construction	CIP 86002	San Marcos Blvd. at Discovery St. intersection	Intersection improvement 300 ft west and 920 ft east of intersection
38	Funded	PARK CIP	Rancho Tesoro Park Improvements – 2 acres of 41-acre park	City Park – Phase 2 Multi-Use Field and Parking Lot Improvements
39	Programmed	ST006	South side of San Marcos Blvd., 500 ft east of Acacia Dr.	San Marcos Blvd. Slope Stabilization Project
40	Approved	Pacific Grand Ventures	1.49-acre lot east of S Pacific at Seminole St.	26,156 sf industrial building
41	Proposed	Twin Oaks Valley Winery	1451 Mulberry Dr.	3,121 sf two-story winery and tasting room on a 4.23-acre lot
42	Proposed	Pacific Specific Plan	Northwest corner of S Las Posas Rd. and Linda Vista Dr.	449-unit multifamily residential development on 33.2 acres
43	Proposed	Paul Mayer-Santa Fe Las Floras LP	Northwest corner of S Santa Fe Ave. and Las Flores Dr.	50-unit residential apartment building and 117 parking spaces on 2.23 acres
44	Proposed	Water Mill Homes, Inc. (Manning Homes)	SW corner of Mulberry Dr. and Cox Rd.	9 single-family residential lots on a 10-acre property
45	Proposed	San Marcos Hospitality	SW corner of Montiel Rd. and Leora Ln.	Hotel with 107 rooms
46	Proposed	Lonnie Tavvaa – Arco	200 Las Posas Rd.	Gas station, convenience store, car wash

Table 2-2. Cumulative Projects

No.	Status	Project Name/ Developer	Location	Description
47	Proposed	Bennet Manning	South of Woodward St. at Killarney Terrace.	3 single-family residential lots
48	Proposed	SH North City, LLC	Discovery St. west of S Twin Oaks Valley Rd.	532 attached and 94 detached condo units (626 total units), master association community rec center, public and private trail systems that connect to future Knoll Park
49	Proposed	University District Specific Plan Amendment – UVSM, LLC	Generally between North City Dr., Carmel St., Campus Way, and S. Twin Oaks Valley Rd.	Mixed-use development with 557 residential units and associated commercial and office space
50	Approved	Hollandia Dairy	620 E Mission Rd.	Partial demolition and reconstruction of dairy facilities; 48,755 sf
51	Proposed	American Rentals	1030 Linda Vista Dr.	Equipment rental facility
52	Proposed	Hunter Industries	West terminus of Opal Dr.	67,657 sf office building
53	Proposed	Hughes SMCC, LLC	NE corner of Pacific St., approximately 750 ft south of Linda Vista Dr.	67,410 sf industrial building
54	Proposed	Marcos Specific Plan	SW corner of Grand Ave. and Linda Vista Dr.	Horizontal mixed-use project with 102 residential units and 63,641 sf of commercial space and 8 live/work units.

Notes: NW = northwest; SW = southwest; Rd. = Road; SE = southeast; Blvd. = Boulevard; sf = square feet; NE = northeast; Ave. = Avenue; St. = Street; Dr. = Drive; Pkwy = Parkway; Ln. = Lane.



SOURCE: SANGIS 2020, 2021; GMP 2021

DUDEK

0 75 150 Feet

FIGURE 2-1

Conceptual Site Plan

Gran Vista Specific Plan Project EIR

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SOURCE: SanGIS 2020

DUDEK

0 1,000 2,000 Feet

FIGURE 2-2

Project Location

Gran Vista Specific Plan Project EIR

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SOURCE: SANGIS 2020, 2021; GMP 2021

DUDEK

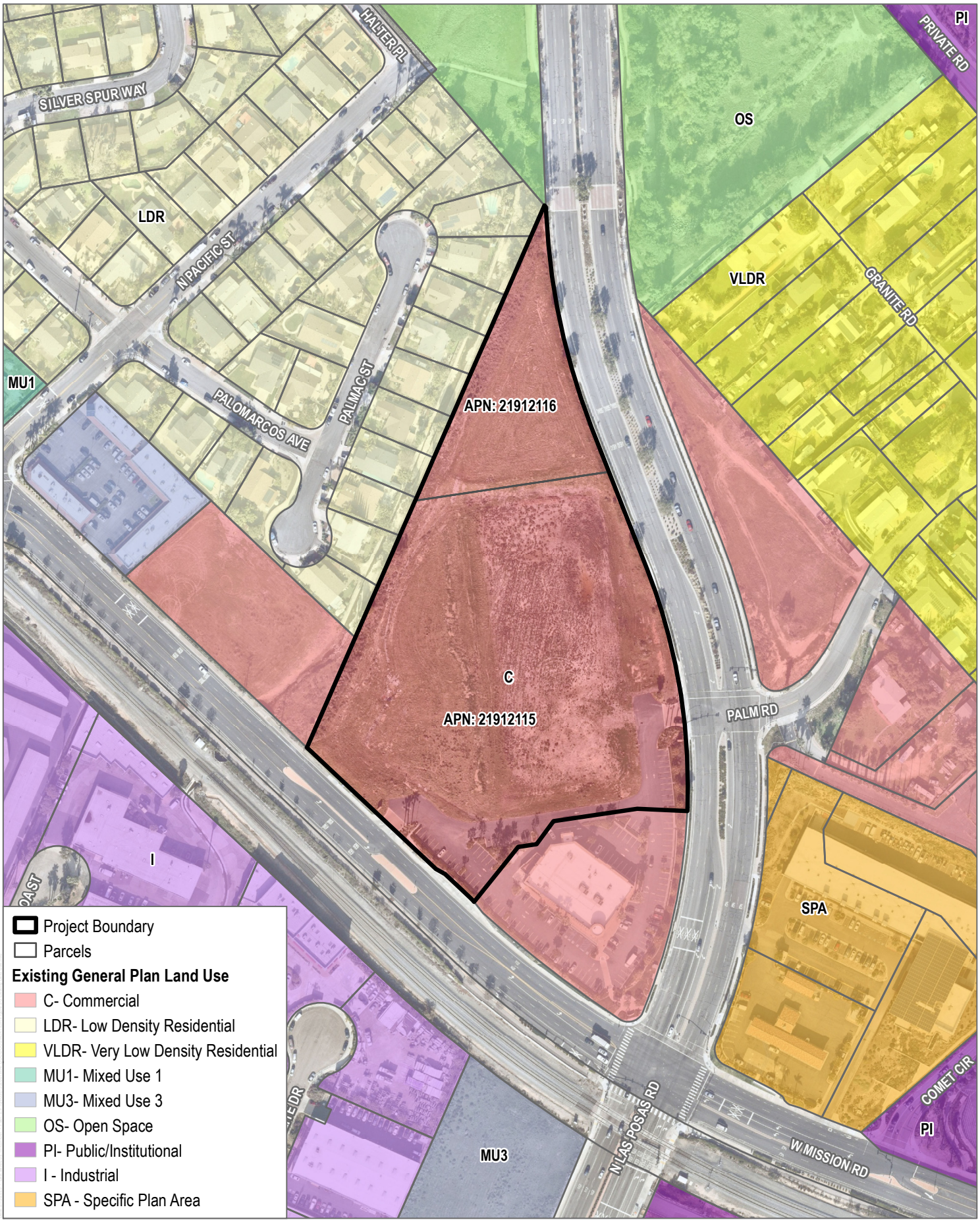
0 75 150 Feet

FIGURE 2-3

Project Site

Gran Vista Specific Plan Project EIR

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SOURCE: SANGIS 2020, 2021; City of San Marcos 2022

DUDEK

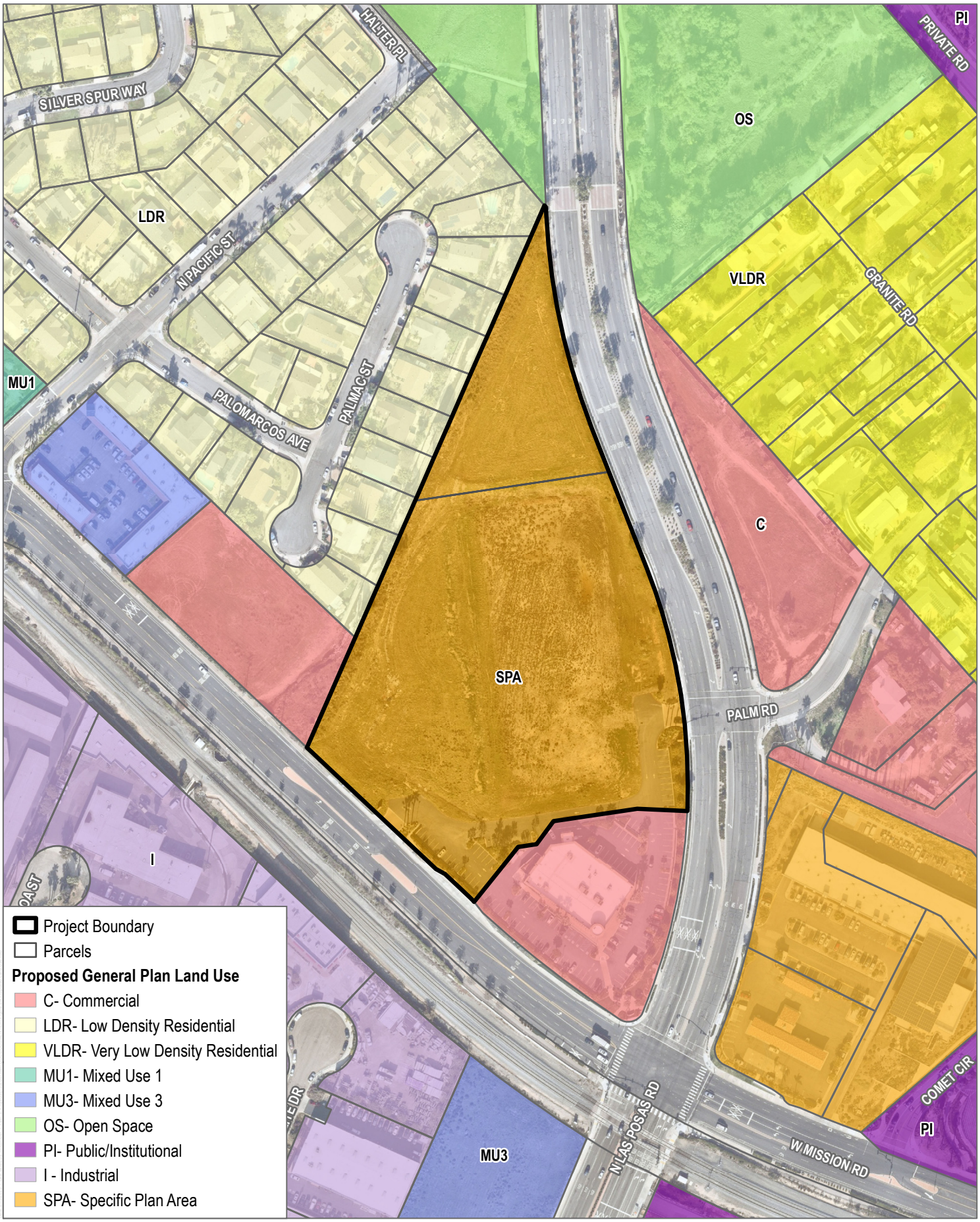
0 100 200 Feet

FIGURE 2-4

Existing General Plan Land Use

Gran Vista Specific Plan Project EIR

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SOURCE: SANGIS 2020, 2021; City of San Marcos 2022

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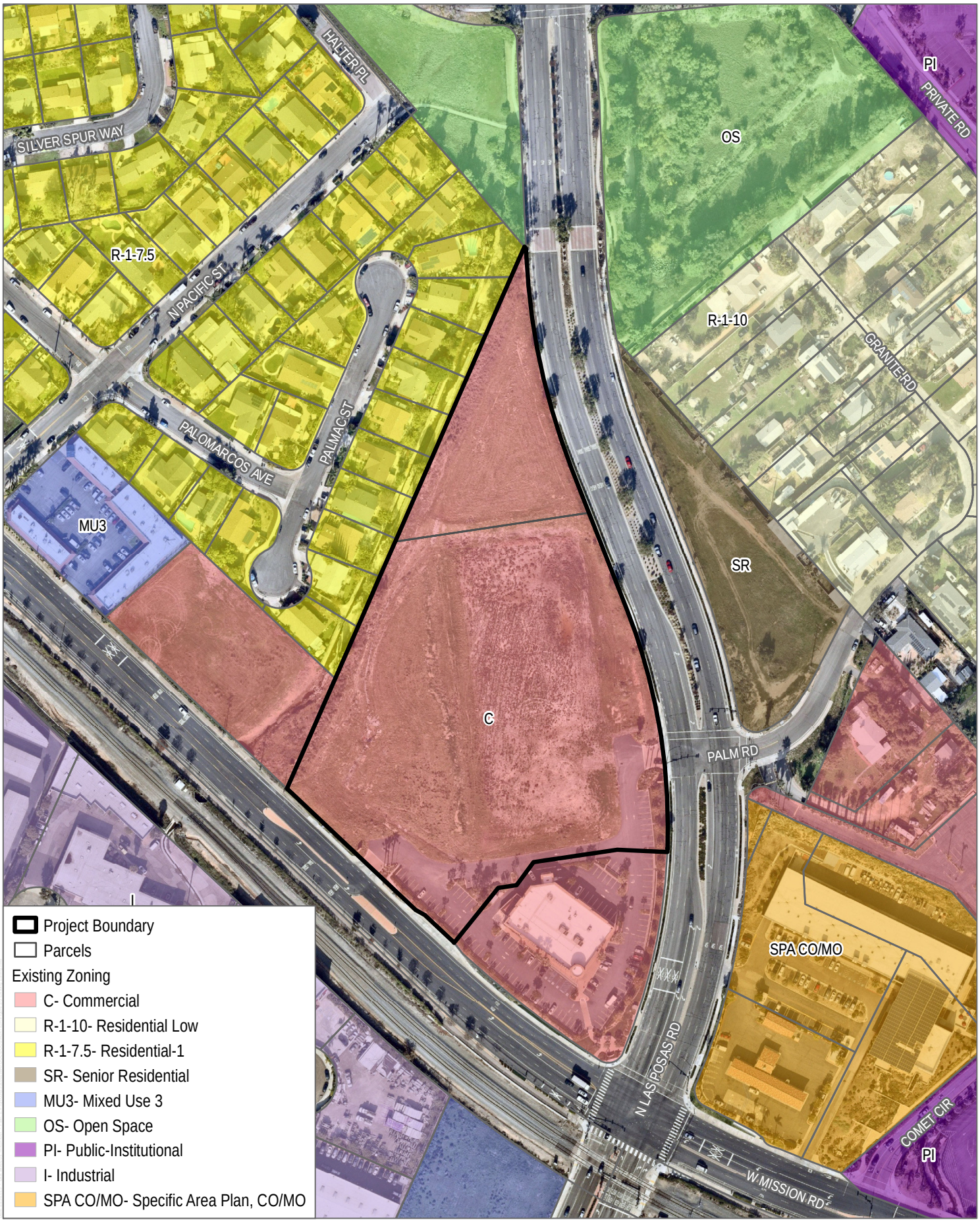
0 100 200 Feet

FIGURE 2-5

Proposed General Plan Land Use

Gran Vista Specific Plan Project EIR

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SOURCE: SANGIS 2020, 2021; City of San Marcos 2022

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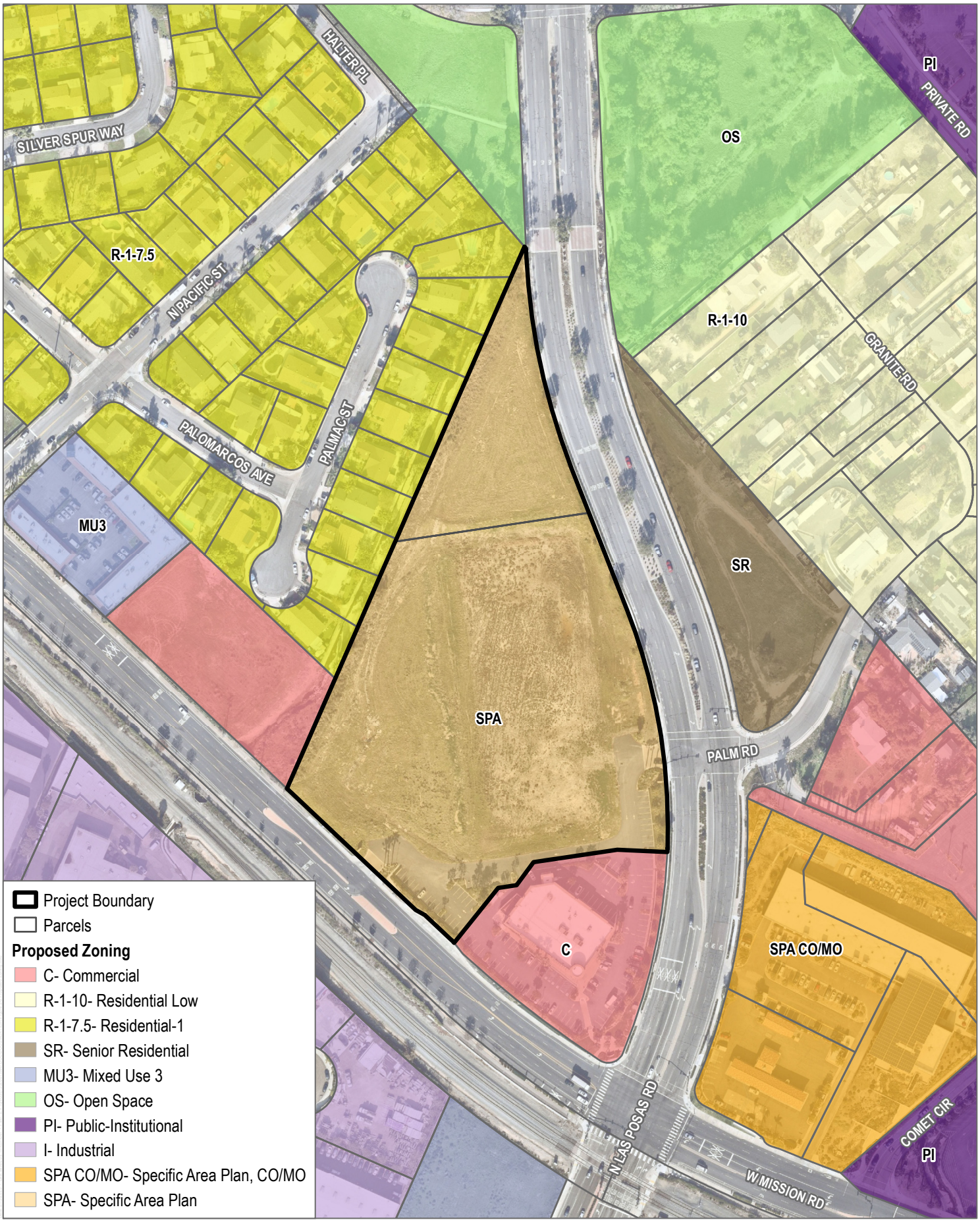
0 100 200 Feet

FIGURE 2-6

Existing Zoning

Gran Vista Specific Plan Project EIR

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SOURCE: SANGIS 2020, 2021; City of San Marcos 2022

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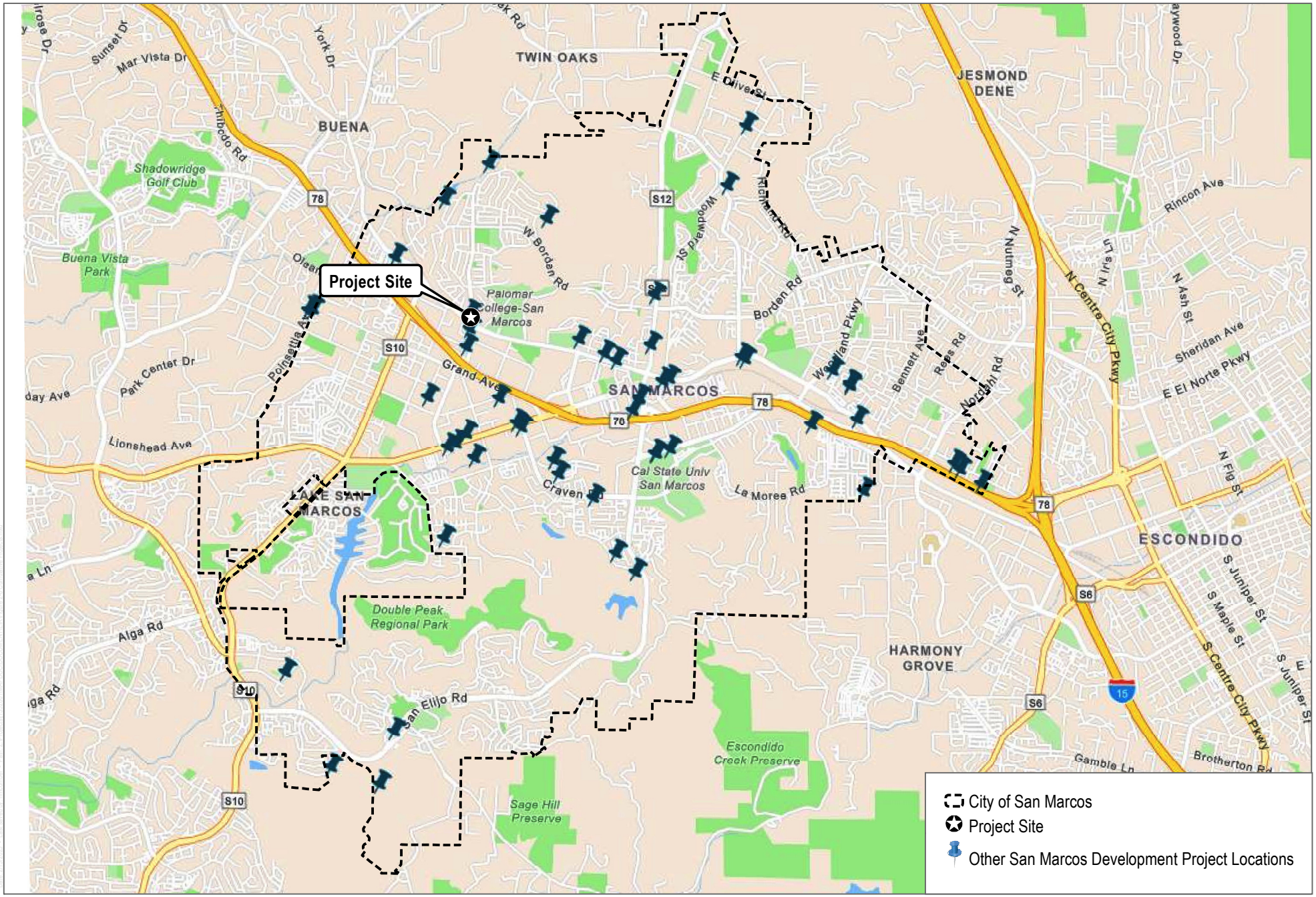
0 100 200 Feet

FIGURE 2-7

Proposed Zoning

Gran Vista Specific Plan Project EIR

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SOURCE: SANGIS 2020, 2021; City of San Marcos 2022

DUDEK

0 2,950 5,900 Feet

FIGURE 2-8

Cumulative Projects

Gran Vista Specific Plan Project EIR

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3 Environmental Analysis

3.1 Aesthetics

This section describes the existing visual setting of the proposed Gran Vista Specific Plan Project (project) and vicinity, identifies associated regulatory requirements, and evaluates potential impacts related to implementation of the proposed project.

Table 3.1-1 summarizes the project- and cumulative-level aesthetics impacts, by threshold.

Table 3.1-1. Aesthetics Summary of Impacts

Threshold of Significance	Project-Level Impact	Cumulative-Level Impact	Significance Determination
No. 1: Have a substantial adverse impact on a scenic vista.	Less than Significant	Less than Significant	Less than Significant
No. 2: Substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway.	Less than Significant	Less than Significant	Less than Significant
No. 3: In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	Less than Significant	Less than Significant	Less than Significant
No. 4: Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.	Less than Significant	Less than Significant	Less than Significant

3.1.1 Existing Conditions

Scenic Highways

According to the California Department of Transportation's California Scenic Highway System Map, the project site is not located adjacent to, or in the vicinity of, a designated state scenic highway (Caltrans 2018). The nearest officially designated state scenic highway is State Route (SR) 78. SR-78 is a designated state scenic highway from the west boundary to the east boundary of Anza-Borrego Desert State Park. SR-78 is located approximately 0.4 miles southwest of the project site; however, the portion designated as a state scenic highway begins approximately 43 miles east of the project site. The project site is located approximately 35 miles west of the closest point of this eligible state scenic highway. The nearest eligible state scenic highway is Interstate (I) 5. I-5 is located approximately 7.7 miles west of the project site.

At a local level, the City of San Marcos (City) has designated SR-78 as a view corridor for its unobstructed visual passageway. The highway corridor provides views of the Merriam Mountains, Mt. Whitney (located in San Diego County), Double Peak, California State University San Marcos, and Palomar Community College. Views of the project site from SR-78 are obscured from the view of motorists due to existing commercial developments and tall vegetation north of the highway.

Scenic Vista

A scenic vista is typically defined as a panoramic view or vista from an identified view/vista point, public road, public trail, public recreational area, or scenic highway. Potential scenic views from private properties are not under consideration in this analysis, as it is not required by the City. The City of San Marcos General Plan (General Plan) does not identify any designated scenic vistas; however, the General Plan more generally aims to protect the City's scenic resources such as the San Marcos, Merriam, and Double Peak Mountains; creek corridors; mature trees; rock outcroppings; and ocean views (City of San Marcos 2012). The project site is in an urban part of the City, surrounded by existing development. Potential vantage points in the City include Double Peak, Mt. Whitney (located in San Diego County), and Franks Peak. There is a potential for the project site to be visible from the Mt. Whitney peak; however, this peak is accessible only by a private road and peak access is prohibited to the public. The Franks Peak summit is accessible by various public recreational trails, which could serve as potential vantage points of the project site. Double Peak is a prominent landform with long and broad views located approximately 3 miles southeast of the project site that will also have potential views of the project site.

Visual Character

The following is a description of the existing visual characteristics and quality of the project site and surroundings.

Project Site

The 7.6-acre project site is an undeveloped lot located in the northwestern portion of the City at the northwest corner of N Las Posas Road and W Mission Road. A CVS Pharmacy is located directly adjacent to the project site to the southeast. Commercial uses are adjacent to the site's southern and western boundaries. Single-family residences are located to the north and west and to the east across N Las Posas Road. The project location and project site boundary are shown on Figures 2-1 and 2-2 in Chapter 2, Project Description. The project site is immediately visible from adjacent streets and surrounding land uses.

The undeveloped project site reflects a history of disturbance. The project site was previously rough graded during construction of the adjacent CVS. Additionally, the project site has been previously used as overflow parking for Palomar College. Existing vegetation on site is disturbed by an abundance of invasive and weedy plant species, and unpaved roads crossing the project site are visible on historic aerials since 1980 (Appendix F, Phase 1 Environmental Site Assessment). Vegetation on the project site consists of a few trees along the drainage channel and N Las Posas Road; grasses and small shrubs are disbursed throughout the site. The project site is relatively flat and the elevation is approximately 575 feet above mean sea level. As described in the Biological Technical Report (Appendix C), three vegetation communities or habitat types occur within the project site, including wild oats grassland, Diegan coastal sage scrub, and urban/developed land.

Surrounding Area

The project site is immediately bordered by N Las Posas Road to the north/northeast and W Mission Road to the south/southwest. The project site is surrounded by a CVS Pharmacy located directly south of the project site, a vacant lot and single-family residences to the west, single-family residences along the northwest project site boundary, single-family residences and a vacant lot to the east across N Las Posas Road, and light industrial and commercial uses further southwest and southeast across W Mission Road and N Las Posas Road. The project site is located in an urban setting and is surrounded by existing development on all sides. As shown in Figure 2-3, existing land use designations surrounding the project site include Commercial (C) to the west, south, and east

across N Las Posas Road. Open Space (OS) land use designations are located to the north, Low Density Residential (LDR) is located to the northwest, Very Low Density Residential (VLDR) is located further to the northeast, Specific Plan Area (SPA) is located to the southeast, and Industrial (I) uses are located to the southwest across W Mission Road. The closest freeway is SR-78 located approximately 0.4 miles south of the project site.

Existing Light and Glare Conditions

The project site is currently undeveloped and lighting on the project site is limited to parking lot and building façade lighting from the adjacent CVS building. Additionally, the project site does not contain any reflective surfaces that would act as sources of glare. Commercial, industrial, and residential developments surrounding the project site contain sources of lighting typical of these land uses. Sources of nighttime lighting in this area could occur from exterior building lighting, street lighting, lighting in parking lots, and vehicles traveling along the adjacent roadways. No sources of substantial glare are present in this area.

3.1.2 Regulatory Setting

Federal

There are no federal codes, policies, or regulations regarding aesthetics that would apply to the proposed project.

State

California Public Resources Code Section 20199

California Public Resources Code (PRC), Section 20199(d)(1), stipulates that "aesthetic and parking impacts of a residential, mixed-use residential, or employment center project on an infill site within a transit priority area shall not be considered significant impacts on the environment." The proposed project would qualify as a residential project on an infill site within a transit priority area. This is further addressed in Section 3.1.4, Project Impact Analysis.

California Scenic Highway Program

The California State Legislature created the California Scenic Highway Program in 1963 with the intent "to protect and enhance the natural scenic beauty of California highways and adjacent corridors, through special conservation treatment." The state laws that govern the Scenic Highway Program are Sections 260 through 263 of the California Streets and Highways Code. A highway may be designated scenic based on the natural landscape visible by travelers, the scenic quality of the landscape, and the extent to which development intrudes upon the views of the highway. The Scenic Highway Program includes both officially designated scenic highways and highways that are eligible for designation. A highway may be designated as scenic based on aesthetic quality of viewable landscape, extent of views upon the natural landscape, and the degree to which development impedes these views. It is the responsibility of local jurisdictions to apply for scenic highway approval, which requires the adoption of a Corridor Protection Program. There are no state-designated scenic highways in the vicinity of the project site.

Local

City of San Marcos General Plan

The Conservation and Open Space Element of the City's General Plan identifies one goal and associated policies to protect natural resources that have scenic value. Landforms such as the mountain ranges in the northern and southern portions of the City contribute to its scenic corridors. The following goal and policies pertain to aesthetics and visual quality (City of San Marcos 2012):

Goal COS-3: Protect natural topography to preserve and enhance the natural beauty of San Marcos.

Policy COS-3.1: Preserve scenic resources, including prominent landforms such as Double Peak, Owens Peak, San Marcos Mountains, Merriam Mountains, Cerro de Las Posas, Franks Peak, and canyon areas through conservation and management policies.

Policy COS-3.2: Encourage and maintain high-quality architectural and landscaping designs that enhance or complement the hillsides, ridgelines, canyons, and view corridors that comprise the visual character in San Marcos.

Policy COS-3.3: Continue to work with new development and redevelopment project applicants in designing land use plans that respect the topography, landforms, view corridors, wildlife corridors, and open space that exists.

Policy COS-3.4: Evaluate potential impacts to visual and aesthetic resources, including the potential to create new light sources, while still maintaining and being sensitive to rural lighting standards.

The proposed project's consistency with applicable General Plan goals and policies is discussed in Section 3.10, Land Use and Planning. As detailed in Section 3.1.4, the project is consistent with the applicable goals and policies pertaining to aesthetics.

San Marcos Municipal Code Title 20, Zoning Ordinance

The provisions of Title 20 of the San Marcos Municipal Code are referred to as the Zoning Ordinance. The San Marcos Municipal Code Zoning Ordinance is the primary implementation tool for the policies of the General Plan. The Zoning Ordinance provides more detailed direction related to design and development standards; permitted, conditionally permitted, and prohibited uses; and other regulations such as lighting and sign regulations. The land uses specified in the Zoning Ordinance are based upon and consistent with the land use policies set forth in the General Plan. Specifically, the ordinance contains building design, setbacks, lighting, and signage standards, as well as open space requirements, for development to protect open space and ambient light levels in the City. Lighting standards in the ordinance require energy-efficient lighting that limits light and glare for private projects, with exceptions for specialized streetscape lighting. Private developments are required to submit lighting plans to ensure consistency with the dark sky needs of the region (City of San Marcos 2022).

Title 20, Section 20.300.080, Site Planning and General Development Standards

The City's Street Lighting Standards and Specifications describes the lighting and glare standards for the City. These standards require lighting to be directed downward and limit the type and spacing of lighting to maintain reasonable lighting levels that do not contribute to light pollution. The City uses International Dark Sky Association thresholds to inform its own testing, leading to a policy that allows for the use of energy-efficient lighting sources that include, but are not limited to, LED and induction lighting technologies (City of San Marcos 2022).

Title 20, Chapter 20.260, Ridgeline Protection and Management Overlay Zone

The City adopted a Ridgeline Protection and Management Overlay Zone in November 2008, set forth in Ordinance 2008-1314, to minimize visual impacts to important ridgelines. These guiding principles are in place to protect natural viewsheds, minimize physical impacts to ridgelines, and establish innovative site and architectural design standards. The ordinance identifies primary and secondary ridgelines within the City, plus buffer zones, or Ridgeline Overlay Zones, surrounding these ridgelines (City of San Marcos 2022). No primary or secondary ridgelines are located within or adjacent to the project site; the nearest ridgeline is a secondary ridgeline located approximately 1 mile northeast of the project site. The nearest primary ridgeline is located approximately 1.15 miles northeast of the project site.

3.1.3 Thresholds of Significance

The significance criteria used to evaluate the project impacts to aesthetics are based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines. According to Appendix G of the CEQA Guidelines, a significant impact related to aesthetics would occur if the project would:

- **Threshold No. 1:** Have a substantial adverse effect on a scenic vista.
- **Threshold No. 2:** Substantially damage scenic resources, including, but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway.
- **Threshold No. 3:** In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings. (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?
- **Threshold No. 4:** Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

3.1.4 Project Impact Analysis

As described in Chapter 2 of this environmental impact report, the proposed project consists of the development of 120 three-story townhomes and associated amenities within the 7.6-acre project site. The number of townhomes per building would vary from 4 to 10.

Design of the project would follow the design guidelines outlined in the Gran Vista Specific Plan (Appendix M). The design guidelines propose transitional architectural styles for the project to allow it to blend in with the surrounding neighborhood. The project would include a variety of floorplans for the proposed townhomes. Floorplans include two- and three-bedroom units that vary in size from approximately 1,200 square feet to 1,800 square feet and include differing garage configurations. All townhomes would be three stories high. The project would be designed to provide transition massing between the single-family residences to the north and west and the CVS along the southern border of the project site. Building materials, accents and colors would be used to help compliment neighborhood character, compliment the architectural style and project, define individual units, and create visual interest.

The project would incorporate landscaping and circulation improvements, and would provide 260 new parking spaces, including 20 guest spaces, in addition to 37 existing on site spaces. The project would include approximately 92,645 square feet of common recreation area on site and an average of 146 square feet of private open space per unit. The proposed project would have a density of approximately 15.8 dwelling units per acre.

The project vicinity is designated as a High Quality Transit Area due to its proximity to transit and other facilities and services that support alternatives to vehicle use. Palomar College, a public community college consisting of a 200-acre campus, is located east of the project site. Palomar College Transit Center, a North County Transit District hub, is located less than 0.25 miles from the project site. Palomar College Transit Center consists of a bus depot on the north side of W Mission Road, near the main entrance to Palomar College, and a train station on the south side of W Mission Road that serves the SPRINTER hybrid rail train. Rail service and bus transit service offered at the transit center provide local and regional connections to schools, employment, shopping, and entertainment options within the City, as well as San Diego and Riverside Counties. An existing bus turnout and stop are also located on W Mission Road in front of CVS. The Inland Rail Trail, a proposed 21-mile Class I bikeway, runs along the south side of W Mission Road and connects the Cities of Oceanside, Vista, San Marcos, and Escondido as well us areas of unincorporated San Diego County.

The project site is considered an infill site within an urbanized area under CEQA, and is located within a transit priority area such that aesthetic impacts are conclusively not significant under PRC Section 20199(d)(1). As described in Section 3.1.2, PRC Section 20199(d)(1) states that "aesthetic and parking impacts of a residential, mixed-use residential, or employment center project on an infill site within a transit priority area shall not be considered significant impacts on the environment." According to Section 21099(d)(1), an "infill site" is defined as "a lot located within an urban area that has been previously developed, or on a vacant site where at least 75 percent of the perimeter of the site adjoins, or is separated only by an improved public right-of-way from, parcels that are developed with qualified urban uses." The project site is located on a vacant lot and more than 75% of the project boundary is adjacent to "qualified urban uses" (i.e., residential and commercial) per PRC Section 21072, such that the site is an "infill site."

PRC Section 21071 defines an "urbanized area" as "(a) an incorporated city that meets either of the following criteria: (1) Has a population of at least 100,000 persons, or (2) Has a population of less than 100,000 persons if the population of that city and not more than two contiguous incorporated cities combined equals at least 100,000 persons." As of 2020, the City has an estimated population of 94,833 (see Section 3.12, Population and Housing). While this is less than 100,000 persons, the City of San Marcos is contiguous with the City of Escondido, which has an estimated population of 151,038 persons as of 2020 (U.S. Census Bureau 2020). The combined estimated population of these two contiguous cities is 245,871 persons, which is well over the 100,000 persons threshold. Thus, the City would be considered an urbanized area per CEQA.

As outlined in California Public Resources Code, Section 20199, a "transit priority area" is defined as "an area within one-half mile of a major transit stop that is existing or planned." The project site is located approximately 0.25 miles from the North County Transit District Palomar College Station, and therefore inside of the transit priority area. Accordingly, the proposed project is a residential project in close proximity to transit and is located in an urbanized area on an infill site.

Threshold No. 1: Would the project have a substantial adverse effect on a scenic vista?

Chapter 20.260 of the San Marcos Municipal Code defines Ridgeline Protection and Management Overlay Zones, which are intended to preserve primary ridgelines in their natural state and minimize visual impacts to secondary ridgelines through Ridgeline Development Permits. The purpose of this ordinance is to protect natural viewsheds and unique natural resources, minimize the physical impacts to ridgelines, and establish innovative site and architectural design standards. This ordinance identifies primary and secondary ridgelines located in North City Area #1, Southeast City Area #2, and Southern City Area #3 within the City limits. North City Area #1 is located in the College Area Community Plan and Twin Oaks Valley Community Plan, which includes portions of "P" Mountain and Owens Peak. Southeast City Area #2 is located in the Questhaven/La Costa Meadows Community Plan, which

includes Franks Peak and Mount Whitney (located in San Diego County). This area also includes Double Peak and Cerro de Las Posas as defined by the San Elijo Hills Specific Plan. Southern City Area #3 is located in the Questhaven/La Costa Meadows Community Plan, which includes a southerly primary ridgeline extending from east to west near the San Marcos abandoned landfill. The project site is located on an infill site in an urban part of the City and is not located within a ridgeline overlay zone.

The City's General Plan does not identify any designated scenic vistas; however, the General Plan more generally aims to protect the City's scenic resources such as the San Marcos, Merriam, and Double Peak Mountains; creek corridors; mature trees; rock outcroppings; and ocean views. The project site and surrounding valley terrain are encompassed by mountains to the east and south that provide opportunities for elevated vantage points offering long and broad views, which may include views of the project site. However, due to the relatively flat terrain of the project site and surrounding area, development of the proposed project is not expected to impede views of existing scenic vistas. Additionally, as described above, the townhomes would be designed to help provide a visual transition between the single-family residences to the north and west and the commercial and industrial uses to the south and high-density residential uses to the southeast. Due to the relatively flat terrain of the project site and surrounding area and the project site's location on an infill site in an urbanized area, development of the proposed project is not expected to impede views of existing scenic vistas, nor is the project site considered a scenic vista. Given the limited views of the project site, the distance of the project site from scenic vistas, and the transitional architectural design, impacts related to scenic vistas would be **less than significant.**

Threshold No. 2: Would the project substantially damage scenic resources, including, but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway?

As described above, SR-78 is located 0.4 miles south of the project site. However, as previously discussed, the section of SR-78 proximate to the project site is not identified as a scenic highway per the State Scenic Highways Program. A portion of SR-78 is identified as an eligible state scenic highway; however, this eligible segment begins 35 miles east of the project site in Santa Ysabel. The nearest eligible state scenic highway is I-5. I-5 is located approximately 7.7 miles west of the project site and is not visible due to distance. Therefore, the project site is not located within a viewshed of a state scenic highway.

While the project site is not in proximity to a designated state scenic highway, the City has designated SR-78 as a view corridor to surrounding ridgelines. As described above, views of the project site from SR-78 are generally limited due to the existing commercial, industrial, and residential developments and vegetation within an urban area of the City. Additionally, the project would provide transitional massing, scale, and architectural style between the industrial uses to the south and single-family development to the north. Therefore, the project would not substantially obstruct views from SR-78.

Further, the project site is currently undeveloped and does not support any historic buildings. There are no rock outcroppings or trees on site. Therefore, implementation of the proposed project would not substantially damage scenic resources within a state scenic highway, and impacts would be **less than significant**.

Threshold No. 3: Would the project, in non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

As previously discussed, the City (which includes the project site) is considered an urbanized area pursuant to PRC Section 21071. Therefore, the first question of Threshold No. 3 does not apply to the proposed project, as it is directed at non-urbanized areas.

The visual character of the site would be altered by the proposed project, from vacant and undeveloped land to residential development. While the proposed project would change the existing visual character on the site, it is not characterized as a substantial degradation since few public vantage points of the project site exist and the site is mainly surrounded by adjacent development in a highly urbanized area. Although the proposed residential uses would differ in land use designation and visual character in comparison to the currently designated land use of Commercial (C) for the project site, the proposed townhomes are designed to provide transitional development between the commercial and industrial land uses to the south and low density residential to the north and west. Generally, the project would conform to the existing urbanized character of the surrounding area and residential uses to the north and west, and would not substantially change the views from any public viewpoint. Renderings of the proposed townhomes are shown in Figures 3.1-1A through 3.1-1D, Project Elevations. Additionally, a landscape plan would be implemented to soften the visual impact of the proposed residential development from adjacent roadways and residences. As the proposed project's location on an infill site would not substantially degrade the existing visual character or quality of the site and its surroundings, impacts would be **less than significant.**

Threshold No. 4: Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Lighting

Lighting in the project vicinity is associated with roadway lighting and with the existing commercial and industrial uses that surround the project site. Development of the proposed project would result in new sources of light from the residential units, landscaping lighting, security lighting, and internal circulation and pedestrian lighting. These proposed land uses would introduce lighting to a site that is currently undeveloped and has no existing source of lighting.

All lighting associated with the project would be required to comply with San Marcos Municipal Code Section 20.300.080, Light and Glare Standards. Additionally, the project would conform to lighting regulations outlined in the Gran Vista Specific Plan (Appendix M), which include the following:

A. Parking area shall be illuminated to levels that achieve a uniform ratio of three to one (3:1) (average to minimum) and maintain an average of one (1) foot candle, with a minimum of one-half (1/2) foot candle.
B. Perimeter lighting, not affiliated with the lighting of parking lots, shall not exceed one-half (1/2) foot candle at any point along the property line of the subject or adjacent parcel.

Although the proposed project would result in new sources of light in the area, the project site is in an urbanized area and is surrounded by existing development with existing sources of day and nighttime lighting. Compliance with the Municipal Code would minimize and restrict nighttime light pollution and light trespass on adjacent properties. Light fixtures on site would be shielded downward as to not spill onto adjacent properties. Therefore, new sources of day or nighttime lighting associated with the project would not be considered substantial, and impacts related to lighting would be **less than significant.**

Glare

Implementation of the proposed project could potentially include sources of glare from architectural finishes or amenities on site. The project developer would be required by Municipal Code Section 20.300.080, Light and Glare Standards, to minimize use of reflective building materials and finishes, as well as reflective lighting structures and metallic surfaces, to the extent feasible to impede any potential generated glare. As shown in the project renderings (Figures 3.1-1A through 3.1-1D), the proposed development would incorporate materials and finishes that would minimize the potential for glare, including recessed windows, window awnings, and neutral colors for building facades. The proposed project would not propose any features that would be characterized as creating a substantial new source of glare that would adversely affect daytime or nighttime views in the area. Therefore, project impacts related to glare would be **less than significant.**

3.1.5 Cumulative Impact Analysis

Projects contributing to a cumulative aesthetic impact include those within the project viewshed. The viewshed encompasses the geographic area within which the viewer is most likely to observe the proposed project and surrounding uses. Typically, this is delineated based on topography, as elevated vantage points, such as scenic vistas, offer unobstructed views of expansive visible landscapes.

Cumulative aesthetic impacts would occur if projects combine to result in substantial adverse impacts to the visual quality of the environment and increase sources of lighting and glare. As discussed above, the proposed project would have no substantial impact on a scenic vista or City-protected scenic resource, would not adversely impact the visual character of the area, and would not introduce a substantial new source of lighting or glare.

Although not technically designated scenic vistas, Mt. Whitney (located in San Diego County), Franks Peak, and the adjacent prominent ridgelines are scenic resources that the City's General Plan aims to protect and preserve for their natural visual quality. As previously discussed, the summit of Mt. Whitney (located in San Diego County) is off limits to the public, but Franks Peak and its surrounding recreational trails are publicly accessible. From Franks Peak, viewers would be able to see cumulative residential projects in the same viewshed, and potentially portions of the project site. The proposed residential development would be three stories tall and the industrial uses to the south consist of one- and two-story buildings of varying height. Due to the light industrial uses to the south, the project would not substantially contrast with the visual patterns of the area, as height and density would be consistent with the existing surrounding development; the project would appear as an extension of the already urbanized landscape. Therefore, the proposed project would not substantially contribute to a cumulative change in visual character of the surrounding area.

As discussed, the closest designated state scenic highway is SR-78; however, the segment designated as a state scenic highway is located in Anza Borrego State Park, approximately 43 miles east of the project site. Therefore, the proposed project would not result in a cumulative impact to the designated state scenic highway segment of SR-78. Nor would the proposed project result in a cumulative impact to the eligible designated state scenic highway I-5, as it is located beyond intervening topography approximately 7.7 miles west of the project site.

As previously described, the project site is surrounded by existing developments that contain sources of lighting typical of residential, commercial, and industrial uses. The proposed project would introduce new sources of lighting to the project site as the proposed project would allow for the development of residential uses. The project site is currently undeveloped and contains no sources of light. The project and cumulative projects would have to comply with the Municipal Code, which would restrict light trespass into adjacent properties and ensure that new sources

of lighting would not result in significant impacts. Concerning glare, implementation of the proposed project would not result in new sources of glare. The project developer, and the developers of any proposed cumulative projects, would be required to minimize use of reflective building materials and finishes, as well as reflective lighting structures and metallic surfaces, to the extent feasible to impede any potential glare effects to comply with the Municipal Code. Impacts pertaining to light and glare from the project and cumulative projects would be minimized through compliance with applicable regulations related to light and glare and design requirements. For the reasons outlined above, cumulative impacts related to aesthetics would be **less than significant**.

3.1.6 Mitigation Measures

No significant impacts to aesthetics were identified and therefore no mitigation measures are required.

3.1.7 Conclusion

In summary, development of the project would not be built upon any primary or secondary ridgelines, nor would the project substantially affect a scenic vista. The project site is not located in close proximity to a designated state scenic highway per the State Scenic Highway Program. Although the City has designated SR-78 as a view corridor to surrounding ridgelines, the project would not significantly change views from SR-78 and the project would not impede views to any primary or secondary ridgelines from SR-78.

The project site is located in an urbanized area on an infill site and would not conflict with applicable zoning and other regulations governing scenic quality, including the scenic resource protection policies in the Conservation and Open Space Element of the City's General Plan (refer to Section 3.10). Implementation of the proposed project would reasonably result in changes to the visual character of the site by allowing residential development; however, impacts would be minimal due to a general lack of public vantage points and visual conformance with adjacent development. Landscaping associated with the project would also soften views of the project site from adjacent uses.

Concerning lighting and glare, the proposed project would not include highly reflective finishes or excessive lighting. Further, any exterior nighttime lighting associated with the project would be required to comply with the City's Street Lighting Standards and Specifications, Municipal Code, and design guidelines in the Gran Vista Specific Plan prepared for the project site.

Implementation of the proposed project would result in less-than-significant impacts related to aesthetics, and no mitigation is required.



Front



Rear



Right



Left

Conceptual Architecture - 4-Plex Building Elevation

SOURCE: Kevin L. Crook Architect Inc. 2021

FIGURE 3.1-1A

Project Elevations

Gran Vista Specific Plan Project EIR

DUDEK

INTENTIONALLY LEFT BLANK



Front



Rear



Right



Left

Conceptual Architecture - 6-Plex Building Elevation

SOURCE: Kevin L. Crook Architect Inc. 2021

FIGURE 3.1-1B

Project Elevations

Gran Vista Specific Plan Project EIR

DUDEK

INTENTIONALLY LEFT BLANK



Front



Rear



Right



Left

Conceptual Architecture - 8-Plex Building Elevation "A"

SOURCE: Kevin L. Crook Architect Inc. 2021

FIGURE 3.1-1C

Project Elevations

Gran Vista Specific Plan Project EIR

DUDEK

INTENTIONALLY LEFT BLANK



Front



Rear



Right



Left

Conceptual Architecture - 8-Plex Building Elevation "B"

SOURCE: Kevin L. Crook Architect Inc. 2021

FIGURE 3.1-1D

Project Elevations

Gran Vista Specific Plan Project EIR

DUDEK

INTENTIONALLY LEFT BLANK

3.2 Air Quality

This section evaluates the potential impacts of the proposed Gran Vista Specific Plan Project (project) on air quality and its contribution to regional air quality conditions and identifies associated regulatory requirements. This section is based on the Air Quality and Greenhouse Gas Emissions Technical Report for the Gran Vista Specific Plan Project prepared by Dudek in February 2023. The complete Air Quality and Greenhouse Gas Emissions Technical Report is included as Appendix B of this environmental impact report (EIR).

Table 3.2-1 summarizes the project- and cumulative-level air quality impacts under each applicable threshold of significance.

Table 3.2-1. Air Quality Summary of Impacts

Threshold of Significance	Project-Level Impact	Cumulative-Level Impact	Significance Determination
No. 1: Conflict with or obstruct implementation of the applicable air quality plan.	Less than Significant	Less than Significant	Less than Significant
No. 2: Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard.	Less than Significant	Less than Significant	Less than Significant
No. 3: Expose sensitive receptors to substantial pollutant concentrations.	Less than Significant	Less than Significant	Less than Significant
No. 4: Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.	Less than Significant	Less than Significant	Less than Significant

3.2.1 Existing Conditions

This section introduces the environmental setting of the project site, including the meteorological/climate conditions for the project area, current physical setting, and pollutant levels in proximity to the proposed project.

The City of San Marcos (City) is located within the San Diego Air Basin (SDAB) and is under the jurisdiction of the San Diego Air Pollution Control District (SDAPCD). The project site is bounded by N Las Posas Road along the eastern boundary, W Mission Road along the southwest boundary, an existing CVS store to the south, and existing single-family residential development to the west/northwest. Nearby land uses in the vicinity of the project site include industrial and commercial uses to the west on the other side of W Mission Road, the Santa Fe Hills residential community to the north, and Palomar College approximately 0.2 miles to the east.

Baseline Air Quality

The SDAB is one of 15 air basins that geographically divide the State of California. The SDAB is currently classified as a federal nonattainment area for ozone (O_3) and a state nonattainment area for particulate matter with a diameter less than or equal to 10 microns (PM_{10}), particulate matter with a diameter less than or equal to 2.5 microns ($PM_{2.5}$), and O_3.

The SDAB lies in the southwest corner of California and comprises the entire San Diego region, covering 4,260 square miles; it is an area of high air pollution potential. The SDAB experiences warm summers, mild winters, infrequent rainfalls, light winds, and moderate humidity. This usually mild climatological pattern is interrupted infrequently by periods of extremely hot weather, winter storms, or Santa Ana winds.

The SDAB experiences frequent temperature inversions. Subsidence inversions occur during the warmer months as descending air associated with the Pacific High Pressure Zone meets cool marine air. The boundary between the two layers of air creates a temperature inversion that traps pollutants. Another type of inversion, a radiation inversion, develops on winter nights when air near the ground cools by heat radiation and the air aloft remains warm. The shallow inversion layer formed between these two air masses also can trap pollutants. As the pollutants become more concentrated in the atmosphere, photochemical reactions occur that produce O_3, commonly known as smog (CARB 2014).

Light daytime winds, predominantly from the west, further aggravate the condition by driving air pollutants inland, toward the mountains. During the fall and winter, air quality problems are created due to carbon monoxide (CO) and oxides of nitrogen (NO_x) emissions. CO concentrations are generally higher in the morning and late evening. In the morning, CO levels are elevated due to cold temperatures and the large number of motor vehicles traveling. Higher CO levels during the late evenings are a result of stagnant atmospheric conditions trapping CO in the area. Since CO is produced almost entirely from automobiles, the highest CO concentrations in the SDAB are associated with heavy traffic. Nitrogen dioxide (NO_2) levels are also generally higher during fall and winter days.

Under certain conditions, atmospheric oscillation results in the offshore transport of air from the Los Angeles region to San Diego County (County). This often produces high O_3 concentrations, as measured at air pollutant monitoring stations within the County. The transport of air pollutants from Los Angeles to San Diego has also occurred within the stable layer of the elevated subsidence inversion, where high levels of O_3 are transported.

Pursuant to the 1990 Clean Air Act amendments, the U.S. Environmental Protection Agency (EPA) classifies air basins (or portions thereof) as “attainment” or “nonattainment” for each criteria air pollutant, based on whether the National Ambient Air Quality Standards (NAAQS) have been achieved. Generally, if the recorded concentrations of a pollutant are lower than the standard, the area is classified as “attainment” for that pollutant. If an area exceeds the standard, the area is classified as “nonattainment” for that pollutant. As previously discussed, these standards are set by EPA or the California Air Resources Board (CARB) and represent the maximum level of a given air pollutant that can exist in the outdoor air without unacceptable effects on human health or the public welfare. If there are not enough data available to determine whether the standard is exceeded in an area, the area is designated as “unclassified” or “unclassifiable.” The designation of “unclassifiable/attainment” means that the area meets the standard or is expected to meet the standard despite a lack of monitoring data.

Areas that achieve the standards after a nonattainment designation are re-designated as maintenance areas and must have approved maintenance plans to ensure continued attainment of the standards. The California Clean Air Act, like its federal counterpart, calls for the designation of areas as “attainment” or “nonattainment,” but based on the California Ambient Air Quality Standards (CAAQS) rather than the NAAQS. Current attainment designations for the SDAB for the criteria pollutants are presented in Table 3.2-2. In summary, the SDAB is designated as a nonattainment area for the 2008 8-hour O_3 NAAQS. The SDAB is designated as a nonattainment area for O_3, PM_{10}, and $PM_{2.5}$ CAAQS. The portion of the SDAB where the project site is located is designated as attainment or unclassifiable/unclassified for all other criteria pollutants under the NAAQS and CAAQS.

Table 3.2-2. San Diego Air Basin Attainment Classification

Pollutant	Federal Designation	State Designation
O3 (1-hour)	Attainment[a]	**Nonattainment**
O3 (8-hour–1997) (8-hour–2008)	Attainment (maintenance) **Nonattainment (moderate)**	**Nonattainment**
NO2	Unclassifiable/attainment	Attainment
CO	Attainment (maintenance)	Attainment
SO2	Not designated[b]	Attainment
PM10	Unclassifiable/attainment	**Nonattainment**
PM2.5	Unclassifiable/attainment	**Nonattainment**
Lead	Unclassifiable/attainment	Attainment
Sulfates	No federal standard	Attainment
Hydrogen sulfide	No federal standard	Unclassified
Visibility-reducing particles	No federal standard	Unclassified
Vinyl chloride	No federal standard	No designation

Sources: EPA 2020 (federal); CARB 2021a (state).
Notes: O_3 = ozone; NO_2 = nitrogen dioxide; CO = carbon monoxide; SO_2 = sulfur dioxide; PM_{10} = particulate matter with a diameter less than or equal to 10 microns; $PM_{2.5}$ = particulate matter with a diameter less than or equal to 2.5 microns.
Attainment = meets the standards; attainment/maintenance = achieve the standards after a nonattainment designation; nonattainment = does not meet the standards; unclassified or unclassifiable = insufficient data to classify; unclassifiable/attainment = meets the standard or is expected to be meet the standard despite a lack of monitoring data.

[a] The federal 1-hour standard of 0.12 parts per million was in effect from 1979 through June 15, 2005. The revoked standard is referenced here because it was employed for such a long period and because this benchmark is addressed in State Implementation Plans.

[b] Federal designations for SO_2 are on hold by EPA; EPA expects to make the designations by December 2017 (EPA 2016).

The SDAPCD operates a network of ambient air monitoring stations throughout San Diego County that measure ambient concentrations of pollutants and determine whether the ambient air quality meets the CAAQS and NAAQS. The SDAPCD monitors air quality conditions at 11 locations throughout the SDAB. Camp Pendleton monitoring station is the closest to the project site for O_3 and NO_2. The Escondido–East Valley Parkway monitoring station ceased to collect data after 2015; thus, due to proximity to the site and similar geographic and climactic characteristics, the San Diego–11403 Rancho Carmel Drive monitoring station concentrations are considered most representative for the project site. Data at this station was also available for CO. The El Cajon–609 S 1st Street monitoring station was used for SO_2, PM_{10}, and $PM_{2.5}$. Ambient concentrations of pollutants from 2018 through 2020 are presented in Table 3.2-3. Air quality within the project region was in compliance with the CAAQS and NAAQS for NO_2, CO, SO_2, and PM_{10} (NAAQS only) during this monitoring period.

Table 3.2-3. Local Ambient Air Quality Data

Averaging Time	Unit	Agency/ Method	Ambient Air Quality Standard	Measured Concentration by Year			Exceedances by Year		
				2018	2019	2020	2018	2019	2020
Ozone (O3) – Camp Pendleton									
Maximum 1-hour concentration	ppm	State	0.09	0.084	0.075	0.094	0	0	0

Table 3.2-3. Local Ambient Air Quality Data

Averaging Time	Unit	Agency/ Method	Ambient Air Quality Standard	Measured Concentration by Year			Exceedances by Year		
				2018	2019	2020	2018	2019	2020
Maximum 8-hour concentration	ppm	State	0.070	0.069	0.065	0.074	0	0	3
		Federal	0.070	0.068	0.064	0.074	0	0	3
Nitrogen Dioxide (NO_2) – Camp Pendleton									
Maximum 1-hour concentration	ppm	State	0.18	0.048	0.053	0.058	0	0	0
		Federal	0.100	0.048	0.053	0.058	0	0	0
Annual concentration	ppm	State	0.030	—	0.005	0.006	—	—	—
		Federal	0.053	0.006	0.005	0.006	—	—	—
Carbon Monoxide (CO) – San Diego–11403 Rancho Carmel Drive									
Maximum 1-hour concentration	ppm	State	20	1.9	4.1	3.3	0	0	0
		Federal	35	1.9	4.1	3.3	0	0	0
Maximum 8-hour concentration	ppm	State	9.0	1.4	2.5	1.7	0	0	0
		Federal	9	1.4	2.5	1.7	0	0	0
Sulfur Dioxide (SO_2) – El Cajon–Lexington Elementary School									
Maximum 1-hour concentration	ppm	Federal	0.075	0.003	0.0008	0.002	0	0	0
Maximum 24-hour concentration	ppm	Federal	0.14	0.0004	0.0003	0.0004	0	0	0
Annual concentration	ppm	Federal	0.030	0.0001	0.0001	0.0001	—	—	—
Coarse Particulate Matter (PM_{10})[a] – El Cajon–Lexington Elementary School									
Maximum 24-hour concentration	µg/m³	State	50	44.7	37.4	55.0	0.0 (0)	0.0 (0)	0.0 (0)
		Federal	150	43.0	38.7	55.0	0.0 (0)	0.0 (0)	0.0 (0)
Annual concentration	µg/m³	State	20	ND	ND	ND	—	—	—
Fine Particulate Matter ($PM_{2.5}$)[a] – El Cajon–Lexington Elementary School									
Maximum 24-hour concentration	µg/m³	Federal	35	36.2	23.8	38.2	—	—	—
Annual concentration	µg/m³	State	12	9.6	8.6	10.3	—	—	—
		Federal	12.0	9.6	8.6	10.3	—	—	—

Sources: CARB 2021b; EPA 2021.
Notes: ppm = parts per million by volume; — = not available; µg/m³ = micrograms per cubic meter; ND = insufficient data available to determine the value.
Data taken from CARB iADAM (http://www.CARB.ca.gov/adam) and EPA AirData (http://www.epa.gov/airdata/) represent the highest concentrations experienced over a given year.

Daily exceedances for particulate matter are estimated days because PM_{10} and $PM_{2.5}$ are not monitored daily. All other criteria pollutants did not exceed federal or state standards during the years shown. There is no federal standard for 1-hour ozone, annual PM_{10}, or 24-hour SO_2, nor is there a state 24-hour standard for $PM_{2.5}$.
Camp Pendleton monitoring station is located at 21441 West B Street, Camp Pendleton, California.
San Diego monitoring station is located at 11403 Rancho Carmel Drive, San Diego, California.
The El Cajon–Lexington Elementary School monitoring station is located at 533 First Street, El Cajon, California.

[a] Measurements of PM_{10} and $PM_{2.5}$ are usually collected every 6 days and every 1 to 3 days, respectively. Number of days exceeding the standards is a mathematical estimate of the number of days concentrations would have been greater than the level of the standard had each day been monitored. The numbers in parentheses are the measured number of samples that exceeded the standard.

Climate and Topography

The weather of the San Diego region, as in most of Southern California, is influenced by the Pacific Ocean and its semi-permanent high-pressure systems that result in dry, warm summers and mild, occasionally wet winters. The average summertime high temperature in the region is approximately 74°F. The average wintertime low temperature is approximately 49°F. Average precipitation in the local area is approximately 10 inches per year, with the bulk of precipitation falling between December and March (WRCC 2017). The topography in the San Diego region varies greatly, from beaches on the west to mountains and desert on the east. Along with local meteorology, topography influences the dispersal and movement of pollutants in the air basin. The mountains to the east prevent dispersal of pollutants in that direction and help trap them in inversion layers. The interaction of ocean, land, and the Pacific High Pressure Zone maintains clear skies for much of the year and influences the direction of prevailing winds (western to northwestern). Local terrain is often the dominant factor inland, and winds in inland mountainous areas tend to blow through the valleys during the day and down the hills and valleys at night.

Sensitive Receptors

Some land uses are considered more sensitive to changes in air quality than others, depending on the population groups and the activities involved. People most likely to be affected by air pollution, as identified by CARB, include children, the elderly, and people with cardiovascular and chronic respiratory diseases. Sensitive receptors include residences, schools, playgrounds, childcare centers, long-term healthcare facilities, rehabilitation centers, convalescent centers, and retirement homes. The closest existing sensitive receptors include single-family residents bordering the western boundary of the project site.

Pollutants and Effects

Criteria Air Pollutants

Criteria air pollutants are defined as pollutants for which the federal and state governments have established ambient air quality standards, or criteria, for outdoor concentrations to protect public health. The federal and state standards have been set, with an adequate margin of safety, at levels above which concentrations could be harmful to human health and welfare. These standards are designed to protect the most sensitive persons from illness or discomfort. Pollutants of concern include O_3, NO_2, CO, sulfur dioxide (SO_2), PM_{10}, $PM_{2.5}$, and lead. These pollutants, as well as toxic air contaminants (TACs), are discussed in the following text. In California, sulfates, vinyl chloride, hydrogen sulfide, and visibility-reducing particles are also regulated as criteria air pollutants (Appendix B).

Ozone. O_3 is a strong-smelling, pale blue, reactive, toxic chemical gas consisting of three oxygen atoms. It is a secondary pollutant formed in the atmosphere by a photochemical process involving the sun's energy and O_3 precursors, such as hydrocarbons and NO_x. These precursors are mainly NO_x and volatile organic compounds

(VOCs). The maximum effects of precursor emissions on O_3 concentrations usually occur several hours after they are emitted and many miles from the source. Meteorology and terrain play major roles in O_3 formation, and ideal conditions occur during summer and early autumn, on days with low wind speeds or stagnant air, warm temperatures, and cloudless skies. O_3 exists in the upper atmosphere ozone layer (stratospheric ozone) and at the Earth's surface in the troposphere (ozone). O_3 in the troposphere causes numerous adverse health effects; short-term exposures (lasting for a few hours) to O_3 at levels typically observed in Southern California can result in breathing pattern changes, reduction of breathing capacity, increased susceptibility to infections, inflammation of the lung tissue, and some immunological changes. These health problems are particularly acute in sensitive receptors such as the sick, the elderly, and young children.

Nitrogen Dioxide. NO_2 is a brownish, highly reactive gas that is present in all urban atmospheres. The major mechanism for the formation of NO_2 in the atmosphere is the oxidation of the primary air pollutant nitric oxide, which is a colorless, odorless gas. NO_x plays a major role, together with VOCs, in the atmospheric reactions that produce O_3. NO_x is formed from fuel combustion under high temperature or pressure. In addition, NO_x is an important precursor to acid rain and may affect both terrestrial and aquatic ecosystems. The two major emissions sources are transportation and stationary fuel combustion sources such as electric utility and industrial boilers. NO_2 can irritate the lungs, cause bronchitis and pneumonia, and lower resistance to respiratory infections.

Carbon Monoxide. CO is a colorless, odorless gas formed by the incomplete combustion of hydrocarbon, or fossil, fuels. CO is emitted almost exclusively from motor vehicles, power plants, refineries, industrial boilers, ships, aircraft, and trains. In urban areas such as the project location, automobile exhaust accounts for the majority of CO emissions. CO is a non-reactive air pollutant that dissipates relatively quickly; therefore, ambient CO concentrations generally follow the spatial and temporal distributions of vehicular traffic. CO concentrations are influenced by local meteorological conditions; primarily, wind speed, topography, and atmospheric stability. CO from motor vehicle exhaust can become locally concentrated when surface-based temperature inversions are combined with calm atmospheric conditions, a typical situation at dusk in urban areas from November to February. The highest levels of CO typically occur during the colder months of the year, when inversion conditions are more frequent. In terms of adverse health effects, CO competes with oxygen, often replacing it in the blood, thus reducing the blood's ability to transport oxygen to vital organs. The results of excess CO exposure can include dizziness, fatigue, and impairment of central nervous system functions.

Sulfur Dioxide. SO_2 is a colorless, pungent gas formed primarily from incomplete combustion of sulfur-containing fossil fuels. The main sources of SO_2 are coal and oil used in power plants and industries; as such, the highest levels of SO_2 are generally found near large industrial complexes. In recent years, SO_2 concentrations have been reduced by the increasingly stringent controls placed on stationary source emissions of SO_2 and limits on the sulfur content of fuels. SO_2 is an irritant gas that attacks the throat and lungs and can cause acute respiratory symptoms and diminished lung function in children. When combined with particulate matter, SO_2 can injure lung tissue and reduce visibility and the level of sunlight. SO_2 can also yellow plant leaves and erode iron and steel.

Particulate Matter. Particulate matter pollution consists of very small liquid and solid particles, which can include smoke, soot, dust, salts, acids, and metals, floating in the air. Particulate matter can form when gases emitted from industries and motor vehicles undergo chemical reactions in the atmosphere. $PM_{2.5}$ and PM_{10} represent fractions of particulate matter. $PM_{2.5}$ (fine particulate matter) is roughly 1/28 the diameter of a human hair. $PM_{2.5}$ results from fuel combustion (e.g., from motor vehicles and power generation and industrial facilities), residential fireplaces, and woodstoves. In addition, $PM_{2.5}$ can be formed in the atmosphere from gases such as sulfur oxides (SO_x), NO_x, and VOCs. PM_{10} (respirable particulate matter or coarse particulate matter) is about 1/7 the thickness of a human hair. Major sources of PM_{10} include crushing or grinding operations; dust stirred up by vehicles

traveling on roads; wood-burning stoves and fireplaces; dust from construction, landfills, and agriculture; wildfires and brush/waste burning; industrial sources; windblown dust from open lands; and atmospheric chemical and photochemical reactions.

$PM_{2.5}$ and PM_{10} pose a greater health risk than larger-size particles. When inhaled, these tiny particles can penetrate the human respiratory system's natural defenses and damage the respiratory tract. $PM_{2.5}$ and PM_{10} can increase the number and severity of asthma attacks, cause or aggravate bronchitis and other lung diseases, and reduce the body's ability to fight infections. Very small particles of substances such as lead, sulfates, and nitrates can cause lung damage directly or be absorbed into the bloodstream, causing damage elsewhere in the body. Additionally, these substances can transport adsorbed gases such as chlorides or ammonium into the lungs, also causing injury. Whereas PM_{10} tends to collect in the upper portion of the respiratory system, $PM_{2.5}$ is so tiny that it can penetrate deeper into the lungs and damage lung tissue. Suspended particulates also damage and discolor surfaces on which they settle, as well as producing haze and reducing regional visibility.

People with influenza, people with chronic respiratory and cardiovascular diseases, and the elderly may suffer worsening illness and premature death as a result of breathing particulate matter. People with bronchitis can expect aggravated symptoms from breathing in particulate matter. Children may experience a decline in lung function due to breathing in PM_{10} and $PM_{2.5}$. Other groups considered sensitive are smokers, people who cannot breathe well through their noses, and exercising athletes (because many breathe through their mouths).

Lead. Lead in the atmosphere occurs as particulate matter. Sources of lead include leaded gasoline; the manufacturing of batteries, paints, ink, ceramics, and ammunition; and secondary lead smelters. Prior to 1978, mobile emissions were the primary source of atmospheric lead. Between 1978 and 1987, the phaseout of leaded gasoline reduced the overall inventory of airborne lead by nearly 95%. With the phaseout of leaded gasoline, secondary lead smelters, battery recycling, and manufacturing facilities are becoming lead-emissions sources of greater concern.

Prolonged exposure to atmospheric lead poses a serious threat to human health. Health effects associated with exposure to lead include gastrointestinal disturbances, anemia, kidney disease, and in severe cases, neuromuscular and neurological dysfunction. Of particular concern are low-level lead exposures during infancy and childhood. Such exposures are associated with decrements in neurobehavioral performance, including intelligence quotient (IQ) performance, psychomotor performance, reaction time, and growth. Children are highly susceptible to the effects of lead.

Volatile Organic Compounds. Hydrocarbons are organic gases that are formed from hydrogen and carbon, and sometimes other elements. Hydrocarbons that contribute to formation of O_3 are referred to and regulated as VOCs. Combustion engine exhaust, oil refineries, and fossil-fueled power plants are sources of hydrocarbons. Other sources of hydrocarbons include evaporation from petroleum fuels, solvents, dry-cleaning solutions, and paint.

The primary health effects of VOCs result from the formation of O_3 and its related health effects. High levels of VOCs in the atmosphere can interfere with oxygen intake by reducing the amount of available oxygen through displacement. Carcinogenic forms of hydrocarbons, such as benzene, are considered TACs. There are no separate health standards for VOCs as a group.

Non-Criteria Air Pollutants

Toxic Air Contaminants. A substance is considered toxic if it has the potential to cause adverse health effects in humans, including increasing the risk of cancer upon exposure, or acute and/or chronic noncancer health effects. A toxic substance released into the air is considered a TAC. TACs are identified by federal and state agencies based on a review of available scientific evidence. In the State of California, TACs are identified through a two-step process that was established in 1983 under the Toxic Air Contaminant Identification and Control Act. This two-step process of risk identification and risk management and reduction was designed to protect residents from the health effects of toxic substances in the air. In addition, the California Air Toxics "Hot Spots" Information and Assessment Act, Assembly Bill (AB) 2588, was enacted by the legislature in 1987 to address public concern over the release of TACs into the atmosphere. The law requires facilities emitting toxic substances to provide local air pollution control districts with information that will allow an assessment of the air toxics problem, identification of air toxics emissions sources, location of resulting hotspots, notification of the public exposed to significant risk, and development of effective strategies to reduce potential risks to the public over 5 years.

Examples include certain aromatic and chlorinated hydrocarbons, certain metals, and asbestos. TACs are generated by a number of sources, including stationary sources, such as dry cleaners, gas stations, combustion sources, and laboratories; mobile sources, such as automobiles; and area sources, such as landfills. Adverse health effects associated with exposure to TACs may include carcinogenic (i.e., cancer-causing) and noncarcinogenic effects. Noncarcinogenic effects typically affect one or more target organ systems and may be experienced on either short-term (acute) or long-term (chronic) exposure to a given TAC.

CARB classified "particulate emissions from diesel-fueled engines" (i.e., diesel particulate matter [DPM]) as a TAC in August 1998. DPM is part of a complex mixture that makes up diesel exhaust. Diesel exhaust is composed of two phases, gas and particle, both of which contribute to health risks. DPM is emitted from a broad range of diesel engines: on-road diesel engines of trucks, buses, and cars and off-road diesel engines including locomotives, marine vessels, and heavy-duty construction equipment, among others. Approximately 70% of all airborne cancer risk in California is associated with DPM (CARB 2000). To reduce the cancer risk associated with diesel particulate matter, CARB adopted a diesel risk reduction plan in 2000 (CARB 2000).

Valley Fever. Coccidioidomycosis, more commonly known as valley fever, is an infection caused by inhalation of the spores of the *Coccidioides immitis* fungus, which grows in the soils of the southwestern United States. When fungal spores are present, any activity that disturbs the soil, such as digging, grading, or other earth-moving operations, can cause the spores to become airborne and thereby increase the risk of exposure. The ecologic factors that appear to be most conducive to survival and replication of the spores are high summer temperatures, mild winters, sparse rainfall, and alkaline sandy soils.

Valley fever is not considered highly endemic to San Diego. Per the San Diego County Health and Human Services Agency, the 10-year average (2008–2017) for Coccidioidomycosis cases in the County is 4.5 cases per 100,000 people per year. The project site is within the 92069 zip code. For the 92069 zip code, there were 16 cases of Coccidioidomycosis between 2008 and 2017, which is equivalent to a rate of 3.4 cases per 100,000 people (Nelson, pers. comm., 2018). Statewide incidences in 2016 were 13.7 per 100,000 people (CDPH 2017).

Even if present at a site, earth-moving activities may not result in increased incidence of valley fever. Propagation of *Coccidioides immitis* is dependent on climatic conditions, with the potential for growth and surface exposure highest following early seasonal rains and long dry spells. *Coccidioides immitis* spores can be released when filaments are disturbed by earth-moving activities, although receptors must be exposed to and inhale the spores

to be at increased risk of developing valley fever. Moreover, exposure to *Coccidioides immitis* does not guarantee that an individual will become ill—approximately 60% of people exposed to the fungal spores are asymptomatic and show no signs of an infection (USGS 2000).

3.2.2 Regulatory Setting

The following section provides a general description of the applicable regulatory requirements pertaining to air quality, including federal, state, and local guidelines.

Federal

Federal Clean Air Act

The federal Clean Air Act, passed in 1970 and last amended in 1990, forms the basis for the national air pollution control effort. EPA is responsible for implementing most aspects of the Clean Air Act, including setting NAAQS for major air pollutants, setting hazardous air pollutant standards, approving state attainment plans, setting motor vehicle emission standards, issuing stationary source emission standards and permits, and establishing acid rain control measures, stratospheric O_3 protection measures, and enforcement provisions. Under the Clean Air Act, NAAQS are established for the criteria pollutants O_3, CO, NO_2, SO_2, PM_{10}, $PM_{2.5}$, and lead.

The NAAQS describe acceptable air quality conditions designed to protect the health and welfare of the citizens of the nation. The NAAQS (other than for O_3, NO_2, SO_2, PM_{10}, $PM_{2.5}$, and those based on annual averages or arithmetic mean) are not to be exceeded more than once per year. NAAQS for O_3, NO_2, SO_2, PM_{10}, and $PM_{2.5}$ are based on statistical calculations over 1- to 3-year periods, depending on the pollutant. The Clean Air Act requires EPA to reassess the NAAQS at least every 5 years to determine whether adopted standards are adequate to protect public health based on current scientific evidence. States with areas that exceed the NAAQS must prepare state implementation plans (SIPs) that demonstrate how those areas will attain the standards within mandated time frames.

State

Federal Clean Air Act

The federal Clean Air Act delegates the regulation of air pollution control and the enforcement of the NAAQS to the states. In California, the task of air quality management and regulation has been legislatively granted to CARB, with subsidiary responsibilities assigned to air quality management districts and air pollution control districts at the regional and county levels. CARB, which became part of the California Environmental Protection Agency in 1991, is responsible for ensuring implementation of the California Clean Air Act of 1988, responding to the federal Clean Air Act, and regulating emissions from motor vehicles and consumer products.

CARB has established CAAQS, which are generally more restrictive than the NAAQS. The CAAQS describe adverse conditions; that is, pollution levels must be below these standards before a basin can attain the standard. Air quality is considered “in attainment” if pollutant levels are continuously below the CAAQS and violate the standards no more than once each year. The CAAQS for O_3, CO, SO_2 (1-hour and 24-hour), NO_2, PM_{10}, $PM_{2.5}$, and visibility-reducing particles are values that are not to be exceeded. All other criteria air pollutants regulated in California (e.g., sulfates, vinyl chloride, hydrogen sulfide, and visibility-reducing particles) are not to be equaled or exceeded. The NAAQS and CAAQS are presented in Table 3.2-4.

Table 3.2-4. Ambient Air Quality Standards

Pollutant	Averaging Time	CAAQS[a]	NAAQS[b]	
		Concentration[c]	Primary[c,d]	Secondary[c,e]
O_3	1 hour	0.09 ppm (180 µg/m³)	—	Same as primary standard[f]
	8 hours	0.070 ppm (137 µg/m³)	0.070 ppm (137 µg/m³)[f]	
NO_2[g]	1 hour	0.18 ppm (339 µg/m³)	0.100 ppm (188 µg/m³)	Same as primary standard
	Annual arithmetic mean	0.030 ppm (57 µg/m³)	0.053 ppm (100 µg/m³)	
CO	1 hour	20 ppm (23 mg/m³)	35 ppm (40 mg/m³)	None
	8 hours	9.0 ppm (10 mg/m³)	9 ppm (10 mg/m³)	
SO_2[h]	1 hour	0.25 ppm (655 µg/m³)	0.075 ppm (196 µg/m³)	—
	3 hours	—	—	0.5 ppm (1,300 µg/m³)
	24 hours	0.04 ppm (105 µg/m³)	0.14 ppm (for certain areas)[g]	—
	Annual	—	0.030 ppm (for certain areas)[g]	—
PM_{10}[i]	24 hours	50 µg/m³	150 µg/m³	Same as primary standard
	Annual arithmetic mean	20 µg/m³	—	
$PM_{2.5}$[i]	24 hours	—	35 µg/m³	Same as primary standard
	Annual arithmetic mean	12 µg/m³	12.0 µg/m³	15.0 µg/m³
Lead[j,k]	30-day average	1.5 µg/m³	—	—
	Calendar quarter	—	1.5 µg/m³ (for certain areas)[k]	Same as primary standard
	Rolling 3-month average	—	0.15 µg/m³	
Hydrogen sulfide	1 hour	0.03 ppm (42 µg/m³)	—	—
Vinyl chloride[j]	24 hours	0.01 ppm (26 µg/m³)	—	—
Sulfates	24- hours	25 µg/m³	—	—
Visibility reducing particles	8 hour (10:00 a.m. to 6:00 p.m. PST)	Insufficient amount to produce an extinction coefficient of 0.23 per kilometer due to particles when the relative humidity is less than 70%	—	—

Source: Appendix B

Notes: CAAQS = California Ambient Air Quality Standards; NAAQS = National Ambient Air Quality Standards; O_3 = ozone; ppm = parts per million by volume; µg/m³ = micrograms per cubic meter; NO_2 = nitrogen dioxide; CO = carbon monoxide; mg/m³= milligrams per cubic meter; SO_2 = sulfur dioxide; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter.

[a] California standards for O_3, CO, SO_2 (1-hour and 24-hour), NO_2, suspended particulate matter—PM_{10}, $PM_{2.5}$, and visibility-reducing particles, are values that are not to be exceeded. All others are not to be equaled or exceeded. CAAQS are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

[b] National standards (other than O_3, NO_2, SO_2, particulate matter, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once a year. The O_3 standard is attained when the fourth-highest 8-hour concentration measured at each site in a year, averaged over 3 years, is equal to or less than the standard. For PM_{10}, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m³ is equal to or less than 1. For $PM_{2.5}$, the 24-hour standard is attained when 98% of the daily concentrations, averaged over 3 years, are equal to or less than the standard.

[c] Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

[d] National primary standards: the levels of air quality necessary, with an adequate margin of safety to protect the public health.

[e] National secondary standards: the levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

[f] On October 1, 2015, the primary and secondary NAAQS for O_3 were lowered from 0.075 ppm to 0.070 ppm.

[g] To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 parts per billion (ppb). Note that the national 1-hour standard is in units of ppb. California standards are in units of ppm. To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.

[h] On June 2, 2010, a new 1-hour SO_2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO_2 national standards (24-hour and annual) remain in effect until 1 year after an area is designated for the 2010 standard, except that in areas designated nonattainment of the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

[i] On December 14, 2012, the national annual $PM_{2.5}$ primary standard was lowered from 15 µg/m³ to 12.0 µg/m³. The existing national 24-hour $PM_{2.5}$ standards (primary and secondary) were retained at 35 µg/m³, as was the annual secondary standard of 15 µg/m³. The existing 24-hour PM_{10} standards (primary and secondary) of 150 µg/m³ also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.

[j] CARB has identified lead and vinyl chloride as TACs with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

[k] The national standard for lead was revised on October 15, 2008, to a rolling 3-month average. The 1978 lead standard (1.5 µg/m³ as a quarterly average) remains in effect until 1 year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.

California Clean Air Act

The California Clean Air Act, signed into law in 1988, requires all areas of the state to achieve and maintain the CAAQS by the earliest practical date. Air pollution from commercial and industrial facilities is regulated by local air quality management districts, whereas mobile sources of air pollution are regulated by CARB and the EPA. All air pollution control districts have been formally designated as “attainment” or “nonattainment” for each state air quality standard, as shown in Table 3.2-2. Areas in California where ambient air concentrations of pollutants are higher than the state standard are considered to be in nonattainment status for that pollutant. Nonattainment designations are categorized into three levels of severity: (1) moderate, (2) serious, and (3) severe. If there are inadequate or inconclusive data to make a definitive attainment designation, districts are considered “unclassified.”

Toxic Air Contaminants

The state Air Toxics Program was established in 1983 under AB 1807. The California TAC list identifies more than 700 pollutants, of which carcinogenic and noncarcinogenic toxicity criteria have been established for a subset of these pollutants pursuant to the California Health and Safety Code. In accordance with AB 2728, the state list includes the (federal) hazardous air pollutants. In 1987, the legislature enacted the Air Toxics “Hot Spots” Information and Assessment Act of 1987 (AB 2588) to address public concern over the release of TACs into the atmosphere. AB 2588 requires facilities emitting toxic substances to provide local air pollution control districts with information that will allow an assessment of the air toxics problem, identification of air toxics emissions sources, location of resulting hotspots, notification of the public exposed to significant risk, and development of

effective strategies to reduce potential risks to the public over 5 years. TAC emissions from individual facilities are quantified and prioritized. "High-priority" facilities are required to perform a health risk assessment and, if specific thresholds are exceeded, the facility operator is required to communicate the results to the public in the form of notices and public meetings.

In 2000, CARB approved a comprehensive Diesel Risk Reduction Plan to reduce diesel emissions from new and existing diesel-fueled vehicles and engines (CARB 2000). Additional regulations apply to new trucks and diesel fuel, including the On-Road Heavy Duty Diesel Vehicle (In-Use) Regulation, the On-Road Heavy Duty (New) Vehicle Program, the In-Use Off-Road Diesel Vehicle Regulation, and the New Off-Road Compression-Ignition (Diesel) Engines and Equipment Program. These regulations and programs have timetables by which manufacturers must comply and existing operators must upgrade their diesel-powered equipment. There are several airborne toxic control measures that reduce diesel emissions, including In-Use Off-Road Diesel-Fueled Fleets (13 CCR 2449 et. seq.) and In-Use On-Road Diesel-Fueled Vehicles (13 CCR 2025).

California Health and Safety Code Section 41700

Section 41700 of the California Health and Safety Code states that a person must not discharge from any source whatsoever quantities of air contaminants or other material that cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public; that endanger the comfort, repose, health, or safety of any of those persons or the public; or that cause, or have a natural tendency to cause, injury or damage to business or property. This section also applies to sources of objectionable odors.

Local

San Diego Air Pollution Control District

Although CARB is responsible for the regulation of mobile emission sources within the state, local air quality management districts and air pollution control districts are responsible for enforcing standards and regulating stationary sources. The project site is located within the SDAB and is subject to SDAPCD guidelines and regulations.

SDAPCD and the San Diego Association of Governments (SANDAG) are responsible for developing and implementing the clean air plan for attainment and maintenance of the ambient air quality standards in the SDAB. The Regional Air Quality Strategy (RAQS) for the SDAB was initially adopted in 1991 and is updated every 3 years (last updated in 2016, with the 2022 RAQs pending adoption) (SDAPCD 2023). The RAQS outlines SDAPCD's plans and control measures designed to attain the CAAQS for O_3. The RAQS relies on information from CARB and SANDAG, including mobile and area source emissions, as well as information regarding projected growth in San Diego County and the cities in the County, to project future emissions and then determine from that the strategies necessary for the reduction of emissions through regulatory controls. CARB mobile source emission projections and SANDAG growth projections are based on population, vehicle trends, and land use plans developed by the County and the cities in the County as part of development of their general plans.

The 8-Hour Ozone Attainment Plan for San Diego County indicated that local controls and state programs would allow the region to reach attainment of the federal 8-hour O_3 standard by 2018 (SDAPCD 2016). In this plan, SDAPCD relied on the RAQS to demonstrate how the region will comply with the federal O_3 standard. The RAQS details how the region will manage and reduce O_3 precursors (NO_x and VOCs) by identifying measures and regulations intended to reduce these contaminants. The control measures identified in the RAQS generally focus on stationary sources; however, the emissions inventories and projections in the RAQS address all potential

sources, including those under the authority of CARB and EPA. Incentive programs for reduction of emissions from heavy-duty diesel vehicles, off-road equipment, and school buses are also established in the RAQS. In response to court decisions, some elements in the 8-hour Ozone Attainment Plan for San Diego County required updates. CARB staff prepared the 2018 Updates to the California SIP to update SIP elements for nonattainment areas throughout the state. The applicable ozone attainment date for San Diego County is in 2032. The 2020 Ozone Attainment Plan complies with the Severe Nonattainment Area classification planning requirements and includes demonstrations for attainment of the 75 parts per billion and 70 parts per billion O_3 standards by 2026 and 2032, respectively. The 2020 plan includes a regionwide inventory of O_3 forming emissions, a reasonably further progress demonstration showing emissions reductions during the years leading to the attainment dates, an assessment of Reasonably Available Control Technology and Reasonably Available Control Measures, and contingency measures in the event the emissions controls fall short of achieving the needed reductions.

In December 2005, the SDAPCD also prepared a report titled Measures to Reduce Particulate Matter in San Diego County to address implementation of Senate Bill 656 in San Diego County (Senate Bill 656 required additional controls to reduce ambient concentrations of PM_{10} and $PM_{2.5}$). In the report, the SDAPCD evaluates implementation of source-control measures that would reduce particulate matter emissions associated with residential wood combustion (SDAPCD 2005).

In addition to SDAPCD's regional planning efforts, the following SDAPCD rules and regulations also would apply to the project:

- **SDAPCD Regulation II: Permits; Rule 20.2: New Source Review Non-Major Stationary Sources.** Requires new or modified stationary source units (that are not major stationary sources) with the potential to emit 10 pounds per day or more of VOC, NO_x, SO_x, or PM_{10} to be equipped with best available control technology. For those units with a potential to emit above Air Quality Impact Assessments Trigger Levels, the units must demonstrate that such emissions would not violate or interfere with the attainment of any national air quality standard (SDAPCD 1998).
- **SDAPCD Regulation IV: Prohibitions; Rule 50: Visible Emissions.** Prohibits discharge into the atmosphere from any single source of emissions whatsoever any air contaminant for a period or periods aggregating more than 3 minutes in any period of 60 consecutive minutes that is darker in shade than that designated as Number 1 on the Ringelmann Chart, as published by the U.S. Bureau of Mines, or of such opacity as to obscure an observer's view to a degree greater than does smoke of a shade designated as Number 1 on the Ringelmann Chart (SDAPCD 1997).
- **SDAPCD Regulation IV: Prohibitions; Rule 51: Nuisance.** Prohibits the discharge, from any source, of such quantities of air contaminants or other materials that cause or have a tendency to cause injury, detriment, nuisance, annoyance to people and/or the public, or damage to any business or property (SDAPCD 1976).
- **SDAPCD Regulation IV: Prohibitions; Rule 55:** Fugitive Dust. Regulates fugitive dust emissions from any commercial construction or demolition activity capable of generating fugitive dust emissions, including active operations, open storage piles, and inactive disturbed areas, as well as track-out and carry-out onto paved roads beyond a project site (SDAPCD 2009).
- **SDAPCD Regulation IV: Prohibitions; Rule 67.0.1: Architectural Coatings.** Requires manufacturers, distributors, and end users of architectural and industrial maintenance coatings to reduce VOC emissions from the use of these coatings, primarily by placing limits on the VOC content of various coating categories (SDAPCD 2015).

City of San Marcos General Plan

The City's General Plan (City of San Marcos 2012) includes various policies related to reducing air pollutant emissions. Applicable policies include the following:

Land Use and Community Design Element

Goal LU-2: Promote development standards and land use patterns that encourage long-term environmental sustainability.

Policy LU-2.1: Promote compact development patterns that reduce air pollution and automobile dependence and facilitate walking, bicycling, and transit use.

Goal LU-3: Develop land use patterns that are compatible with and support a variety of mobility opportunities and choices.

Policy LU-3.1: Require that new development and redevelopment incorporate connections and reduce barriers between neighborhoods, transit corridors, and activity centers within the City.

Mobility Element

Policy M-2.1: Work with new development to design roadways that minimize traffic volumes and/or speed, as appropriate within residential neighborhoods; while maintaining the City's desire to provide connectivity on the roadway network.

Goal M-3: Promote and encourage use of alternative transportation modes, including transit, bicycles, neighborhood electric vehicles (NEVs), and walking, within the City.

The proposed project's consistency with applicable General Plan goals and policies is discussed in Section 3.10, Land Use and Planning, and throughout Chapter 3 of this EIR.

3.2.3 Thresholds of Significance

The significance criteria used to evaluate the project impacts to air quality are based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines. According to Appendix G of the CEQA Guidelines, a significant impact related to air quality would occur if the project would:

- **Threshold No. 1:** Conflict with or obstruct implementation of the applicable air quality plan.
- **Threshold No. 2:** Result in a cumulatively considerable new increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard.
- **Threshold No. 3:** Expose sensitive receptors to substantial pollutant concentrations.
- **Threshold No. 4:** Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

Appendix G of the CEQA Guidelines (14 CCR 15000 et seq.) indicates that, where available, the significance criteria established by the applicable air quality management district or pollution control district may be relied upon to determine whether the project would have a significant impact on air quality. For purposes of this EIR, reference has been made to thresholds established by SDAPCD in Rule 20.2 for permitted stationary sources.

SDAPCD sets forth quantitative emission thresholds in Rule 20.2 below which a stationary source would not have a significant impact on ambient air quality. For CEQA purposes, these thresholds can be used to demonstrate that a project's total emissions (e.g., stationary and fugitive emissions, as well as emissions from mobile sources) would not result in a significant impact to air quality. While the proposed project is a land use development project (and not a stationary source project), the Rule 20.2 thresholds provide a representative and relevant proxy for purposes of assessing project impacts. Therefore, project-related air quality impacts assessed in this EIR would be considered significant if any of the applicable significance thresholds developed by SDAPCD for Rule 20.2, as presented in Table 3.2-5, are exceeded. Emissions below the screening-level thresholds would not cause a significant impact. For nonattainment pollutants, if emissions exceed the thresholds shown in Table 3.2-5, a project could have the potential to result in a cumulatively considerable net increase in these pollutants and thus could have a significant impact on the ambient air quality.

Table 3.2-5. San Diego Air Pollution Control District Air Quality Significance Thresholds

Construction Emissions			
Pollutant	**Total Emissions (Pounds per Day)**		
Respirable particulate matter (PM_{10})	100		
Fine particulate matter ($PM_{2.5}$)	55		
Oxides of nitrogen (NO_x)	250		
Sulfur oxides (SO_x)	250		
Carbon monoxide (CO)	550		
Volatile organic compounds (VOC)	137[a]		
Operational Emissions			
	Total Emissions		
Pollutant	**Pounds per Hour**	**Pounds per Day**	**Tons per Year**
Respirable particulate matter (PM_{10})	—	100	15
Fine particulate matter ($PM_{2.5}$)	—	55	10
Oxides of nitrogen (NO_x)	25	250	40
Sulfur oxides (SO_x)	25	250	40
Carbon monoxide (CO)	100	550	100
Lead and lead compounds	—	3.2	0.6
Volatile organic compounds (VOC)	—	137[a]	13.7

Source: SDAPCD Rules 1501 and 20.2(d)(2).
Note:
[a] VOC threshold based on South Coast Air Quality Management District (SCAQMD) levels per the SCAQMD and the Monterey Bay Air Pollution Control District, which have similar federal and state attainment status to San Diego.

Methodology

Construction

Construction assumptions, including timing, phasing, and equipment type and quantity, as well as worker and vendor truck trips, were based on information provided by the applicant. Default values provided by the California Emissions Estimator Model (CalEEMod) were used where detailed project information was not available. For purposes of most conservatively estimating project air quality emissions, it is assumed that construction would

commence in December 2023[1] and would end in March 2025. Construction is anticipated to occur in five phases consisting of site preparation, grading, paving, building construction, and architectural coating. The analysis contained herein is based on the following assumptions (the duration of phases is approximate):

- Site preparation – 6 days (December 2023)
- Grading – 24 days (December 2023–January 2024)
- Paving – 20 days (January 2024–February 2024)
- Building construction – 262 days (February 2024–February 2025)
- Architectural coating – 20 days (February 2025–March 2025)

The construction equipment mix used for estimating construction emissions herein is based on CalEEMod defaults and is shown in Table 3.2-6. For this analysis, it was estimated that heavy construction equipment would operate 5 days a week during project construction. The equipment used in each phase as shown in Table 3.2-6 was based on the CalEEMod default equipment mix for each phase of construction. Construction worker and vendor estimates by construction phase were generated by CalEEMod. Based on the project's grading plans, the project would be balanced on site. The applicant has committed to using offroad construction equipment with EPA Tier 4 Interim certification or better for equipment over 50 horsepower and electric equipment less than 50 horsepower[2] (Appendix B).

Table 3.2-6. Construction Scenario Parameters

Construction Phase	One-Way Vehicle Trips			Equipment		
	Average Daily Worker Trips	Average Daily Vendor Truck Trips	Total Haul Truck Trips	Equipment Type	Quantity	Usage Hours
Site preparation	12	4	0	Rubber Tired Loaders	1	8
				Tractors/Loaders/ Backhoes	3	8
Grading	16	4	0	Graders	1	8
				Rubber Tired Dozers	1	8
				Scrapers	4	8
				Tractors/Loaders/ Backhoes	1	8
Paving	16	4	0	Pavers	2	8
				Paving Equipment	2	8
				Rollers	3	8

[1] The analysis assumes a construction start date of December 2023, which represents the earliest date construction would initiate (although unlikely). Assuming the earliest start date for construction represents the worst-case scenario for criteria air pollutant emissions because equipment and vehicle emission factors for later years would be slightly less due to more stringent standards for in-use off-road equipment and heavy-duty trucks, as well as fleet turnover replacing older equipment and vehicles in later years.

[2] In the case that a piece of equipment is not available in Tier 4 Interim, the applicant may upgrade another piece of equipment to better than Tier 4 Interim (i.e., Tier 4 Final) to compensate for the piece of equipment with a lower tier.

Table 3.2-6. Construction Scenario Parameters

Construction Phase	One-Way Vehicle Trips			Equipment		
	Average Daily Worker Trips	Average Daily Vendor Truck Trips	Total Haul Truck Trips	Equipment Type	Quantity	Usage Hours
Building Construction	192	54	0	Welders	1	8
				Air Compressors	2	8
				Cranes	1	4
				Forklifts	2	8
				Generator Sets	1	8
				Skid Steer Loaders	1	4
				Tractors/Loaders/ Backhoes	1	4
Architectural coating	38	4	0	Air Compressors	1	6

Source: Appendix B.

Health Risk Assessment

As a precautionary measure, a health risk assessment (HRA) was performed to assess the impact of construction on sensitive receptors proximate to the project. Appendix B to this EIR includes an HRA associated with emissions from construction of the project based on the methodologies prescribed in the Office of Environmental Health Hazard Assessment Air Toxics Hot Spots Program Risk Assessment Guidelines – Guidance Manual for Preparation of Health Risk Assessments (OEHHA 2015). To implement the Office of Environmental Health Hazard Assessment Guidelines based on project information, the SDAPCD has developed a three-tiered approach where each successive tier is progressively more refined, with fewer conservative assumptions. The SDAPCD Supplemental Guidelines for Submission of Air Toxics "Hot Spots" Program Health Risk Assessments provides guidance with which to perform HRAs within the SDAB (SDAPCD 2022).

Health effects from carcinogenic air toxics are usually described in terms of cancer risk. The SDAPCD recommends a carcinogenic (cancer) risk threshold of 10 in a million. Additionally, some TACs increase non-cancer health risk due to long-term (chronic) exposures. The Chronic Hazard Index is the sum of the individual substance chronic hazard indices for all TACs affecting the same target organ system. The SDAPCD recommends a Chronic Hazard Index significance threshold of 1.0 (project increment). The exhaust from diesel engines is a complex mixture of gases, vapors, and particles, many of which are known human carcinogens. DPM has established cancer risk factors and relative exposure values for long-term chronic health hazard impacts. No short-term, acute relative exposure level has been established for DPM; therefore, acute impacts of DPM are not addressed in this assessment. The HRA evaluated the risk to future residents from diesel emissions from exhaust from on-site construction equipment and diesel haul and vendor trucks.

The dispersion modeling of DPM was performed using the American Meteorological Society/EPA Regulatory Model (AERMOD), which is the model SDAPCD requires for atmospheric dispersion of emissions. AERMOD is a steady-state Gaussian plume model that incorporates air dispersion based on planetary boundary layer turbulence structure and scaling concepts, including treatment of surface and elevated sources, building downwash, and simple and complex terrain (EPA 2022). For the project, AERMOD was run with all sources emitting unit emissions (1 gram per second) to obtain the "X/Q" values. X/Q is a dispersion factor that is the

average effluent concentration normalized by source strength and is used as a way to simplify the representation of emissions from many sources. The X/Q values of ground-level concentrations were determined for construction emissions using AERMOD and the maximum concentrations determined for the 1-hour and Period averaging periods. Principal parameters of this modeling are presented in Table 3.2-7.

Table 3.2-7. AERMOD Principal Parameters

Parameter	Details
Meteorological Data	The latest 3-year meteorological data (2010–2012) for the Escondido Station (Station ID 3177) from SDAPCD were downloaded and then input to AERMOD. For cancer or chronic noncancer risk assessments, the average cancer risk of all years modeled was used.
Urban versus Rural Option	Urban areas typically have more surface roughness, as well as structures and low-albedo surfaces that absorb more sunlight—and thus more heat—relative to rural areas. However, based on the SDAPCD guidelines, the rural dispersion option was selected due to the project's proximity to the ocean.
Terrain Characteristics	The terrain in the vicinity of the modeled project site is generally flat. The elevation of the modeled site is about 575 feet above sea level. Digital elevation model files were imported into AERMOD so that complex terrain features were evaluated as appropriate.
Elevation Data	Digital elevation data were imported into AERMOD and elevations were assigned to the emission sources and receptors. Digital elevation data were obtained through AERMOD View in the U.S. Geological Survey's National Elevation Dataset format with a 10-meter resolution.
Emission Sources and Release Parameters	Air dispersion modeling of DPM from construction equipment was conducted using emissions estimated using the CalEEMod, assuming emissions would occur 8 hours per day, 5 days per week. The project area was modeled as a series of volume sources.
Source Release Characterizations	Based on EPA methodology, the modeled line volume sources would result in a release height of 3.4 meters, a plume height of 6.8 meters, and a plume width of 8.6 meters for off-road equipment and diesel trucks (EPA 2015).
Discrete Receptors	A uniform Cartesian grid overlaying residential receptors in close proximity to the project with 20-meter resolution was placed. Additional discrete receptors were placed over residences not within the uniform Cartesian grid.

Source: Appendix B.
Note: SDAPCD = San Diego Air Pollution Control District; AERMOD = American Meteorological Society/Environmental Protection Agency Regulatory Model; DPM = diesel particulate matter; CalEEMod = California Emissions Estimator Model; EPA = U.S. Environmental Protection Agency.

Dispersion model plotfiles from AERMOD were then imported into CARB's Hotspots Analysis and Reporting Program Version 2 to determine health risk, which requires peak 1-hour emission rates and annual-averaged emission rates for all pollutants for each modeling source. For the residential health risk, the HRA assumed exposure would start in the third trimester of pregnancy. The results of the HRA are provided in Appendix B to this EIR.

Operation

CalEEMod was used to estimate operational emissions from area sources, including emissions from consumer product use, architectural coatings, and landscape maintenance equipment. Emissions associated with natural gas usage in space heating were calculated in the building energy use module of CalEEMod, as described in the following text.

Area Sources

Consumer products are chemically formulated products used by household and institutional consumers, including detergents; cleaning compounds; polishes; floor finishes; cosmetics; personal care products; home, lawn, and garden products; disinfectants; sanitizers; aerosol paints; and automotive specialty products. Other paint

products, furniture coatings, or architectural coatings are not considered consumer products (CAPCOA 2021). Consumer product VOC emissions are estimated in CalEEMod based on the floor area of residential buildings and on the default factor of pounds of VOC per building square foot per day. The CalEEMod default values for consumer products were modeled.

VOC off-gassing emissions result from evaporation of solvents contained in surface coatings, such as in paints and primers used during building maintenance. CalEEMod calculates the VOC evaporative emissions from application of surface coatings based on the VOC emission factor, the building square footage, the assumed fraction of surface area, and the reapplication rate. The VOC emission factor is based on the VOC content of the surface coatings; SDAPCD's Rule 67.0.1 (Architectural Coatings) governs the VOC content for interior and exterior coatings (SDAPCD 2015). The model default reapplication rate of 10% of area per year was assumed. Consistent with CalEEMod defaults, it was assumed that the surface area for painting equals 2.7 times the floor square footage, with 75% assumed for interior coating and 25% assumed for exterior surface coating (CAPCOA 2021). Consistent with the architectural coatings used during the construction phase, the applicant will use architectural coatings with a VOC content of 50 grams per liter for internal reapplication, and exterior architectural coatings would have a VOC content of 100 grams per liter for any reapplication during operation.

Landscape maintenance includes fuel combustion emissions from equipment such as lawn mowers, rototillers, shredders/grinders, blowers, trimmers, chainsaws, and hedge trimmers. The emissions associated from landscape equipment use are estimated based on CalEEMod default values for emission factors (grams per square foot of nonresidential building space per day) and number of summer days (when landscape maintenance would generally be performed) and winter days. Emissions associated with potential landscape maintenance equipment were included to conservatively capture potential project operational emission sources. As a project design feature, the project would not include wood burning stoves or fireplaces.

Energy Sources

As represented in CalEEMod, energy sources would include emissions associated with building electricity and natural gas usage. Electricity use would contribute indirectly to criteria air pollutant emissions; however, the emissions from electricity use are only quantified for greenhouse gases in CalEEMod, since criteria pollutant emissions occur at the site of the power plant, which is typically off site.

Operational criteria air pollutant emissions from energy sources include natural gas combustion for appliances and space heating. The current Title 24, Part 6 standards, referred to as the 2019 Title 24 Building Energy Efficiency Standards, became effective on January 1, 2020. CalEEMod defaults were assumed for electricity and natural gas. The project is also designed to include energy star appliances.

Mobile Sources

The project would generate air quality emissions from mobile sources (vehicular traffic) as a result of the residents of the project. CalEEMod was used to estimate emissions from proposed vehicular sources (refer to Appendix B). The trip generation rates for the project residential land use were adjusted in CalEEMod to match the overall weekday daily trip rate and trip length based on the Vehicle Miles Traveled Analysis and Local Transportation Analysis (Appendices K-1 and K-2 to this EIR, respectively). CalEEMod default data, trip modes, fleet mix, and emissions factors were used for the model inputs. CalEEMod default vehicle emission factors and vehicle fleet mix for 2025, as based on the CARB EMFAC2017 model, were used to estimate emissions associated with vehicular sources. In accordance with 2019 California Green Building Standards Code requirements, the project would install a listed raceway to accommodate a dedicated 208/

240-volt branch circuit in each residential garage for future installation of an electric vehicle charger. No quantitative credit was taken for this requirement. 2019 California Green Building Standards Code Section 4.106.4.2.1 requires the installation of at least one electric vehicle space in common use parking. The project will install two electric vehicle charging stations in the common use parking. According to Table 25 of Appendix B of the City's Climate Action Plan, every electric vehicle charging station in a multifamily development is assumed to reduce 1.65 metric tons of carbon dioxide equivalent per year (City of San Marcos 2013).

Due to the project's location and design, the following reduction measures were accounted for in CalEEMod:

- Increase Density (LUT-1): 120 dwelling units/7.6 acres = 15.8 dwelling units/acre
- Increase Diversity (LUT-3): Nearby land uses in the vicinity of the project site include industrial and commercial uses to the west on the other side of W Mission Road, the Santa Fe Hills residential community to the north, and Palomar College approximately 0.2 miles to the east
- Increase Transit Accessibility (LUT-5): The project would be 0.3 miles from the Palomar College SPRINTER station.

3.2.4 Project Impact Analysis

Threshold No. 1: Would the project conflict with or obstruct implementation of the applicable air quality plan?

As mentioned in Section 3.2.2, the SDAPCD is responsible for developing and implementing the clean air plans for attainment and maintenance of the ambient air quality standards in the SDAB—specifically, the SIP and RAQS.[3] SANDAG is responsible for developing growth projection forecasts and data that are used by the SDAPCD in preparing the SIP and RAQS. The federal O_3 maintenance plan, which is part of the SIP, was adopted in 2012. The SIP includes a demonstration that current strategies and tactics will maintain acceptable air quality in the basin based on the NAAQS. The RAQS was initially adopted in 1991 and is updated every 3 years (most recently in 2020). The RAQS outlines SDAPCD's plans and control measures designed to attain the state air quality standards for O_3. The SIP and RAQS rely on information from CARB and SANDAG, including mobile and area source emissions, as well as information regarding projected growth in the County as a whole and the cities in San Diego County, to project future emissions and determine the strategies necessary for the reduction of emissions through regulatory controls. CARB mobile source emission projections and SANDAG growth projections are based on population, vehicle trends, and land use plans developed by the County and the cities in the County as part of development of their general plans.

Although the SDAPCD and City do not provide guidance regarding the analysis of impacts associated with air quality plan conformance, the County's Guidelines for Determining Significance and Report and Format and Content Requirements – Air Quality does discuss conformance with the RAQS (County of San Diego 2007). The guidance indicates that, if the project, in conjunction with other projects, contributes to growth projections that would not exceed SANDAG's growth projections for a city, the project would not be in conflict with the RAQS. If a project includes development that is greater than that anticipated in the local plan and SANDAG's growth projections, the project might be in conflict with the SIP and RAQS and may contribute to a potentially significant cumulative impact on air quality (County of San Diego 2007).

The project site is currently zoned for Commercial (C) use with an existing General Plan designation of Commercial and is within the City's General Plan College Area Neighborhood. The project proposes a General Plan and Zoning Amendment to change the land use designation to Specific Plan Area (SPA). The SANDAG Series 13 forecast

[3] For the purpose of this discussion, the relevant federal air quality plan is the Ozone Attainment Plan (SDAPCD 2020). The RAQS is the applicable plan for purposes of state air quality planning. Both plans reflect growth projections in the SDAB.

projects that the City will see an increase of 3,170 housing units between 2020 and 2035 (SANDAG 2013); the project would only account for 3.8% of that increase in City housing. The project's proposed General Plan Amendment and Rezone would be within the growth projections for the City; thus, the project would result in regional growth that is accounted for within the RAQS. Furthermore, at a regional level, the growth is consistent with the underlying growth forecasts in the SIP and RAQS. Therefore, implementation of the proposed project would not conflict with the RAQS or SIP, and potential future development would be consistent with the growth in the region. Impacts would be **less than significant.**

Threshold No. 2: Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

In analyzing cumulative impacts from a project, the analysis must specifically evaluate a project's contribution to the cumulative increase in pollutants for which the air basin is designated as nonattainment for the CAAQS and NAAQS. If a project does not exceed thresholds and is determined to have less-than-significant project-specific impacts, it may still contribute to a significant cumulative impact on air quality if the emissions from the project, in combination with the emissions from other proposed or reasonably foreseeable future projects, are in excess of established thresholds. However, a project would only be considered to have a significant cumulative impact if the project's contribution accounts for a significant proportion of the cumulative total emissions (i.e., it represents a "cumulatively considerable contribution" to the cumulative air quality impact).

Additionally, for the SDAB, the RAQS serves as the long-term regional air quality planning document for the purpose of assessing cumulative operational emissions to ensure that the SDAB continues to make progress toward NAAQS and CAAQS attainment status. As such, cumulative projects located in the San Diego region would have the potential to result in a cumulative impact to air quality if, in combination, they would conflict with or obstruct implementation of the RAQS. Similarly, individual projects that are inconsistent with the regional planning documents upon which the RAQS is based would have the potential to result in cumulative operational impacts if they represent development and population increases beyond regional projections.

The SDAB has been designated as a federal nonattainment area for O_3 and a state nonattainment area for O_3, PM_{10}, and $PM_{2.5}$. PM_{10} and $PM_{2.5}$ emissions associated with construction generally result in "near-field" impacts. The nonattainment status is the result of cumulative emissions from all sources of these air pollutants and their precursors within the SDAB. As discussed previously, the emissions of all criteria pollutants would be below the significance levels. Construction would be short term and temporary, and once construction is completed, construction-related emissions would cease. Operational emissions generated by the project would not exceed the significance thresholds for VOCs, NO_x, CO, SO_x, PM_{10}, or $PM_{2.5}$, and would not cause a significant impact. As such, the project would result in less-than-significant impacts to air quality relative to operational emissions.

Construction of the proposed project would result in the temporary addition of pollutants to the local airshed caused by soil disturbance, fugitive dust emissions, and combustion pollutants from on-site construction equipment, as well as from off-site trucks hauling construction materials. Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of operation, and, for dust, the prevailing weather conditions. Therefore, such emissions levels can only be estimated, with a corresponding uncertainty in precise ambient air quality impacts. Fugitive dust (PM_{10} and $PM_{2.5}$) emissions would primarily result from grading and site preparation activities. NO_x and CO emissions would primarily result from the use of construction equipment and motor vehicles.

Construction emissions were calculated using CalEEMod for the estimated worst-case day over the construction period associated with each phase and reported as the maximum daily emissions estimated during each year of construction (2023 and 2024). Construction schedule assumptions, including phase type, duration, and sequencing, were based on information provided by the applicant, and are intended to represent a reasonable scenario based on the best information available. A detailed depiction of the construction schedule—including information regarding phasing, equipment used during each phase, haul trucks, vendor trucks, and worker vehicles—is included in Section 2.4.2.1, Construction, of Appendix B to this EIR.

Construction of the proposed project would generate temporary air pollutant emissions from entrained dust, off-road equipment, vehicle emissions, architectural coatings, and asphalt pavement application. Entrained dust results from the exposure of earth surfaces to wind from the direct disturbance and movement of soil, resulting in PM_{10} and $PM_{2.5}$ emissions. The proposed project would be subject to SDAPCD Rule 55, Fugitive Dust Control. This rule requires that a project take steps to restrict visible emissions of fugitive dust beyond the property line. Compliance with Rule 55 would limit fugitive dust (PM_{10} and $PM_{2.5}$) that may be generated during grading and construction activities. To account for dust control measures in the calculations, it was assumed that the active sites would be watered at least two times daily, resulting in an approximately 55% reduction of particulate matter. Compliance with Rule 55 would be required as a standard condition of project approval or for issuance of a grading permit.

Exhaust from internal combustion engines used by construction equipment, hauling trucks (dump trucks), vendor trucks (delivery trucks), and worker vehicles would result in temporary emissions of NO_x, VOC, CO, SO_x, PM_{10}, and $PM_{2.5}$. Application of architectural coatings, such as exterior/interior paint and other finishes, would also produce VOC emissions; however, the contractor is required to procure architectural coatings from a supplier in compliance with the requirements of SDAPCD Rule 67.0.1, Architectural Coatings (SDAPCD 2021). This rule requires manufacturers, distributors, and end users of architectural and industrial maintenance coatings to reduce VOC emissions from the use of these coatings, primarily by placing limits on the VOC content of various coating categories (SDAPCD 2015). The proposed project would comply with SDAPCD Rule 67.0.1 through the incorporation of low-VOC architectural coatings. The VOC content assumed for the analysis was 50 grams per liter for interior coatings and 100 grams per liter for exterior coatings.

Table 3.2-8 shows the estimated maximum daily construction emissions associated with the construction of the proposed residential use. Details of the emissions calculations are provided in Appendix B of this EIR.

Table 3.2-8. Estimated Maximum Daily Construction Emissions – Unmitigated

Year	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	Pounds per Day					
2023	1.36	21.59	43.15	0.08	5.39	1.92
2024	1.36	21.59	43.12	0.08	5.39	1.92
2025	48.50	11.21	19.58	0.05	2.02	0.08
Maximum daily emissions	**48.50**	**21.59**	**43.15**	**0.08**	**5.39**	**1.92**
Emission threshold	*75*	*250*	*550*	*250*	*100*	*55*
Threshold exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

Source: Appendix B
Notes: VOC = volatile organic compound; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM_{10} = particulate matter with an aerodynamic diameter equal to or less than 10 microns; $PM_{2.5}$ = particulate matter with an aerodynamic diameter equal to or less than 2.5 microns.

See Appendix B for output files and modeling details.
The values shown are the maximum summer or winter daily emissions results from CalEEMod and provided in Appendix B. The maximum emissions assumes compliance with SDAPCD Rule 67.0.1, Architectural Coatings, and SDAPCD Rule 55, Fugitive Dust Control.

As shown in Table 3.2-8, daily construction emissions would not exceed the significance thresholds for VOC, NO_x, CO, SO_x, PM_{10}, or $PM_{2.5}$.

Following completion of construction activities, the proposed residential use would generate VOC, NO_x, CO, SO_x, PM_{10}, and $PM_{2.5}$ emissions from mobile sources, including vehicular traffic generated by residents; area sources, including the use of landscaping equipment and consumer products; and architectural coatings.

Table 3.2-9 presents the maximum daily emissions associated with operation of the proposed residential use. The values shown for mobile sources (motor vehicles), energy sources, and area sources are the maximum of either the summer or winter daily emissions results from CalEEMod, whichever is greater.

Table 3.2-9. Estimated Project Maximum Daily Operational Emissions – Unmitigated

Emission Source	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	Pounds per Day					
Area	3.17	0.11	9.89	0.00	0.06	0.06
Energy	0.03	0.22	0.09	0.00	0.02	0.02
Mobile	2.03	1.77	15.18	0.03	3.02	0.82
Total	**5.23**	**2.10**	**25.16**	**0.03**	**3.10**	**0.90**
Emission threshold	*55*	*250*	*550*	*250*	*100*	*55*
Threshold exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

Source: Appendix B
Notes: VOC = volatile organic compound; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM_{10} = particulate matter with an aerodynamic diameter equal to or less than 10 microns; $PM_{2.5}$ = particulate matter with an aerodynamic diameter equal to or less than 2.5 microns.
See Appendix B for output files and modeling details.

As shown in Table 3.2-9, the daily operational emissions from implementation of the proposed project would not exceed the significance thresholds for VOC, NO_x, CO, SO_x, PM_{10}, or $PM_{2.5}$.

Regarding long-term cumulative operational emissions in relation to consistency with local air quality plans, the SIP and RAQS serve as the primary air quality planning documents for the state and SDAB, respectively. The SIP and RAQS rely on SANDAG growth projections based on population, vehicle trends, and land use plans developed by the cities and the County as part of the development of their general plans. Development that is consistent with the growth anticipated by local plans would be consistent with the SIP and RAQS and would result in emissions that are accounted for. Projects that conform to the permitted land use or result in a less emissions-intensive use and are therefore accounted for in the SIP and RAQS would not be considered to result in cumulatively considerable impacts from operational emissions. As stated previously, the project would result in fewer emissions than buildout of the existing permitted land use that was anticipated by the RAQS and therefore would not result in significant regional emissions that are not accounted for within the RAQS. As a result, the project would not result in a cumulatively considerable contribution to regional O_3 concentrations or other criteria pollutant emissions. Therefore, the project's cumulative impacts would be **less than significant**.

Threshold No. 3: Would the project expose sensitive receptors to substantial pollutant concentrations?

Air quality varies as a direct function of the amount of pollutants emitted into the atmosphere, the size and topography of the air basin, and the prevailing meteorological conditions. Air quality problems arise when the rate of pollutant emissions exceeds the rate of dispersion. Reduced visibility, eye irritation, and adverse health impacts on those persons termed sensitive receptors are the most serious hazards of existing air quality conditions in the area. Some land uses are considered more sensitive to changes in air quality than others, depending on the population groups and the activities involved. People most likely to be affected by air pollution, as identified by CARB, include children, older adults, athletes, and people with cardiovascular and chronic respiratory diseases; however, for the purposes of this analysis, residents are also considered sensitive receptors. As such, sensitive receptors include residences, schools, playgrounds, childcare centers, athletic facilities, long-term healthcare facilities, rehabilitation centers, convalescent centers, and retirement homes.

Health Impacts of Toxic Air Contaminants

In addition to impacts from criteria pollutants, project impacts may include emissions of pollutants identified by the state and federal government as TACs or hazardous air pollutants. State law has established the framework for California's TAC identification and control program, which is generally more stringent than the federal program and aimed at TACs that are a problem in California. The state has formally identified more than 200 substances as TACs, including the federal hazardous air pollutants, and is adopting appropriate control measures for sources of these TACs. The greatest potential for TAC emissions during construction would be DPM from heavy-duty equipment operations and heavy-duty trucks, and the associated health impacts to sensitive receptors. The following measures are required by state law to reduce diesel particulate emissions:

- Fleet owners of mobile construction equipment are subject to the CARB Regulation for In-use Off-road Diesel Vehicles (13 CCR 2449), the purpose of which is to reduce DPM and criteria pollutant emissions from in-use (existing) off-road diesel-fueled vehicles.
- All commercial diesel vehicles are subject to Title 13, Section 2485 of the California Code of Regulations, limiting engine idling time. Idling of heavy-duty diesel construction equipment and trucks during loading and unloading shall be limited to 5 minutes; electric auxiliary power units should be used whenever possible.

The greatest potential for TAC emissions during construction would be DPM emissions from heavy-duty equipment operations and heavy-duty trucks during construction of the project and the associated health impacts to sensitive receptors.

However, as a precautionary measure, an HRA was performed to evaluate the risk from diesel exhaust emissions on existing sensitive receptors and future on-site receptors from construction activities. The HRA methodology was described in Section 3.2.3, and the detailed assessment is provided in Appendix B. Table 3.2-10 summarizes the results of the HRA for proposed project construction.

Table 3.2-10. Construction Activity Health Risk Assessment Results

Impact Parameter	Units	Project Impact	CEQA Threshold	Level of Significance
Cancer Risk	Per Million	5.9	10.0	Less than Significant
HIC	Not Applicable	0.005	1.0	Less than Significant

Source: Appendix B.
Notes: CEQA = California Environmental Quality Act; HIC = Chronic Hazard Index.

The results of the HRA demonstrate that the TAC exposure from construction diesel exhaust emissions would result in cancer risk on site below the 10 in 1 million threshold, as well as Chronic Hazard Index less than 1.0. Therefore, TAC emissions from construction of the proposed project would not expose sensitive receptors to substantial pollutant concentrations and would result in a less than significant impact. Upon completion of construction, the project would not generate substantial TAC emissions. As such, impacts would be **less than significant** during construction and operation.

Health Impacts of Carbon Monoxide

As described previously, exposure to high concentrations of CO can result in dizziness, fatigue, chest pain, headaches, and impairment of central nervous system functions. Mobile-source impacts, including those related to CO, occur on two scales. Regionally, project-related construction travel would add to regional trip generation and increase the vehicle miles traveled within the local airshed and the SDAB. Locally, construction traffic would be added to the roadway system in the vicinity of the project site. Although the SDAB is currently an attainment area for CO, there is a potential for the formation of microscale CO "hotspots" to occur immediately around points of congested traffic. Hotspots can form if such traffic occurs during periods of poor atmospheric ventilation, is composed of a large number of vehicles cold-started and operating at pollution-inefficient speeds, and/or is operating on roadways already crowded with non-project traffic. Because of continued improvement in vehicular emissions at a rate faster than the rate of vehicle growth and/or congestion, the potential for CO hotspots in the SDAB is steadily decreasing. The SDAB is a CO maintenance area (western and central part of the SDAB only).

The Governor's Office of Planning and Research and the California Natural Resources Agency have issued new CEQA Guidelines for analyzing transportation impacts. By July 1, 2020, all CEQA lead agencies must analyze a project's transportation impacts using vehicle miles traveled. Vehicle miles traveled measures the distances vehicles will travel to and from a project, rather than congestion levels at intersections (level of service, graded on a scale of A–F). To account for this shift from LOS to vehicle miles traveled—such that vehicle congestion is no longer modeled and available—but to nonetheless evaluate the potential for CO hotspots for the hypothetical development scenario, this EIR utilizes CO modeling analyses performed by the South Coast Air Quality Management District (SCAQMD) relative to 1-hour and 8-hour concentrations as follows.

The SCAQMD conducted CO modeling for the 2003 Air Quality Management Plan (Appendix V of SCAQMD 2003) for the four worst-case intersections in the South Coast Air Basin: (1) Wilshire Boulevard and Veteran Avenue, (2) Sunset Boulevard and Highland Avenue, (3) La Cienega Boulevard and Century Boulevard, and (4) Long Beach Boulevard and Imperial Highway. At the time the 2003 Air Quality Management Plan was prepared, the intersection of Wilshire Boulevard and Veteran Avenue was the most congested intersection in Los Angeles County, with an average daily traffic volume of about 100,000 vehicles per day. Using CO emission factors for 2002, the peak modeled CO 1-hour concentration was estimated to be 4.6 parts per million (ppm) at the intersection of Wilshire Boulevard and Veteran Avenue.

A daily traffic volume of 100,000 vehicles (as considered in the SCAQMD modeling) as a result of the proposed project would be at least double the traffic volumes of nearby intersections (Appendix K). However, if "peak" modeled 1-hour concentration from SCAQMD's analysis of 100,000 vehicle traffic volumes of 4.6 ppm were added to the maximum 1-hour CO concentration from 2018 through 2020 at the San Diego–11403 Rancho Carmel Drive monitoring station (see Table 3, Local Ambient Air Quality Data, in Appendix B to this EIR) of 4.1 ppm (in 2019), the 1-hour CO concentration in the project area would total 8.7 ppm. This worst case scenario—modeling at least double the traffic experienced in the project area—would still result in 1-hour CO concentrations well below the CAAQS 1-hour CO threshold of 20 ppm.

Concerning 8-hour concentrations, SCAQMD modeled future year 8-hour CO concentrations at the Central Los Angeles monitoring site of 4.6 ppm in 2020. Adding 4.6 ppm to the maximum 8-hour CO concentration from 2018 through 2020 at the San Diego–11403 Rancho Carmel Drive monitoring station of 2.5 ppm (in 2019) would result in a total 8-hour CO concentration of 7.1 ppm. Again, this worst case scenario 8-hour CO concentration, assuming traffic counts far above that experienced in the project area, would still be well below the CAAQS 8-hour threshold of 9.0 ppm.

Therefore, CO concentrations at congested intersections would not exceed the 1-hour or 8-hour CO CAAQS unless projected daily traffic would cause area traffic volumes to exceed 100,000 vehicles per day. The proposed project would not increase daily traffic volumes at any study intersection to more than 100,000 vehicles per day (Appendix K). Therefore, the proposed project is not anticipated to create a CO hotspot. As such, impacts to sensitive receptors with regard to potential CO hotspots resulting from the project and hypothetical development scenario's contribution to cumulative traffic-related air quality impacts would be **less than significant.**

Health Impacts of Criteria Air Pollutants

Construction and operation of the project would not result in emissions that exceed the SDAPCD significance thresholds for any criteria air pollutants including VOC, NO_x, CO, SO_x, PM_{10}, or $PM_{2.5}$. Regarding VOCs, some VOCs would be associated with motor vehicles and construction equipment, while others are associated with architectural coatings, the emissions of which would not result in the exceedances of the SDAPCD significance thresholds. Generally, the VOCs in architectural coatings are of relatively low toxicity. Additionally, the project would use low-VOC architectural coatings that would comply with SDAPCD Rule 67.0.1, which restricts the VOC content of coatings for both construction and operational applications (SDAPCD 2015).

In addition, VOCs and NO_x are precursors to O_3, for which the SDAB is designated as nonattainment with respect to the NAAQS and CAAQS (the SDAB is designated by EPA as an attainment area for the 1-hour O_3 NAAQS). The health effects associated with O_3 are generally associated with reduced lung function. The contribution of VOCs and NO_x to regional ambient O_3 concentrations is the result of complex photochemistry. The increases in O_3 concentrations in the SDAB due to O_3 precursor emissions tend to be found downwind from the source location to allow time for the photochemical reactions to occur. However, the potential for exacerbating excessive O_3 concentrations would also depend on the time of year that the VOC emissions would occur because exceedances of the O_3 ambient air quality standards tend to occur between April and October when solar radiation is highest.

The holistic effect of a single project's emissions of O_3 precursors is speculative due to the lack of quantitative methods to assess this impact. Nonetheless, the VOC and NO_x emissions associated with project construction could minimally contribute to regional O_3 concentrations and the associated health impacts. Due to the minimal contribution during construction and operation, health impacts would be considered less than significant.

Similar to O_3, construction of the project would not exceed the SDAPCD significance thresholds for PM_{10} or $PM_{2.5}$ and would not contribute to exceedances of the NAAQS and CAAQS for particulate matter. Due to the minimal contribution of particulate matter during construction and operation, health impacts would be considered less than significant.

Regarding NO_2, according to the construction emissions analysis, construction of the project would not contribute to exceedances of the NAAQS and CAAQS for NO_2. NO_2 and NO_x health impacts are associated with respiratory irritation, which may be experienced by nearby receptors during the periods of heaviest use of off-road construction equipment. Off-road construction equipment would be operating at various portions of the site and

would not be concentrated in one portion of the site at any one time. Construction of the project would not require any stationary emission sources that would create substantial, localized NO_x impacts. Therefore, health impacts would be considered less than significant.

In summary, construction and operation of the project would not result in exceedances of SDAPCD significance thresholds for criteria pollutants. The VOC and NO_x emissions, as described previously, would minimally contribute to regional O_3 concentrations and the associated health effects. In addition to O_3, NO_x emissions would not contribute to potential exceedances of the NAAQS and CAAQS for NO_2. The existing NO_2 concentrations in the area are well below the NAAQS and CAAQS. Thus, the project's operational NO_x emissions are not expected to result in exceedances of the NO_2 standards or contribute to the associated health effects. PM_{10} and $PM_{2.5}$ would not contribute to potential exceedances of the NAAQS and CAAQS, would not obstruct the SDAB from coming into attainment for these pollutants, and would not contribute to significant health effects associated with particulates. Therefore, health impacts associated with criteria air pollutants would be considered **less than significant**.

Valley Fever Exposure

Valley fever is not highly endemic to San Diego County, and within the County, the incidence rate in the project area is below the County average and the statewide average. Construction of the project would comply with SDAPCD Rule 55, which limits the amount of fugitive dust generated during construction. Strategies the project would implement to comply with SDAPCD Rule 55 and control dust include watering two times per day and limiting speed on unpaved roads to 15 miles per hour.

Based on the low incidence rate of Coccidioidomycosis in San Diego County and the project's implementation of dust control strategies, it is not anticipated that earth-moving activities during project construction would result in exposure of nearby sensitive receptors to valley fever. Therefore, the project would have **a less-than-significant** impact with respect to valley fever exposure for sensitive receptors.

Threshold No. 4: Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Odors would be generated from vehicle and equipment exhaust emissions during construction of the proposed project. Odors produced during construction would be attributable to concentrations of unburned hydrocarbons from tailpipes of construction equipment and from architectural coatings. Such odors would disperse rapidly from the project site and generally occur at magnitudes that would not affect substantial numbers of people. Therefore, impacts associated with odors during construction would be **less than significant**.

Land uses and industrial operations associated with odor complaints include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding (CARB 2005). The proposed project would not allow for any of these activities. Moreover, typical odors generated from operation of the proposed project residential land uses would primarily include vehicle exhaust generated by residents and through the periodic use of landscaping and maintenance equipment. Therefore, the proposed project would result in an odor impact that is **less than significant**.

3.2.5 Cumulative Impact Analysis

The project's cumulative air quality impacts were previously addressed above under Threshold No. 2 in Section 3.2.4. In analyzing cumulative impacts from the project, the analysis must specifically evaluate a

project's contribution to the cumulative increase in pollutants for which the basin is designated as nonattainment for the CAAQS and NAAQS.

The project would include a 120-unit residential development on undeveloped land. The residential development would result in fewer emissions than buildout of the existing permitted commercial land use that was anticipated by the RAQS and therefore would not result in significant regional emissions that are not accounted for within the RAQS. As a result, the project would not result in a cumulatively considerable contribution to regional O_3 concentrations or other criteria pollutant emissions.

Cumulative localized impacts would potentially occur if a construction project were to occur concurrently with another off-site project. As it is unknown whether the cumulative projects under review will be approved or not, and, if approved, when actual construction would begin, it would be speculative to estimate any potential overlap of the proposed project. Construction schedules for potential future projects near the project site are currently unknown; therefore, potential construction impacts associated with two or more simultaneous projects would be speculative. However, future projects would be subject to CEQA and would require an air quality analysis and, where necessary, mitigation if the project would exceed the SDAPCD significance thresholds. Criteria air pollutant emissions associated with construction activity of future projects would be reduced through implementation of control measures required by SDAPCD. Cumulative PM_{10} and $PM_{2.5}$ emissions would be reduced because all future projects would be subject to SDAPCD Rule 55, Fugitive Dust, which sets forth general and specific requirements for all construction sites in the SDAPCD.

As construction and operation of the project would be typical of townhome development uses, implementation of the project is not expected to contribute to any cumulative health risks. Cumulative impacts would be **less than significant**.

3.2.6 Mitigation Measures

The project would not result in significant impacts; therefore, no mitigation is required.

3.2.7 Conclusion

The proposed project would change the allowable land use and zoning designation of Commercial (C) to allow for residential uses under a proposed Specific Plan Area (SPA). However, the project's proposed growth would be within the growth projections for the City and, at a regional level, the proposed project is consistent with the underlying growth forecasts in the SIP and RAQS. Therefore, implementation of the proposed project would not conflict with the RAQS or SIP and proposed development would be consistent with the growth in the region.

Implementation of the proposed project also would not violate any air quality standards or contribute substantially to an existing or projected air quality violation during construction with mitigation or operation. Additionally, the proposed project would not expose a substantial number of people to objectionable odors.

As construction and operations of the proposed project would not exceed the significance thresholds for criteria air pollutants, the potential for the proposed project to result in a cumulatively considerable net increase of any criteria pollutant (here, O_3) for which the project region is nonattainment under an applicable national or California ambient air quality standard is less than significant.

3.3 Biological Resources

This section describes the existing biological resources of the proposed Gran Vista Specific Plan Project (project), identifies associated regulatory requirements, evaluates potential impacts, and identifies mitigation measures related to implementation of the proposed project. This section is based on the Biological Resources Technical Report prepared by Dudek in July 2022, which is included as Appendix C to this environmental impact report.

Table 3.3-1 summarizes the project- and cumulative-level biological resource impacts by threshold.

Table 3.3-1. Biological Resources Summary of Impacts

Threshold of Significance	Project Impact	Project Cumulative Impact	Significance Determination
No. 1: Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.	Potentially Significant	Less than Significant with **MM-BIO-1** and **MM-BIO-2**	Less than Significant with **MM-BIO-1** and **MM-BIO-2**
No. 2: Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.	Potentially Significant	Less than Significant with **MM-BIO-1** and **MM-BIO-2**	Less than Significant with **MM-BIO-1** and **MM-BIO-2**
No. 3: Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.	No impact	No impact	No impact
No. 4: Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.	Less than Significant	Less than Significant	Less than Significant
No. 5: Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.	Less than Significant	Less than Significant	Less than Significant
No. 6: Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.	Less than Significant	Less than Significant	Less than Significant

3.3.1 Existing Conditions

The 7.6-acre project site consists of undeveloped land in the northwestern portion of the City of San Marcos (City). Although undeveloped, the project site reflects a history of disturbance. Vegetation is disturbed from previous grading and disking. Based on historical aerial imagery, the project site was graded and disked in the early 1990s and again in the early 2000s; between 2005 and 2009 the site was graded and used as a staging area for construction of the CVS store located just south of the site. In addition, in 2017 the site was utilized by Palomar Community College District for temporary parking. Once the parking was no longer needed, the area was restored by removing parking fill and applying a hyrdroseed to the disturbed areas (Appendix C).

The project site is immediately adjacent to roadways. The site is located at the northwest corner of N Las Posas Road and W Mission Road. Existing development occurs on all sides of the site. An existing CVS Pharmacy abuts the project site to the south. Nearby land uses in the vicinity of the project site include industrial and commercial uses to the west on the other side of W Mission Road, a residential community to the north and west, and Palomar College approximately 0.2 miles to the east.

The project site is gently sloping from north to south, ranging in elevation from approximately 582 to 568 feet above mean sea level. Two soil types have been mapped on the project site: Huerhuero loam (HrC), 2% to 9% slopes, and Placentia sandy loam (PeC), 2% to 9% slopes. Soils within the project site have been degraded over time from disturbances such as grading and disking. As a result, the soils no longer maintain their native soil characteristics and therefore have no particular significance to biological resources of the project site (Appendix C).

The biological study area for the project includes the entire project site. Prior to conducting the field surveys, Dudek performed a review of relevant maps, databases, and literature pertaining to biological resources known to occur within the project vicinity. In addition, a query of sensitive species and habitats within vicinity of the project site was conducted, including the U.S. Fish and Wildlife Service (USFWS) species records; California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDB); San Diego Natural History Museum's Plant Atlas, Mammal Atlas, and Bird Atlas (Unitt 2004); the San Diego Geographic Information Source, and California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants (Appendix C).

The project site is generally located within the boundaries of the North County Multiple Habitat Conservation Program (MHCP) Plan area (Appendix C), specifically within the area of the City of San Marcos Subarea Habitat Conservation Plan/Natural Community Conservation Plan (Draft San Marcos Subarea Plan). The Draft San Marcos Subarea Plan has not been completed, approved, or adopted (City of San Marcos 2001). However, it is the City of San Marcos General Plan (General Plan) policy to comply with the conservation policies identified in the MHCP through use of the Draft San Marcos Subarea Plan as an implementation tool.

3.3.2 Methodology

Literature Review

Prior to conducting the field surveys, Dudek conducted a review of the existing biological resources and species within the vicinity of the survey area using the CDFW CNDDB; the CNPS Online Inventory of Rare, Threatened, and Endangered Plants of California; the San Diego Natural History Museum's Plant Atlas, Mammal Atlas, and Bird Atlas; and the San Diego Geographic Information Source. Dudek obtained special-status species occurrence data from the above sources by querying records within the U.S. Geological Survey (USGS) 7.5-minute quadrangle map for the project site and the nine quadrangle maps surrounding the project site, including the Valley Center, Morro Hill, Bonsall, Pala, Encinitas, Escondido, Rancho Santa Fe, San Luis Rey, and San Marcos USGS quadrangle maps (Appendix C).

For this analysis, special-status plant and wildlife species are defined as those that are (1) listed, proposed for listing, or candidates for listing as threatened or endangered under the federal Endangered Species Act (FESA); (2) listed or candidates for listing as threatened or endangered under the California Endangered Species Act; (3) designated as Fully Protected under the California Fish and Game Code; (4) designated as a California Species of Special Concern by CDFW; and/or (5) assigned a California Rare Plant Rank of 1B or 2B by the CNPS.

In addition, Dudek reviewed the following available resources to assess the potential for biological and wetland resources within the project site and vicinity:

- List of potentially occurring listed species generated from a review of the USFWS's Information for Planning and Consultation Trust Resources Report list of federal and threatened species (USFWS 2022a)
- USGS National Hydrography Dataset (USGS 2022)
- USFWS National Wetlands Inventory (USFWS 2022b)
- U.S. Department of Agriculture, Natural Resources Conservation Service, Web Soil Survey (USDA 2022)

Prior environmental documents prepared for the project provided information on biological resources and constraints previously identified. The documents reviewed include the following:

- Biological Site Assessment for the Meritage Homes Project in San Marcos, California (Dudek 2021)
- Directed Surveys for Thread-Leaved and Orcutt's Brodiaea, Mission Pointe (EAEC 2017)
- Potential Biological Constraints to Development for the Property Located at the Corner of N Las Posas and W Mission Road, City of San Marcos (BCG 2008)

Field Surveys

Vegetation Community and Land Cover Mapping

Dudek conducted vegetation mapping to characterize natural vegetation communities, including habitats for special-status species, within the project site. Vegetation communities and land covers were mapped using the Preliminary Descriptions of the Terrestrial Natural Communities of California (Holland 1986) as modified by the County of San Diego and noted in Vegetation Communities of San Diego County (Oberbauer 2008).

Vegetation mapping was conducted within the project site in June 2021 in conjunction with the initial reconnaissance-level surveys for sensitive resources. Mapping was performed in the field through interpretation of field maps with a high-quality aerial photographic base map.

Focused Surveys for Thread-Leaved and Orcutt's Brodiaea

Everett and Associates Environmental Consultants conducted a focused survey for thread-leaved brodiaea (*Brodiaea filifolia*) and Orcutt's brodiaea (*B. orcutti*) in 2017 within the project site. A reference site approximately 1,300 feet northwest of the project site with a known population of thread-leaved brodiaea was visited the morning of the survey to verify the species was in bloom. The project site was surveyed using transects to achieve complete visual coverage of the site (EAEC 2017).

Jurisdictional Delineation

In 2008, Blue Consulting Group performed a jurisdictional delineation to classify waters of the United States and state, including wetlands, under the jurisdiction of the U.S. Army Corps of Engineers (USACE) and CDFW (BCG 2008). The USACE jurisdictional wetlands delineation was conducted in accordance with the 1987 U.S. Army Corps of Engineers Wetland Delineation Manual (USACE 1987). Hydrology, vegetation, and soils were examined at potential wetland sites and were recorded on wetland determination data forms. Additionally, a directed survey for potential vernal pool basins and vernal pool plant species was completed on site.

Dudek field verified the findings of previous jurisdictional delineations within the project site in June 2021 in conjunction with the initial reconnaissance-level surveys for sensitive resources. Methods followed those described for the 2008 delineation above.

Survey Limitations

The reconnaissance survey, vegetation mapping, and jurisdictional delineation were done during daylight hours under weather conditions that allowed for quality biological observations (e.g., surveys were not conducted during rain). Because surveys were conducted during the day, the likelihood of detecting nocturnal and crepuscular species, such as many mammal species, was relatively low.

Vegetation Communities and Land Covers

Three vegetation communities or habitat types occur within the project site: non-native grassland, Diegan coastal sage scrub: Baccharis-dominated, and urban/developed (see Table 3.3-2). Vegetation community locations on the project site can be seen on Figure 3.3-1, Vegetation Communities and Land Cover Types.

Table 3.3-2. Existing Vegetation/Habitat Types

Vegetation Community/Habitat Type	Area (Acres)[1]
Non-native grassland	5.95
Diegan coastal sage scrub: Baccharis-dominated	0.6
Urban/developed	0.9
Total	**7.6**

Source: Appendix C.
Note:
[1] Acres rounded to the nearest 0.01 acres for wetland habitat and 0.1 acres for upland habitat.

Non-Native Grassland

Non-native grassland consists of dense to sparse cover of annual grasses with flowering culms between 0.5 to 3 feet in height (Oberbauer 2008). In San Diego County, the presence of wild oat (*Avena* spp.), bromes (*Bromus* spp.), redstem stork's bill (*Erodium cicutarium*), and shortpod mustard (*Hirschfeldia incana*) are common indicators. In some areas, depending on past disturbance and annual rainfall, annual forbs may be the dominant species; however, it is presumed that grasses will dominate. Non-native grassland makes up the majority of the project site and is dominated by oats and brome grasses in the open to continuous herbaceous layer. Other common herbs observed in the grassland include shortpod mustard, prickly Russian thistle (*Salsola tragus*), redstem stork's bill, and Menzies's golden bush (*Isocoma menziesii*). There are 5.95 acres of non-native grassland on site (Appendix C). The vegetation community is the result of hydroseed placement over the graded portions of the site. The current owner actively mows the area, thus limiting the potential for the area to regenerate to its fullest potential. Typically, this vegetation community is considered sensitive and impacts would require mitigation.

Diegan Coastal Sage Scrub: Baccharis-dominated

Diegan coastal sage scrub: Baccharis-dominated is a subcategory of coastal scrub plant community as described in Oberbauer (2008). The community is typically dominated by low, soft woody drought-deciduous shrubs with shallow root systems and open canopies and associated herbaceous species. The community typically occupies xeric sites with shallow soils. Characteristic species include California sagebrush (*Artemisia californica*), California

buckwheat (*Eriogonum fasciculatum*), black sage (*Salvia mellifera*), and white sage (*Salvia apiana*). The western slope of the project site contains approximately 0.6 acres of disturbed Diegan coastal sage scrub, dominated by coyote brush (*Baccharis pilularis*) and ladies' tobacco (*Pseudognaphalium californicum*) (Appendix C). This vegetation community is considered sensitive and impacts would require mitigation.

Urban/Developed

The urban/developed land cover refers to areas that have been constructed on or otherwise physically altered to the point where vegetation is no longer present. Urban or developed areas are characterized by permanent or semi-permanent structures, hardscapes, and landscaped areas that require irrigation.

Within the project site, this mapping unit identifies the developed area in the southern portion of the site containing the CVS parking lot, Peruvian peppertree (*Schinus mole*), Brazilian peppertree (*Schinus terebinthifolius*), and a couple small palm trees. There are 0.9 acres of urban/developed land on site. This land cover is not sensitive and does not require habitat compensation (Appendix C).

Plants

A total of 21 plant species were observed within the project site during the biological surveys, of which 7 (33%) are native species and 14 (67%) are non-native species. Please refer to Appendix C for a list and details regarding the 21 plant species observed within the project site.

Animals

Wildlife was recorded on site during the initial reconnaissance-level survey in 2021. Common species observed on the project site included California ground squirrel (*Spermophilus [Otospermophilus] beecheyi*), brush rabbit (*Sylvilagus bachmani*), Cassin's kingbird (*Tyrannus vociferans*), and American crow (*Corvus brachyrhynchos*).

Special-Status/Regulated Resources

Special-Status Vegetation Communities

Sensitive natural communities are vegetation communities that (1) support concentrations of special-status plant or wildlife species, (2) are of particular value to wildlife, and/or (3) are of limited distribution statewide or within a county or region. The MHCP organizes vegetation into habitat group types: Wetland Communities, Rare Upland, Coastal Sage Scrub, Chaparral, Annual Grassland, and Other Lands (SANDAG 2003). Vegetation communities listed under each of those groups, except for Other Lands, are considered sensitive and impacts to these communities would require mitigation. The City typically requires habitat compensation for impacts to non-native grassland at a 0.5:1 ratio and for impacts to Diegan coastal sage scrub at a 1:1 ratio. No habitat compensation is required for impacts to urban/developed.

Special-Status Plant Species

Results of the CNDDB, CNPS, and Information for Planning and Consultation database searches identified 65 special-status plant species as occurring or potentially occurring within the USGS 7.5-minute quadrangle map and the nine quadrangle maps surrounding the project site—Valley Center, Morro Hill, Bonsall, Pala, Encinitas, Escondido, Rancho Santa Fe, San Luis Rey, and San Marcos (CDFW 2022a; CNPS 2022)—and within the vicinity (USFWS 2022a). All 65 were eliminated from further consideration due to a lack of suitable habitat or edaphic

conditions, extent of habitat degradation within the project site (e.g., regular mowing, previous disturbance), or the location of the project site being outside a species' known range. No special-status plant species were observed during the initial site reconnaissance survey. Everett and Associates Environmental Consulting did not observe any special-status plant species on site during the focused survey for thread-leaved brodiaea and Orcutt's brodiaea, and reported that appropriate soils for these species were not on site (EAEC 2017). Therefore, the project site has no value as habitat for endangered, rare, or threatened plant species.

Special-Status Wildlife Species

Results of the CNDDB and Information for Planning and Consultation database searches identified 52 special-status wildlife species as occurring or potentially occurring within the USGS 7.5-minute quadrangle map and the nine quadrangle maps surrounding the project site—Valley Center, Morro Hill, Bonsall, Pala, Encinitas, Escondido, Rancho Santa Fe, San Luis Rey, and San Marcos USGS quadrangle maps (CDFW 2022a)—and within the vicinity (USFWS 2022a). Of these, 51 species were eliminated from consideration due to the absence of suitable habitat within the project site or the project site being outside of their known range (Appendix C). The remaining species, burrowing owl (*Athene cunicularia*), was determined to have a moderate potential to occur on the project site based on the presence of suitable habitat.

Burrowing Owl

Burrowing owl is a California Species of Special Concern. It requires habitat with three basic attributes: open, well-drained terrain; short, sparse vegetation; and underground burrows or burrow surrogates, such as culverts, concrete debris piles, or riprap (Klute et al. 2003). This species occupies grasslands, deserts, sagebrush scrub, agricultural areas (including pastures and untilled margins of cropland), earthen levees and berms, coastal uplands, and urban vacant lots, as well as the margins of airports, golf courses, and roads. This species also prefers sandy soils with higher bulk density and less silt, clay, and gravel (Lenihan 2007).

Although habitat within the project site is moderately suitable to support burrowing owl foraging and breeding, this species is not known to breed and forage within proximity of the project site. Suitable habitat for this species exists within the non-native grassland and disturbed Diegan coastal sage scrub vegetation communities located within the project site. California ground squirrel burrows, which can be utilized by burrowing owls for breeding and shelter, were observed within the project site during the reconnaissance survey; however, no burrowing owls or sign of burrowing owl presence (i.e., whitewash, pellets, feathers) was observed within the project site during the reconnaissance survey or previous surveys. The nearest CNDDB documented occurrence for this species is a historical occurrence approximately 6.86 miles southeast of the project site (Occ. No. 567) (CDFW 2022b). In addition, the project site is surrounded by development and has been disturbed multiple times throughout the years. Therefore, although there is suitable habitat available for this species, it is not expected to occur.

Nesting Birds

Habitats within the project site could provide suitable nesting habitat for bird species, including raptors, known to occur in the region. In California, all native birds and active bird nests (with eggs or young) are protected by Sections 3503 and 3503.5 of the California Fish and Game Code. The trees and shrubs within and adjacent to the project site provide suitable nesting habitat for several native resident and migratory bird species.

Jurisdictional Aquatic Resources

In 2008, Blue Consulting Group conducted a delineation at the site and observed mulefat (*Baccharis salicifolia*) and deer weed (*Acmispon glaber*) growing in the southwest portion of the site. Wetland sampling points were taken beside the mulefat and concluded that no jurisdictional wetlands were located on the project site. Dudek analyzed the project site in 2021 and confirmed that no jurisdictional aquatic resources occur on site (Appendix C).

Wildlife Corridors/Core Wildlife Areas

Wildlife corridors are linear features that connect large patches of natural open space and provide avenues for the migration of animals. Wildlife corridors contribute to population viability by ensuring continual exchange of genes between populations, providing access to adjacent habitat areas for foraging and mating, and providing routes for recolonization of habitat after local extirpation or ecological catastrophes (e.g., fires).

Habitat linkages are small patches that join larger blocks of habitat and help reduce the adverse effects of habitat fragmentation. Habitat linkages provide a potential route for gene flow and long-term dispersal of plants and animals. They may also serve as primary habitat for smaller animals, such as reptiles and amphibians. Habitat linkages may be continuous habitat or discrete habitat islands that function as stepping stones for dispersal.

To function effectively, a wildlife corridor must link two or more patches of habitat for which connectivity is desired, and it must be suitable for the focal target species to achieve the desired demographic and genetic exchange between populations. Habitat areas are identified by the City as areas of open space natural habitats located in patches spread throughout the City. The largest patches of open space occur in the northern and southern portions of the City (City of San Marcos 2012).

The approximately 7.6-acre project site is not expected to provide for wildlife movement or serve as an important habitat linkage because it is surrounded by residential neighborhoods and commercial and industrial development. Because of regular human activity and considerable vehicle traffic in and surrounding the site, predominantly urban-adapted wildlife species are expected to occur in this area, such as raccoons (*Procyon lotor*), Virginia opossum (*Didelphis virginiana*), striped skunk (*Mephitis mephitis*), and brush rabbits (*Sylvilagus* spp.).

3.3.3 Regulatory Setting

Federal

Federal Endangered Species Act

FESA of 1973 (16 USC 1531 et seq.), as amended, is administered by USFWS for most plant and animal species and by the National Oceanic and Atmospheric Administration National Marine Fisheries Service for certain marine species. This legislation is intended to provide a means to conserve the ecosystems upon which endangered and threatened species depend and provide programs for the conservation of those species, thus preventing extinction of plants and wildlife. FESA defines an endangered species as “any species that is in danger of extinction throughout all or a significant portion of its range.” A threatened species is defined as “any species that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.” Under FESA, it is unlawful to take any listed species, and “take” is defined as, “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.”

FESA allows for the issuance of incidental take permits for listed species under Section 7, which is generally available for projects that also require other federal agency permits or other approvals, and under Section 10, which provides for the approval of habitat conservation plans on private property without any other federal agency involvement. Upon development of a habitat conservation plan, USFWS can issue incidental take permits for listed species.

Clean Water Act

Pursuant to Section 404 of the Clean Water Act, USACE regulates the discharge of dredged and/or fill material into waters of the United States. The term "wetlands" (a subset of waters of the United States) is defined in Title 33 of the Code of Federal Regulations, Section 328.3(b), as "those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas." In the absence of wetlands, the limits of USACE jurisdiction in non-tidal waters, such as intermittent streams, extend to the ordinary high water mark, which is defined in Title 33 of the Code of Federal Regulations, Section 328.3(e).

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) was originally passed in 1918 as four bilateral treaties, or conventions, for the protection of a shared migratory bird resource. The primary motivation for the international negotiations was to stop the "indiscriminate slaughter" of migratory birds by market hunters and others. Each of the treaties protects selected species of birds and provides for closed and open seasons for hunting game birds. The MBTA protects more than 800 species of birds and prohibits the take of any migratory bird or any part, nest, or eggs of any such bird. Under the MBTA, "take" is defined as pursuing, hunting, shooting, capturing, collecting, or killing, or attempting to do so (16 USC 703 et seq.). Additionally, Executive Order 13186, Responsibilities of Federal Agencies to Protect Migratory Birds, requires that any project with federal involvement address impacts of federal actions on migratory birds with the purpose of promoting conservation of migratory bird populations (66 FR 3853–3856). The executive order requires federal agencies to work with USFWS to develop a memorandum of understanding. USFWS reviews actions that might affect these species.

Two species of eagles that are native to the United States, bald eagle (*Haliaeetus leucocephalus*) and golden eagle (*Aquila chrysaetos*), were granted additional protection within the United States under the Bald and Golden Eagle Protection Act (16 USC 668–668d) to prevent the species from becoming extinct.

State

California Environmental Quality Act

The California Environmental Quality Act (CEQA) (California Public Resources Code, Section 21000 et seq.) and the CEQA Guidelines (14 CCR 15000 et seq.) require identification of a project's potentially significant impacts on biological resources and feasible mitigation measures and alternatives that could avoid or reduce significant impacts. CEQA Guidelines Section 15380(b)(1) defines endangered animals or plants as species or subspecies whose "survival and reproduction in the wild are in immediate jeopardy from one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, disease, or other factors." A rare animal or plant is defined in CEQA Guidelines Section 15380(b)(2) as a species that, although not currently threatened with extinction, exists "in such small numbers throughout all or a significant portion of its range that it may become endangered if its environment worsens; or … [t]he species is likely to become endangered within the foreseeable

future throughout all or a significant portion of its range and may be considered 'threatened' as that term is used in the federal Endangered Species Act." Additionally, an animal or plant may be presumed to be endangered, rare, or threatened if it meets the criteria for listing, as defined further in CEQA Guidelines Section 15380(c). CEQA also requires identification of a project's potentially significant impacts on riparian habitats (such as wetlands, bays, estuaries, and marshes) and other sensitive natural communities, including habitats occupied by endangered, rare, and threatened species.

In Title 14 of the California Code of Regulations, Section 1.72, CDFW defines a "stream" (including creeks and rivers) as "a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life. This includes watercourses having surface or subsurface flow that supports or has supported riparian vegetation."

In Title 14 of the California Code of Regulations, Section 1.56, CDFW's definition of "lake" includes "natural lakes or man-made reservoirs." Diversion, obstruction, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake that supports fish or wildlife requires authorization from CDFW by means of entering into an agreement pursuant to Section 1602 of the California Fish and Game Code.

CDFW recognizes that all plants with a California Rare Plant Rank 1A, 1B, or 2, and some ranked 3, of the CNPS Inventory of Rare and Endangered Plants in California (CNPS 2022) may meet the criteria for listing as threatened or endangered and should be considered under CEQA (CDFW 2021). Some of the California Rare Plant Rank 3 and 4 plants meet the criteria for determination as "rare" or "endangered" as defined in Section 1901, Chapter 10 (Native Plant Protection Act), Division 2, of the California Fish and Game Code, as well as Section 2062 and Section 2067, Chapter 1.5 (CESA), Division 3. Therefore, consideration under CEQA for these California Rare Plant Rank 3 and 4 species is strongly recommended by the CNPS (CNPS 2022).

For purposes of this report, animals considered "rare" under CEQA include endangered or threatened species, Birds of Conservation Concern (USFWS 2021), California Species of Special Concern (CDFW 2022b), and fully protected species.

Section IV, Appendix G, Environmental Checklist Form, of the CEQA Guidelines requires an evaluation of impacts to "any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service."

The criteria used to determine the significance of impacts to biological resources under CEQA are provided under Section 3.3.4, Thresholds of Significance, and in Chapter 5 of the Biological Resources Technical Report (Appendix C).

California Endangered Species Act

CDFW administers the California Endangered Species Act (CESA), which prohibits the "take" of plant and animal species designated by the California Fish and Game Commission as endangered or threatened in the state of California. Under CESA Section 86, take is defined as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." CESA Section 2053 stipulates that state agencies may not approve projects that will "jeopardize the continued existence of any endangered species or threatened species, or result in the destruction or adverse modification of habitat essential to the continued existence of those species, if there are reasonable and prudent alternatives available consistent with conserving the species or its habitat which would prevent jeopardy."

CESA defines an endangered species as "a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant which is in serious danger of becoming extinct throughout all, or a significant portion, of its range due to one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, or

disease." CESA defines a threatened species as "a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that, although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future in the absence of the special protection and management efforts required by this chapter. Any animal determined by the [California Fish and Game] Commission as rare on or before January 1, 1985, is a threatened species." A candidate species is defined as "a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that the Commission has formally noticed as being under review by the department for addition to either the list of endangered species or the list of threatened species, or a species for which the Commission has published a notice of proposed regulation to add the species to either list." CESA does not list invertebrate species.

CESA authorizes the taking of threatened, endangered, or candidate species if take is incidental to an otherwise lawful activity and if specific criteria are met. These provisions also require CDFW to coordinate consultations with USFWS for actions involving federally listed species that are also state-listed species. In certain circumstances, CESA allows CDFW to adopt a CESA incidental take authorization as satisfactory for CEQA purposes based on finding that the federal permit adequately protects the species and is consistent with state law.

A CESA permit may not authorize the take of "fully protected" species that are protected in other provisions of the California Fish and Game Code, as discussed further below.

California Fish and Game Code

Sections 3511 (birds), 4700 (mammals), 5050 (reptiles and amphibians), and 5515 (fish) of the California Fish and Game Code provide that designated fully protected species may not be taken or possessed without a permit. Incidental take of these species is not authorized by law.

Pursuant to Section 3503.5 of the California Fish and Game Code, it is unlawful to take, possess, or destroy any birds of prey or to take, possess, or destroy any nest or eggs of such birds. Birds of prey refer to species in the orders Falconiformes and Strigiformes.

Nests of all other birds (except English sparrow [*Passer domesticus*] and European starling [*Sturnus vulgaris*]) are protected under Sections 3503 and 3513 of the California Fish and Game Code.

Pursuant to Section 1602 of the California Fish and Game Code, CDFW regulates all diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake that supports fish or wildlife. Diversion, obstruction, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake that supports fish or wildlife requires authorization from CDFW by means of entering into an agreement pursuant to Section 1602 of the California Fish and Game Code.

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act (Porter-Cologne Act) protects water quality and the beneficial uses of water. It applies to surface water and groundwater. Under this law, the State Water Resources Control Board develops statewide water quality plans, and the Regional Water Quality Control Boards develop regional basin plans that identify beneficial uses, water quality objectives, and implementation plans. The Regional Water Quality Control Boards have the primary responsibility to implement the provisions of statewide plans and basin plans. Waters regulated under the Porter-Cologne Act include isolated waters that are not regulated by USACE. Regional Water Quality Control Boards regulate discharging waste, or proposing to discharge waste, within any region that could

affect waters of the state (California Water Code, Section 13260[a]). Waters of the state are defined as "any surface water or groundwater, including saline waters, within the boundaries of the state" (California Water Code, Section 13050[e]). Developments with impacts on jurisdictional waters must demonstrate compliance with the goals of the Porter-Cologne Act by developing stormwater pollution prevention plans, standard urban stormwater mitigation plans, and other measures to obtain a Clean Water Act Section 401 certification. If a Clean Water Act Section 404 permit is not required for a project, the Regional Water Quality Control Board may still require a permit (i.e., Waste Discharge Requirement) for impacts to waters of the state under the Porter-Cologne Act.

Local

City of San Marcos General Plan

The Conservation and Open Space Element of the City's General Plan contains several policies pertaining to the protection of biological resources (City of San Marcos 2012). The following goals and policies apply to the project:

Goal COS-1: Identify, protect, and enhance significant ecological and biological resources within San Marcos and its adaptive Sphere of Influence.

Policy COS-1.1: Support the protection of biological resources through the establishment, restoration, and conservation of high-quality habitat areas.

Policy COS-1.2: Ensure that new development, including Capital Improvement Projects, maintain the biotic habitat value of riparian areas, oak woodlands, habitat linkages, and other sensitive biological habitats.

Policy COS-1.3: Continue to work with other federal, State, regional, and local agencies to implement, SANDAG's MHCP.

Goal COS-2: The City is committed to conserving, protecting, and maintaining open space, agricultural, and limited resources for future generations. By working with property owners, local organizations, and state and federal agencies, the City can limit the conversion of resource lands to urban uses.

Policy COS-2.1: Provide and protect open space areas throughout the City for its recreational, agricultural, safety, and environmental value.

Policy COS-2.2: Limit, to the extent feasible, the conversion of open space to urban uses and place a high priority on acquiring and preserving open space lands for recreation, habitat protection and enhancement, flood hazard management, water and agricultural resources protection, and overall community benefit.

Policy COS-2.6: Preserve healthy mature trees where feasible; where removal is necessary, trees shall be replaced at a ratio of 1:1.

Goal COS-3: Protect natural topography to preserve and enhance the natural beauty of San Marcos.

Policy COS-3.3: Continue to work with new development and redevelopment project applicants in designing land use plans that respect the topography, landforms, view corridors, wildlife corridors, and open space that exists.

Policy COS-3.4: Evaluate potential impacts to visual and aesthetics resources, including the potential to create new light sources, while still maintaining and being sensitive to rural lighting standards.

Goal COS-8: Focus watershed protection, surface and groundwater quality management on sources and practices that the City has the ability to affect.

Policy COS-8.4: Require new development and redevelopment to protect the quality of water bodies and natural drainage systems through site design, source controls, storm water treatment, runoff reduction measures, Best Management Practices (BMPs), low impact development hydromodification strategies consistent with the current San Diego Regional Water Quality Control Board Municipal Stormwater National Pollutant Discharge Elimination System Permit, and all future municipal stormwater permits.

The project's consistency with applicable General Plan goals and policies is discussed in Section 3.10, Land Use and Planning. As shown in Section 3.10.4, the project is consistent with the applicable goals and policies related to biological resources.

North County Multiple Habitat Conservation Program

The North County MHCP is a long-term regional conservation plan established to protect sensitive species and habitats in northern San Diego County. The MHCP is divided into seven subarea plans—one for each jurisdiction within the MHCP—that are permitted and implemented separately from one another. The City of Carlsbad is the only city under the MHCP that has an approved and permitted subarea plan. The Draft San Marcos Subarea Plan has not been finalized or implemented, and the City is no longer an active participant in the Natural Community Conservation Plan program or the subregional MHCP conservation planning effort. However, it is the City's policy to comply with the conservation policies identified in the Draft San Marcos Subarea Plan, including an assessment of any designated Biological Core and Linkage Area or MHCP Focused Planning Area in the context of a proposed project and the preservation of sensitive biological resources.

3.3.4 Thresholds of Significance

The significance criteria used to evaluate the project impacts to biological resources are based on Appendix G of the CEQA Guidelines. According to Appendix G of the CEQA Guidelines, a significant impact related to biological resources would occur if the project would:

- **Threshold No. 1:** Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.
- **Threshold No. 2:** Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.
- **Threshold No. 3:** Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.
- **Threshold No. 4:** Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.
- **Threshold No. 5:** Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
- **Threshold No. 6:** Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

3.3.5 Project Impact Analysis

The project consists of 120 townhomes on an approximately 7.6-acre project site The proposed project would have a density of approximately 15.8 dwelling units per acre.

The significance of impacts to biological resources present, or with potential to occur on the project site, was determined based upon the sensitivity of each resource and the extent of the anticipated impact. For certain highly sensitive resources (e.g., a federally listed species), any impact would be considered significant. Conversely, other resources that are of low sensitivity (e.g., species with a large, locally stable population in the County of San Diego but declining elsewhere) could sustain some impact with a less-than-significant effect.

The issues addressed in this section are derived from Appendix G of the CEQA Guidelines. Mitigation, monitoring, and reporting requirements to eliminate or reduce project impacts to a less-than-significant level are also provided herein.

Threshold No. 1: Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

Direct impacts could occur during construction if activities inadvertently encroach into areas outside the authorized limits of work. However, the project site has no value as habitat for endangered, rare or threatened plant species. No special-status plants have moderate or high potential to occur on the project site due to lack of suitable vegetation, soil, or microhabitats or the project site being outside of their known range (Appendix C). In addition, the site does not support any known populations of special-status wildlife. The project site has been disturbed several times in the past and is also located within a developed portion of the City. Therefore, any suitable habitat on site would be considered isolated, and the past disturbance would preclude special-status species from utilizing the site.

Raptors and/or any migratory birds are protected under the MBTA (16 USC 703 et seq.) and California Fish and Game Code (Sections 3503 and 3503.5). The MBTA provides protection for birds by prohibiting the destruction of active nests for most native birds. The MBTA protects more than 800 species of birds, including species such as house finch (*Haemorhous mexicanus*), mourning dove (*Zenaida macroura*), and California towhee (*Melozone crissalis*), which could nest in the grassland, Diegan coastal sage scrub, or urban/developed areas within the project site. Impacts to nesting birds would be potentially significant (**Impact BIO-1**). The project would include a mitigation measure requiring nesting bird surveys be completed if clearing and grubbing occur during the nesting season (typically February 15 through August 31) (**Mitigation Measure [MM] BIO-2**). Local governments have the land use authority to protect bird nests during clearing and grubbing activities; therefore, nesting bird surveys are a common and typical mitigation measure for any property in the state and western region due to the wide range of the Pacific Flyway. Impacts to nesting birds would be **less than significant with mitigation incorporated**.

Threshold No. 2: Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

Development of the proposed project has the potential to result in impacts to special-status vegetation communities on site. The majority of the non-native grassland would be directly impacted, resulting in the loss of 5.95 acres of this vegetation community. Impacts to non-native grassland are typically considered significant, requiring mitigation for impacts. However, the portions of the project site that contain non-native grassland have been subject to repeated disturbance, as discussed in Appendix C. The current conditions are the result of erosion control

hydroseed installation following the removal of the temporary parking lot. The non-native grassland is regularly maintained by the current owner, thus reducing the ability for the grassland to function as habitat for wildlife species. Therefore, any impacts to this vegetation community resulting from the proposed project would be **less than significant**, and no mitigation would be required.

Potentially significant direct impacts could also occur if construction work inadvertently extends beyond the authorized work limits where impacts to sensitive natural communities, specifically Diegan coastal sage scrub, are not anticipated (**Impact BIO-2**). The proposed project would be required to install temporary fencing to ensure that impacts stay within the project limits (**MM-BIO-1**). Therefore, potential direct impacts to sensitive vegetation communities would be **less than significant with mitigation incorporated**.

Potential indirect impacts as a result of increased human presence, noise, domestic animals, the spread of non-native species, and artificial lighting are not anticipated due to the urban nature of the project location. Therefore, indirect impacts to sensitive natural communities as a result of the proposed project would not occur.

Threshold No. 3: Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

As described in Appendix C, in 2008, Blue Consulting Group conducted a delineation at the site and observed mulefat and deer weed growing in the southwest portion of the site. Wetland sampling points were taken beside the mulefat and it was concluded that no jurisdictional wetlands were located on the project site. Dudek analyzed the project site in 2021 and confirmed that no jurisdictional aquatic resources occur on site. Based on the analysis above, no substantial adverse effect on state or federally protected wetlands would occur as a result of project implementation; **no impact** would occur.

Threshold No. 4: Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

The project site does not support fish habitat, as the site is entirely bounded by existing development, is not contiguous with native habitats, and is outside of areas where wildlife movement opportunities do occur (along undeveloped open space habitat corridors). Development on the project site would not interfere with wildlife movement or nursery functions. Areas may be used by smaller urban-adapted mammal species and bird species, but such areas are not considered refuge as a wildlife corridor or habitat linkage. Further, the project site is located in an urban and developed area that does not support wildlife movement or nursery functions. As outlined in Appendix C, there are no wildlife corridors or habitat linkages on site. Based on the analysis above, development of the project site would not interfere or impede with wildlife movement, corridors, or nursery sites. Impacts would be **less than significant**.

Threshold No. 5: Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Section 14.12.200 of the San Marcos Municipal Code provides that where a permit is required for excavation, fill, or obstruction for installation or repair of utilities under any public street, sidewalk, trail, or public place, such construction should be located away from trees. The proposed project would likely require some utility work within adjacent public streets, including sewer and water connections, storm drainage facilities, and circulation

improvements. However, as a requirement to obtain an excavation permit under the San Marcos Municipal Code, such construction would be located away from trees and would not otherwise require the removal of trees within the public right-of-way. In the case that construction near trees is unavoidable, the applicant will confer with the Director of Development Services, or their designee, to determine how best to avoid conflicts with mature trees and their root systems. The project would be required to demonstrate compliance with this requirement to the satisfaction of the Director to obtain an excavation permit.

Per General Plan Policy COS-2.6, healthy mature trees are to be preserved, where feasible; where removal is necessary, trees shall be replaced at a ratio of 1:1. The project does not propose any tree removal at this time, and thus would not require the removal of any healthy mature trees. The project would plant approximately 288 trees. The proposed project would incorporate a conceptual landscape plan that would detail tree planting plans and would be drafted to be aligned with all relevant General Plan policies, including this tree preservation policy.

Further, as discussed in Section 3.10, the project would be consistent with the City's General Plan Conservation and Open Space Element. Development of a commercial use on site, which the project site is currently zoned for, would likely result in greater impacts to biological resources in comparison to the proposed residential use due to increased impervious areas, no required open space uses, and hazards associated with commercial development. Therefore, it is determined that the project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance, and impacts would be **less than significant**.

Threshold No. 6: Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

The project is not located within a designated Biological Core Linkage Area or Focused Planning Area, and therefore it is consistent with the conservation policies of the Draft San Marcos Subarea Plan. In addition, the project would be required to conform to the goals and policies in the City's General Plan (City of San Marcos 2012) related to the protection of biological resources. Following implementation of proposed mitigation measures, the project is expected to be found to be in conformance with the Draft San Marcos Subarea Plan and the General Plan. Therefore, impacts related to regional resource planning would be **less than significant**.

3.3.6 Cumulative Impact Analysis

Sensitive Natural Communities

The project would directly contribute to the cumulative loss of 5.95 acres of non-native grassland. These impacts would typically be considered significant prior to mitigation; however, due to the previous years of disturbance on the site and the active mowing, impacts to non-native grassland would be considered less than significant. With the implementation of **MM-BIO-2,** as identified below, the project would reduce cumulative impacts to a level below significance.

Cumulative projects would be required to mitigate their individual impacts to sensitive vegetation communities through either on-site preservation/restoration or off-site habitat acquisition. Therefore, because the proposed project and cumulative projects would be required to mitigate for habitat loss, impacts related to the loss of sensitive vegetation communities would not be cumulatively considerable.

Special-Status Plant and Animal Species

Cumulative impacts consider the potential regional effects of a project and how a project may affect an ecosystem or one of its members beyond the project limits and on a regional scale. As discussed, the project would have potentially significant impacts associated nesting birds; however, implementation of MM-BIO-1 and MM-BIO-2 would reduce these impacts to a level below significance.

Similar to the project, cumulative projects would be required to mitigate impacts by avoiding the grading or clearing of suitable habitat for sensitive wildlife during breeding season, or by conducting pre-construction surveys to avoid sensitive species if construction would occur during breeding season. Through the implementation of required mitigation, impacts to present and potentially present sensitive wildlife species would be reduced to a level below significance for the proposed project and for cumulative projects. Therefore, cumulative impacts with regard to special-status wildlife species would not be cumulatively considerable.

Jurisdictional Waters and Wetlands

As analyzed above, the project site does not contain any jurisdictional waters or wetlands and no impact would occur. Like the proposed project, it is presumed that all reasonably foreseeable cumulative projects would be required to conform to existing regulations with respect to avoidance, minimization, and mitigation of impacts to sensitive habitat, achieving no-net-loss of wetlands and like/kind replacement for impacts to sensitive habitat that cannot be avoided. The regulatory permitting process ensures that every project with unavoidable impacts on jurisdictional resources implements required avoidance, minimization, and compensatory mitigation measures and obtains the appropriate permits. Projects in the region are required to meet a no-net-loss standard for both function and spatial area of wetland and non-wetland resources. Therefore, the project would not contribute to a cumulative impact to jurisdictional waters and wetlands.

Wildlife Corridors and Habitat Linkages

The project site does not support fish habitat, as the site is entirely bounded by existing development, is not contiguous with native habitats, and is outside of areas where wildlife movement opportunities do occur (along undeveloped open space habitat corridors). Development on the project site would not interfere with wildlife movement or nursery functions. The project site and many cumulative projects are located in an urban and developed area that does not support wildlife movement or nursery functions. However, cumulative projects would be required to analyze wildlife corridors or habitat linkages on their respective sites and mitigate their individual impacts. Therefore, because the proposed project does not contain any wildlife corridors or habitat linkages on site, impacts would not be cumulatively considerable.

Conflict with Local Ordinances/Tree Preservation Policies

Like the proposed project, it is presumed that all reasonably foreseeable cumulative projects would be required to conform to the San Marcos Municipal Code requirements and General Plan policies for tree replacement. Therefore, the project would not contribute to a cumulative impact related to a conflict with tree preservation policies.

Conflict with Adopted Habitat Management Plan

The Draft San Marcos Subarea Plan has not been adopted and remains in draft form since 2001; therefore, the project would not be in conflict with an adopted habitat conservation plan. The project is not located within a designated Biological Core Linkage Area or Focused Planning Area, and therefore it is consistent with the

conservation policies of the Draft San Marcos Subarea Plan. In addition, the project would be required to conform to the goals and policies in the General Plan (City of San Marcos 2012) related to the protection of biological resources. Following implementation of proposed mitigation measures, the project is expected to be found to be in conformance with the Draft San Marcos Subarea Plan and the General Plan. Therefore, no impacts related to regional resource planning are anticipated.

All reasonably foreseeable cumulative projects would be required to conform to existing regulations with respect to avoidance, minimization, and mitigation of impacts to sensitive habitat, achieving no-net-loss of wetlands and like/kind replacement for impacts to sensitive habitat that cannot be avoided. Impacts would be assessed on a regional basis and mitigated pursuant to CEQA, and those projects within the City's jurisdiction would be reviewed by the City during the project review and approval process. For these reasons, project impacts to biological resources would not be cumulatively considerable.

3.3.7 Mitigation Measures

MM-BIO-1 and **MM-BIO-2** outlined below would address **Impact BIO-1** and **Impact BIO-2** and would ensure consistency with the MHCP and Draft San Marcos Subarea Plan, reduce potential impacts related to special status animals and nesting birds, and reduce potential impacts to sensitive natural communities. With implementation of **MM-BIO-1** and **MM-BIO-2**, impacts to biological resources as a result of project implementation would be reduced to less than significant.

MM-BIO-1 Temporary Construction Fencing. Prior to issuance of a grading permit, the project applicant shall provide the limits of grading, including staging areas, and plans shall be provided to the City of San Marcos (City) and a qualified biologist for review and approval. Temporary fencing shall be installed in accordance with the approved grading plan and inspected by a qualified biologist.

The project applicant shall temporarily fence the limits of project impacts and install appropriate sediment-trapping devices to prevent additional impacts to, and the spread of silt from, the construction zone into adjacent habitats to be avoided. Fencing and sediment trapping devices shall be installed in a manner that does not impact habitats to be avoided.

If work occurs beyond the fenced limits of impacts, all work shall cease until the problem has been remedied to the satisfaction of the City. Any habitat impacts that occur beyond the authorized work area shall be offset at ratios approved by the City. Temporary construction fencing and sediment trapping devices shall be removed upon project completion.

MM-BIO-2 Pre-Construction Nesting Bird Surveys. To avoid any direct impacts to raptors and/or any migratory birds protected under the Migratory Bird Treaty Act (16 USC 703 et seq.) and California Fish and Game Code (3503 and 3503.5), removal of habitat shall occur outside of the nesting season for these species (i.e., outside of February 15 through August 31, annually). If, however, removal of habitat must occur during the nesting period, the proposed project applicant or its designee shall retain a biologist to conduct a pre-construction survey to determine the presence or absence of nesting birds in the proposed area of disturbance. The pre-construction survey must be conducted within 72 hours prior to the start of construction and shall be repeated if construction activities discontinue for more than 3 consecutive days.

Impacts to active nests are typically avoided as follows. Clearing and construction shall be postponed or halted within the following buffers to be established by the biologist: (1) no work within 50 feet of a non-listed and non-raptor avifauna nest and (2) no work within 500 feet of a raptor nest. Raptor nests are not anticipated within the immediate project site due to lack of suitable nesting habitat; however, trees within 500 feet of the project boundary could support raptor nesting. The construction avoidance area shall be clearly demarcated in the field with highly visible construction fencing or flagging, and construction personnel shall be instructed on the sensitivity of nest areas. To the extent possible, the no-construction buffer zones shall be avoided until the nesting cycle is complete. However, it may be reasonable for the City of San Marcos to reduce these buffer widths depending on site conditions. If construction-related activities must take place within an active nest buffer area, the proposed project applicant or its designee shall present a plan to the City of San Marcos with measures to monitor and minimize impacts to nesting birds. No ground-disturbance activities shall occur within the avoidance buffer zone until the qualified biologist has determined that the nest is no longer active and the young are not dependent on the nest.

3.3.8 Conclusion

As described throughout Section 3.3.5, Project Impact Analysis, implementation of the proposed project would result in potentially significant impacts to biological resources (**Impact BIO-1** and **Impact BIO-2**). However, compliance with existing regulations and implementation of **MM-BIO-1** and **MM-BIO-2** outlined in Section 3.3.7, Mitigation Measures, would ensure that the proposed project would not result in significant impacts to sensitive vegetation communities, special-status species, or nesting birds. Implementation of proposed mitigation and City review of proposed project plans for the site would ensure impacts to biological resources would be reduced to a level of less than significant.



SOURCE: SanGIS 2019

DUDEK

0 75 150 Feet

FIGURE 3.3-1

Vegetation Communities and Land Cover Types

Gran Vista Specific Plan Project EIR

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3.4 Cultural Resources

This section describes the existing cultural resources of the proposed Gran Vista Specific Plan Project (project), identifies associated regulatory requirements, evaluates potential impacts, and identifies mitigation measures related to implementation of the proposed project. Potential impacts to tribal cultural resources are analyzed in Section 3.16 of this environmental impact report (EIR).

The analysis in this section relies on the Archaeological Resource Inventory Negative Findings Report for the Gran Vista Project (Cultural Resources Report) prepared by Dudek in February 2023. The Cultural Resources Report included a record search, literature review, correspondence with Native American contacts, and a field survey. The analysis also considers the California Environmental Quality Act (CEQA) Guidelines Appendix G and applicable state and local regulations, including the City of San Marcos General Plan (General Plan). The Cultural Resources Report is included as Appendix D to this EIR.

Table 3.4-1 summarizes the project- and cumulative-level cultural resources impacts, by threshold.

Table 3.4-1. Cultural Resources Summary of Impacts

Threshold of Significance	Project-Level Impact	Cumulative-Level Impact	Significance Determination
No. 1: Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5.	No Impact	No Impact	No Impact
No. 2: Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5.	Potentially Significant	Less than Significant	Less Than Significant with **MM-CR-1** through **MM-CR-4**
No. 3: Disturb any human remains, including those interred outside of dedicated cemeteries.	Potentially Significant	Less than Significant	Less Than Significant with **MM-CR-1** through **MM-CR-4**

3.4.1 Existing Conditions

This section provides information on the cultural setting of the project site, as well as information on the research methodology used to prepare the Cultural Resources Report for the proposed project. Additional detail can be found in Appendix D of this EIR.

The project's area of potential effect (APE), as analyzed in the Cultural Resources Report, includes the entire 7.6-acre project site, which is located in the City of San Marcos (City), County of San Diego, and is comprised of Assessor's Parcel Numbers 219-121-15-00 and 219-121-16-00. The project APE is located at the northwest corner of N Las Posas Road and W Mission Road and is surrounded by commercial, residential, and light industrial uses. The project site is undeveloped and reflects a history of disturbance. Vegetation is disturbed by an abundance of invasive and weedy plant species (Appendix C, Biological Resources Technical Report).

Methodology

South Coastal Information Center Records Search

Dudek previously completed a cultural resources constraints analysis for the project (Appendix D). The purpose of the records search is to identify any previously recorded cultural resources that may be located within the project site. In addition to a review of previously prepared EIRs, permit application packages, site records, and reports, the records search also reviewed historical maps of the project APE and vicinity, ethnographies, the National Register of Historic Places (NRHP), the California Register of Historic Resources (CRHR), the Built Environment Resources Directory, and the lists of California State Historical Landmarks, California Points of Historical Interest, and Archaeological Determinations of Eligibility. Dudek received the results of the records search on June 17, 2021 (Appendix D).

Dudek reviewed the Built Environment Resources Directory on June 16, 2021. No previously recorded built environment resources are located within the project APE or along the blocks of N Las Posas Road and W Mission Road that border the project APE.

The South Coastal Information Center records search results identified 40 cultural resources within 1 mile of the project APE, none of which intersect the current project APE. One resource, P-37-005584/CA-SDI-5584, was identified immediately adjacent to the project APE and is discussed below. Table 1 in Appendix D summarizes the cultural resources within 1 mile of the project APE.

P-37-005584/CA-SDI-5584

This site was originally recorded by Randy Franklin in 1977 as a single grinding slick in a boulder outcrop on a small knoll. Franklin (1977) stated that there was no midden but that lithic flakes, core fragments, and a hammerstone were present near the adjacent road, and suggested that they may have been intrusive. This resource was located immediately east of the project APE within the current path of N Las Posas Road. This resource was destroyed during the road's construction in 1986 and its expansion by 1990.

The records search also identified 55 previous studies that have been performed within 1 mile of the project APE. Four of these studies addressed at least a portion of the project APE, one of which (SD-18210) addressed the entire project APE. SD-18210, however, was a constraints study and did not include a full pedestrian survey. The findings of SD-18210 are similar to the findings of this inventory and so will not be summarized here. These previous 55 studies were conducted between 1974 and 2020. No survey of the project APE has been conducted within the past 6 years. A complete list of the previous studies conducted within 1 mile of the project APE is included in Appendix D.

Built Environment Historical Resources

There are no built environment resources on the project APE. The project APE is surrounded by numerous residential and commercial buildings, all of which were constructed after 1973. No previously identified historical resources are in the vicinity. The commercial building to the south of the project APE (currently CVS) was constructed in 2010. The width of streets and topography surrounding the project APE creates a geographic and visual separation between the project APE and all nearby development. There are no built environment historical resources that require avoidance or evaluation prior to construction.

Archival Research

The previous constraints analysis included a review of historic topographic maps and aerial photographs of the project APE and the general vicinity, to help determine the possible development and land use of the project APE in the past. The historic aerial imagery available from Nationwide Environmental Title Research LLC includes historic photographs available since 1953 (NETR 2021). The 1953 aerial photograph shows that the property was undeveloped but still bordered W Mission Road to the south. The knoll and rock outcrop on which archaeological resource P-37-005584 was located is vaguely visible on the 1953 aerial photograph. By 1964, a natural drainage that was located west of the project APE was channelized and demarcates the western boundary of the current project APE. The project APE itself was still undisturbed but a residential development was constructed to the northeast. By 1978, the project APE and the adjacent P-37-005584 knoll were undisturbed, though a new residential development was constructed west of the project boundary. The 1984 aerial photograph shows that the southeastern corner of the project APE was graded but the rest of the project APE and the adjacent P-37-005584 knoll was undisturbed. The 1986 aerial photograph shows the grading of the current N Las Posas Road alignment. This grading disturbed the eastern border of the project APE and destroyed part of the adjacent P-37-005584 knoll. In 1989, the grading of the eastern project APE boundary was expanded and substantial earth movement was required to support the current alignment of the six-laned N Las Posas Road. This expansion destroyed the P-37-005584 knoll adjacent to the project APE. By 1991, the entire project APE had been graded. By 2009, the entire project APE was graded again, leaving the property with a northern terrace that overlooked the southern 75% of the project APE. The current commercial building and parking lot that bound the southern portion of the project APE were also constructed in 2009. The historic aerial photographs show that the project APE has been undeveloped but completely disturbed.

Intensive Pedestrian Survey

Dudek archaeologist conducted a survey of the proposed project APE on April 22, 2022. Native American monitor Logovii Sialoi from Saving Sacred Sites Inc., a Luiseño owned company, participated in the pedestrian survey. The project consists of a vacant lot bordering existing residential and commercial developments. The project APE has been previously disturbed, as evidenced by graded terraces. There was an elevation difference of approximately 10 feet between the northern and the southern half of the parcel, showing complete disturbance of the natural landscape. Ground visibility was low throughout the project APE due to heavy vegetation, with some modern trash and debris scattered throughout the area. Though currently undeveloped, the project APE is immediately adjacent to residential and commercial development and has been subjected to illicit dumping activities. The pedestrian survey was conducted utilizing formal transects at 15-meter intervals. Deviations from transects also occurred to inspect animal burrows and other locations of exposed sediments and boulders. No remnants of adjacent resource P-37-005584 or other cultural resources were identified within the project APE (Appendix D).

Native American Heritage Commission and Native American Outreach Letters

Dudek requested a Native American Heritage Commission (NAHC) search of the Sacred Lands File on April 15, 2022 for the project APE and a 1-mile buffer. The Sacred Lands File consists of a database of known Native American resources. These resources may not be included in the South Coastal Information Center database. The NAHC replied on May 19, 2022, and reported that the Sacred Lands File did not identify any known Native American cultural resources within the project APE or the surrounding 1-mile buffer (Appendix D). The NAHC additionally provided a list of Native American tribes and individuals/organizations with traditional geographic associations that might have knowledge of cultural resources in this area.

Outreach letters were mailed on May 27, 2022, to all Native American group representatives included on the NAHC contact list (Appendix D). These letters attempted to solicit additional information relating to Native American resources that may be impacted by the project. Native American representatives were requested to define a general area where known resources intersect the project APE. To date, Dudek has received responses to these outreach letters from three tribal representatives. On June 17, 2022, San Pasqual Band of Mission Indians responded to the letter stating that the Project APE is within the boundary of the tribe's Traditional Use Area. San Pasqual stated that they would like to engage in "formal government to government consultation". On June 21, 2022, Pechanga Band of Luiseño Mission Indians stated that the Project APE is within their Ancestral Territory and that they are interested in participating in the Project Area. Pechanga added that the Project APE is within 1.75 miles of two Ancestral Placenames and nine other previously recorded sites within 0.5 miles, one of which is within the Project APE. Unfortunately, no other information about the intersecting resource was included but Pechanga is likely referring to the destroyed Project Area adjacent P-37-005584 knoll. On June 28, 2022 Rincon Band of Luiseño Indians responded to the outreach letter and stated that the Project APE was within the band's specific Area of Historic Interest. Rincon added that they were concerned that the project may impact Tribal Cultural Resources, Traditional Cultural Landscapes, or potential Traditional Cultural Properties. Rincon recommended that an archaeological/ cultural resources inventory and that a Tribal monitor from the Rincon Band should accompany the survey. On July 12, 2022, Dudek archaeologist Mattthew DeCarlo met Cheryl Madrigal, the Tribal Historic Preservation Officer for Rincon Band, at the Project APE for a site visit. They discussed the previous disturbance of the area and visited the location of former prehistoric bedrock milling site P-37-005584. Ms. Madrigal stated that she would contact the City about her concerns after she had some time to research the Project Area. On September 8, 2022, Rincon sent a letter to the City critiquing an earlier version of this report. Rincon requested an ethno-historic research and further analysis of adjacent sites P-37-005584 and P-37-005633.

In compliance with Assembly Bill (AB) 52 and Senate Bill (SB) 18, the City, as lead agency, is responsible for conducting government to government consultation with pertinent tribal entities. Rincon Band responded to City outreach for Senate Bill 18 and Assembly Bill 52 on February 16 and April 13 requesting consultation on the Project. The City had a consultation meeting with representatives of Rincon Band on August 16, 2022.

3.4.2 Regulatory Setting

The following section provides a general description of the applicable regulatory requirements pertaining to cultural resources, including federal, state, and local guidelines.

Federal

National Historic Preservation Act

The National Historic Preservation Act (NHPA) established the NRHP program under the Secretary of the Interior. The act authorized funding for state programs with provision for pass-through funding and participation by local governments, created an Advisory Council on Historic Preservation, and established the Section 106 review process for protecting historic resources. The goal of the Section 106 review process is to offer protection to sites that are determined eligible for listing in the NRHP. The National Historic Preservation Act provides the legal framework for most state and local preservation laws.

Traditional Cultural Properties (Native American Heritage Values)

Federal and state laws mandate that consideration be given to the concerns of contemporary Native Americans with regard to potentially ancestral human remains, associated funerary objects, and items of cultural patrimony. Consequently, an important element in assessing the significance of the study site has been to evaluate the likelihood that these classes of items are present in areas that would be affected by the proposed project. Also, potentially relevant to prehistoric archaeological sites is the category termed Traditional Cultural Properties in discussions of cultural resource management performed under federal auspices. According to Parker and King (1998), "Traditional" in this context refers to those beliefs, customs, and practices of a living community of people that have been passed down through the generations, usually orally or through practice. The traditional cultural significance of a historic property, then, is significance derived from the role the property plays in a community's historically rooted beliefs, customs, and practices.

State

California Register of Historic Resources (California Public Resources Code, Section 5020 et. seq.)

In California, the term "historical resource" includes, but is not limited to, "any object, building, structure, site, area, place, record, or manuscript which is historically or archaeologically significant, or is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California" (California Public Resources Code, Section 5020.1[j]). In 1992, the California legislature established the CRHR "to be used by state and local agencies, private groups, and citizens to identify the state's historical resources and to indicate what properties are to be protected, to the extent prudent and feasible, from substantial adverse change" (California Public Resources Code, Section 5024.1[a]). A resource is eligible for listing in the CRHR if the State Historical Resources Commission determines that it is a significant resource and that it meets any of the following NRHP criteria (California Public Resources Code, Section 5024.1[c]):

1. Associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.
2. Associated with the lives of persons important in our past.
3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.
4. Has yielded, or may be likely to yield, information important in prehistory or history.

Resources less than 50 years old are not considered for listing in the CRHR unless it can be demonstrated that sufficient time has passed to understand the historical importance of the resource (see 14 CCR 4852[d][2]). The CRHR protects cultural resources by requiring evaluations of the significance of prehistoric and historic resources. The criteria for the CRHR are nearly identical to those for the NRHP, and properties listed or formally designated as eligible for listing on the NRHP are automatically listed on the CRHR, as are the state landmarks and points of interest. The CRHR also includes properties designated under local ordinances or identified through local historical resource surveys. The State Historic Preservation Officer maintains the CRHR.

California Points of Historic Interest

California Points of Historical Interest are buildings, structures, site or features of local (city and county) significance that have anthropological, cultural, military, political, architectural, economic, scientific/technical, religious,

experimental, or other value. Points of Historical Interest designated after December 1997 are recommended by the State Historical Resources Commission to also be listed in the CRHR. The criteria for designation of Points of Historical Interest are the same as those that govern the California Historic Landmarks program.

Native American Historic Cultural Sites (California Public Resources Code, Section 5097 et. seq.)

State law addresses the disposition of Native American burials in archaeological sites and protects such remains from disturbance, vandalism, or inadvertent destruction; establishes procedures to be implemented if Native American skeletal remains are discovered during construction of a project; and establishes the NAHC to resolve disputes regarding the disposition of such remains. In addition, the Native American Historic Resource Protection Act makes it a misdemeanor punishable by up to 1 year in jail to deface or destroy Native American historic or cultural site that is listed or may be eligible for listing in the CRHR.

California Environmental Quality Act

Under CEQA, a project may have a significant effect on the environment if it may cause "a substantial adverse change in the significance of an historical resource" (California Public Resources Code, Section 21084.1; 14 CCR 15064.5[b]). If a site is either listed or eligible for listing in the CRHR, or if it is included in a local register of historic resources, or identified as significant in a historical resources survey (meeting the requirements of California Public Resources Code, Section 5024.1[q]), it is a "historical resource" and is presumed to be historically or culturally significant for purposes of CEQA (California Public Resources Code, Section 21084.1; 14 CCR 15064.5[a]). The lead agency is not precluded from determining that a resource is a historical resource even if it does not fall within this presumption (California Public Resources Code, Section 21084.1; 14 CCR 15064.5[a]).

A "substantial adverse change in the significance of an historical resource" reflecting a significant effect under CEQA means "physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired" (14 CCR 15064.5[b][1]; California Public Resources Code, Section 5020.1[q]).

California Health and Safety Code, Section 7050.5

California law protects Native American burials, skeletal remains, and associated grave goods, regardless of their antiquity, and provides for the sensitive treatment and disposition of those remains. California Health and Safety Code, Section 7050.5, requires that if human remains are discovered in any place other than a dedicated cemetery, no further disturbance or excavation of the site or nearby area reasonably suspected to contain human remains shall occur until the county coroner has examined the remains (Section 7050.5b). If the coroner determines or has reason to believe the remains are those of a Native American, the coroner must contact the NAHC within 24 hours (Section 7050.5c). The NAHC will notify the most likely descendant. With the permission of the landowner, the most likely descendant may inspect the site of discovery. The inspection must be completed within 24 hours of notification of the most likely descendant by the NAHC. The most likely descendant may recommend means of treating or disposing of, with appropriate dignity, the human remains and items associated with Native Americans.

California Health and Safety Code, Section 8010-8011

This code is intended to provide consistent state policy to ensure that all California Native American human remains and cultural material are treated with dignity and respect. The code extends policy coverage to non-federally recognized tribes and federally recognized groups.

Assembly Bill 2461

The bill provides procedures for private landowners to follow upon discovering Native American human remains. Landowners are encouraged to consider culturally appropriate measures if they discover Native American human remains as set forth in California Public Resources Code, Section 5097.98.

Senate Bill 18

SB 18, approved in 2004, amends the California Civil Code and the California Government Code, requiring cities and counties to contact and consult with California Native American tribes prior to adopting or amending any general plan or specific plan, or designating land as open space in order to preserve or mitigate impacts to specified Native American places, features, and objects that are located within the city's or county's jurisdiction. SB 18 also requires cities and counties to hold in strict confidence any information about the specific identity, location, character or use of these resources. In 2005, the Governor's Office of Planning and Research published Tribal Consultation Guidelines to guide cities and counties on the process of engaging in consultation in accordance with SB 18. The NAHC maintains a list of California Native American tribes with whom cities and counties must consult pursuant to SB 18.

Assembly Bill 52

AB 52 was approved in 2014 and adds new requirements regarding consultation with California Native American tribes and consideration of tribal cultural resources. The law went into effect on July 1, 2015, and after that date, if requested by a California Native American tribe, lead agencies must consult prior to the release of a negative declaration, mitigated negative declaration, or draft EIR. City consultation efforts in accordance with SB 18 and AB 52 are discussed in the Section 3.16, Tribal Cultural Resources, of this EIR.

Local

City of San Marcos General Plan

The Conservation and Open Space Element of the City's General Plan contains several policies pertaining to the protection of archaeological and historic resources. The following goals and policies apply to the project (City of San Marcos 2012):

> Policy COS-2.5: Continue to review future development proposals to ensure that cultural resources (including prehistoric, historic, paleontological, and SB 18 Tribal resources) are analyzed and conserved in compliance with CEQA requirements.

Goal COS-11: Continue to identify and evaluate cultural, historic, archaeological, paleontological and architectural resources for protection from demolition and inappropriate actions.

> Policy COS-11.1: Identify and protect historic and cultural resources including individual properties, districts and sites (e.g., archaeological sites) in compliance with CEQA.

> Policy COS-11.2: Prohibit the demolition or removal of a historic structure without evaluation of the condition of the structure, the cost of rehabilitation, and the feasibility of alternatives to preservation in place including but not limited to relocation, or reconstruction off-site, and/or photo-preservation.

The project's consistency with applicable General Plan goals and policies is discussed in Section 3.10, Land Use and Planning, of this EIR. As detailed in Section 3.10.4, the project is consistent with the applicable General Plan goals and policies pertaining to cultural resources.

3.4.3 Thresholds of Significance

The determination of significance for cultural resources is based on CEQA Guidelines Appendix G. Impacts to cultural resources would be significant if the proposed project would:

- **Threshold No. 1:** Cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5;
- **Threshold No. 2:** Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5;
- **Threshold No. 3:** Disturb any human remains, including those interred outside of dedicated cemeteries.

3.4.4 Project Impact Analysis

Impacts to cultural resources that may result from ground disturbing activities associated with the proposed project are analyzed below.

Threshold No. 1: Would the project cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5?

Section 15064.5 of the CEQA Guidelines defines a historical resource as one that meets one or more of the following criteria:

1. Is listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the CRHR; or
2. Is included in a local register of historical resources or identified as significant in a historical resource survey meeting the requirements of Section 5024.1(g) of the Public Resources Code; or
3. Is determined to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California.

As described in Appendix D to this EIR, there are no built environment resources on the project APE. The project APE is surrounded by numerous residential and commercial buildings, all of which were constructed after 1973. No previously identified historical resources are in the vicinity. The commercial building to the south of the project APE (currently CVS) was constructed in 2010. The width of streets and topography surrounding the project APE creates a geographic and visual separation between the project APE and all nearby development. There are no built environment historical resources that require avoidance or evaluation prior to construction. After reviewing the list of historic structures and sites in San Marcos (list provided by the City), none were found to overlap the project APE. Therefore, it is determined that **no impact** related to historical resources would occur as a result of project implementation.

Threshold No. 2: Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5?

As identified in Section 3.4.1, Existing Conditions, no cultural resources were found at the project site during the field survey for South Coastal Information Center records search. As described in the Cultural Resources Report (Appendix D), the NAHC Sacred Lands File search, Native American outreach, and intensive-pedestrian survey suggest that no

known cultural resources would be impacted by the proposed project, pending the results of the Native American outreach and AB 52 and SB 18 consultation. However, construction activities associated with the project could result in potentially significant impacts to undocumented archaeological resources. In the unlikely event that archaeological resources are identified during earth moving activities associated with the project, mitigation is proposed that would require work be temporarily halted in the vicinity of the discovery. The project developer would then be required to notify a qualified archaeologist, who would review the unanticipated find and evaluate the resource for CRHR listing. Accordingly, although unlikely, ground-disturbing activities on the project site associated with the project could result in a potentially significant impact (**Impact CR-1**), and mitigation would be required. Implementation of **Mitigation Measure (MM) CR-1** through **MM-CR-4** would mitigate potentially significant impacts to unknown archaeological resources (**Impact CR-1**). Impacts would be **less than significant with mitigation incorporated**.

Threshold No. 3: Would the project disturb any human remains, including those interred outside of dedicated cemeteries?

The cultural resources intensive pedestrian survey conducted for the proposed project did not identify any human remains or find any indications that they would be expected to be found on the project site. However, although unlikely, there is the possibility of human remains being discovered during ground disturbing activities on the project site. If remains are discovered during project construction activities, mitigation is proposed that would require work in the vicinity of the discovery be halted and procedures set forth in the California Public Resources Code (Section 5097.98) and California Health and Safety Code (Section 7050.5) be followed. Therefore, potential discovery of undocumented human remains on the project site could result in a potentially significant impact (**Impact CR-2**) and mitigation would be required. Implementation of **MM-CR-1** through **MM-CR-4** would also mitigate potentially significant impacts to human remains (**Impact CR-2**). Impacts would be **less than significant with mitigation incorporated**.

3.4.5 Cumulative Impact Analysis

According to CEQA, the importance of cultural resources comes from the research value and the information they contain, as well as the loss of recognized cultural landmarks and vestiges of our community cultural history. The cumulative study area includes the project APE and cumulative project sites.

As identified in Section 3.4.4, no historic resources exist at the project site. Thus, no impact to historic resources would occur with implementation of the proposed project. It is expected that cultural resources studies would be prepared for all cumulative projects to assess potential impacts, and that these projects would avoid or mitigate impacts to historic resources, as required by local jurisdictions and state law.

As identified in Section 3.4.4, no cultural resources were found at the project site during the field survey. However, the potential to unearth a cultural resource during project construction would be potentially significant (**Impact CR-1**). **MM-CR-1** through **MM-CR-4** would be implemented to reduce impacts to less-than-significant levels. It is expected that cultural resources studies would be prepared for all other cumulative projects to assess potential impacts, and that these projects would similarly avoid or mitigate impacts to cultural resources, as required by local jurisdictions and state law.

Similar to the project, the presence of human remains on cumulative project sites would typically remain unknown until earthwork activities commence for project construction. As identified in Section 3.4.4, the cultural resources field survey conducted for the project did not identify any human remains or find any indications that they would be expected to be found on the project site. If human remains are encountered during project construction, there is a potential for a significant impact **(Impact CR-2).** However, **MM-CR-1** through **MM-CR-4** would ensure any impacts to

human remains would be less than significant. It is expected that all cumulative projects would similarly assess potential impacts to human remains, and that these cumulative projects would avoid or mitigate these impacts, as required by local jurisdictions and state law.

Because the project and those projects identified within the cumulative study area would be required to mitigate cultural impacts through the collection and curation of information, construction monitoring, and the preservation of the most important resources, cumulative cultural impacts would be **less than significant**.

3.4.6 Mitigation Measures

MM-CR-1 Pre-Excavation Agreement: Prior to the issuance of a Grading Permit or ground disturbing activities, the Applicant/Owner shall enter into a Tribal Cultural Resources Treatment and Repatriation Agreement (Pre-Excavation Agreement) with a Traditionally and Culturally Affiliated Native American Tribe (TCA Tribe), identified in consultation with the City of San Marcos. The purpose of the Pre-Excavation Agreement shall be to formalize protocols and procedures between the Applicant/Owner and the TCA Tribe for the protection, treatment, and repatriation of Native American human remains, funerary objects, cultural and/or religious landscapes, ceremonial items, traditional gathering areas, and other tribal cultural resources. Such resources may be located within and/or discovered during ground disturbing and/or construction activities for the proposed project, including any additional culturally appropriate archaeological studies, excavations, geotechnical investigations, grading, preparation for wet and dry infrastructure, and other ground disturbing activities. Any project-specific monitoring plans and/or excavation plans prepared by the project archaeologist shall include the TCA Tribe requirements for protocols and protection of tribal cultural resources that were agreed to during the tribal consultation.

The landowner shall relinquish ownership of all non-burial-related tribal cultural resources collected during construction monitoring and from any previous archaeological studies or excavations on the project site to the TCA Tribe for proper treatment and disposition per the Pre-Excavation Agreement, unless ordered to do otherwise by responsible agency or court of competent jurisdiction. The requirement and timing of such release of ownership, and the recipient thereof, shall be reflected in the Pre-Excavation Agreement. If the TCA Tribe does not accept the return of the cultural resources, then the cultural resources will be subject to curation.

MM-CR-2 Construction Monitoring: Prior to the issuance of a Grading Permit or ground disturbing activities, the Applicant/Owner or Grading Contractor shall provide written documentation (either as signed letters, contracts, or emails) to the City of San Marcos (City) Planning Division stating that a Qualified Archaeologist and Traditionally and Culturally Affiliated (TCA) Native American monitor have been retained at the Applicant/Owner or Grading Contractor's expense to implement the construction monitoring program, as described in the Tribal Cultural Resources Treatment and Repatriation Agreement.

The Qualified Archaeologist and TCA Native American monitor shall be invited to attend all applicable pre-construction meetings with the General Contractor and/or associated subcontractors to present the construction monitoring program. The Qualified Archaeologist and TCA Native American monitor shall be present on site during grubbing, grading, trenching, and/or other ground-disturbing activities that occur in areas of native soil or other permeable natural surfaces that have the potential to

unearth any evidence of potential archaeological resources or tribal cultural resources. In areas of artificial paving, the Qualified Archaeologist and TCA Native American monitor shall be present on site during grubbing, grading, trenching, and/or other ground disturbing activities that have the potential to disturb more than 6 inches below the original pre-project ground surface to identify any evidence of potential archaeological or tribal cultural resources. No monitoring of fill material, existing or imported, will be required if the General Contractor or developer can provide documentation to the satisfaction of the City that all fill materials being utilized at the site are either from existing commercial (previously permitted) sources of materials or are from private or other non-commercial sources that have been determined to be absent of tribal cultural resources by the Qualified Archaeologist and TCA Native American monitor.

The Qualified Archaeologist and TCA Native American monitor shall maintain ongoing collaborative coordination with one another during all ground disturbing activities. The requirement for the construction monitoring program shall be noted on all applicable construction documents, including demolition plans and grading plans. The Applicant/Owner or Grading Contractor shall provide written notice to the Planning Division and the TCA Tribe, preferably through email, of the start and end of all ground disturbing activities.

Prior to the release of any grading bonds, or prior to the issuance of any project Certificate of Occupancy, an archaeological monitoring report that describes the results, analysis, and conclusions of the construction monitoring shall be submitted by the Qualified Archaeologist, along with any TCA Native American monitor's notes and comments received by the Qualified Archaeologist, to the Planning Division Manager for approval. Once approved, a final copy of the archaeological monitoring report shall be retained in a confidential City project file and may be released, as a formal condition of Assembly Bill 52 consultation, to Rincon Band of Luiseño Indians, San Pasqual Band of Mission Indians, or any parties involved in the project specific monitoring or consultation process. A final copy of the report, with all confidential site records and appendices, will also be submitted to the South Coastal Information Center after approval by the City of San Marcos.

MM-CR-3 Unanticipated Discovery Procedures: Both the Qualified Archaeologist and the Traditionally and Culturally Affiliated (TCA) Native American monitor may temporarily halt or divert ground disturbing activities if potential archaeological resources or tribal cultural resources are discovered during construction activities. Ground disturbing activities shall be temporarily directed away from the area of discovery for a reasonable amount of time to allow a determination of the resource's potential significance. Isolates and clearly non-significant archaeological resources (as determined by the Qualified Archaeologist, in consultation with the TCA Native American monitor) will be minimally documented in the field. All unearthed archaeological resources or tribal cultural resources will be collected, temporarily stored in a secure location (or as otherwise agreed upon by the Qualified Archaeologist and the TCA Tribe), and repatriated according to the terms of the Tribal Cultural Resources Treatment and Repatriation Agreement (Pre-Excavation Agreement), unless ordered to do otherwise by responsible agency or court of competent jurisdiction.

If a determination is made that the archaeological resources or tribal cultural resources are considered potentially significant by the Qualified Archaeologist, the TCA Tribe, and the TCA Native American monitor, then the City of San Marcos (City) and the TCA Tribe shall determine, in consultation with the Applicant/Owner and the Qualified Archaeologist, the culturally appropriate treatment of those resources.

If the Qualified Archaeologist, the TCA Tribe, and the TCA Native American monitor cannot agree on the significance or mitigation for such resources, these issues will be presented to the Planning Division Manager for decision. The Planning Division Manager shall make a determination based upon the provisions of CEQA and California Public Resources Code, Section 21083.2(b), with respect to archaeological resources and California Public Resources, Sections 21704 and 21084.3, with respect to tribal cultural resources, and shall take into account the religious beliefs, cultural beliefs, customs, and practices of the TCA Tribe.

All sacred sites, significant tribal cultural resources, and/or unique archaeological resources encountered within the project area shall be avoided and preserved as the preferred mitigation. If avoidance of the resource is determined to be infeasible by the City as the Lead Agency, then the City shall require additional culturally appropriate mitigation to address the negative impact to the resource, such as, but not limited to, the funding of an ethnographic study and/or a data recovery plan, as determined by the City in consultation with the Qualified Archaeologist and the TCA Tribe. The TCA Tribe shall be notified and consulted regarding the determination and implementation of culturally appropriate mitigation and the drafting and finalization of any ethnographic study and/or data recovery plan and/or other culturally appropriate mitigation. Any archaeological isolates or other cultural materials that cannot be avoided or preserved in place as the preferred mitigation shall be temporarily stored in a secure location on site (or as otherwise agreed upon by the Qualified Archaeologist and TCA Tribe) and repatriated according to the terms of the Pre-Excavation Agreement, unless ordered to do otherwise by responsible agency or court of competent jurisdiction. The removal of any artifacts from the project site will be inventoried with oversight by the TCA Native American monitor.

If a data recovery plan is authorized as indicated above and the TCA Tribe does not object, then an adequate artifact sample to address research avenues previously identified for sites in the area will be collected using professional archaeological collection methods. If the Qualified Archaeologist collects such resources, the TCA Native American monitor must be present during any testing or cataloging of those resources. Moreover, if the Qualified Archaeologist does not collect the cultural resources that are unearthed during the ground disturbing activities, the TCA Native American monitor may, at their discretion, collect said resources for later reburial or storage at a local curation facility, as described in the Pre-Excavation Agreement.

In the event that curation of archaeological resources or tribal cultural resources is required by a superseding regulatory agency, curation shall be conducted by an approved local facility within San Diego County and the curation shall be guided by California State Historical Resources Commission's Guidelines for the Curation of Archaeological Collections. The City shall provide the Applicant/Owner final curation language and guidance on the project grading plans prior to issuance of the Grading Permit, if applicable, during project construction. The Applicant/Owner shall be responsible for all repatriation and curation costs and provide to the City written documentation from the TCA Tribe or the curation facility, whichever is most applicable, that the repatriation and/or curation have been completed.

MM-CR-4 Human Remains: As specified by California Health and Safety Code, Section 7050.5, if human remains, or remains that are potentially human, are found on the project site during ground disturbing activities or during archaeological work, the person responsible for the excavation, or his or her authorized representative, shall immediately notify the San Diego County Medical Examiner's Office by telephone. No further excavation or disturbance of the discovery or any nearby area

reasonably suspected to overlie adjacent remains (as determined by the Qualified Archaeologist and/or the Traditionally and Culturally Affiliated [TCA] Native American monitor) shall occur until the Medical Examiner has made the necessary findings as to origin and disposition pursuant to California Public Resources Code, Section 5097.98.

If such a discovery occurs, a temporary construction exclusion zone shall be established surrounding the area of the discovery so that the area would be protected (as determined by the Qualified Archaeologist and/or the TCA Native American monitor) and consultation and treatment could occur as prescribed by law. As further defined by state law, the Medical Examiner will determine within 2 working days of being notified if the remains are subject to his or her authority. If the Medical Examiner recognizes the remains to be Native American, and not under his or her jurisdiction, then he or she shall contact the Native American Heritage Commission by telephone within 24 hours. The Native American Heritage Commission will make a determination as to the most likely descendent, who shall be afforded 48 hours from the time access is granted to the discovery site to make recommendations regarding culturally appropriate treatment.

If suspected Native American remains are discovered, the remains shall be kept in place until after the Medical Examiner makes their determination and notifications and until after the most likely descendent is identified, at which time the archaeological examination of the remains shall only occur on site in the presence of the most likely descendent. The specific locations of Native American burials and reburials will be proprietary and not disclosed to the general public. According to California Health and Safety Code, six or more human burials at one location constitutes a cemetery (Section 8100) and disturbance of Native American cemeteries is a felony (Section 7052). In the event that the Applicant/Owner and the most likely descendant are in disagreement regarding the disposition of the remains, state law will apply, and the mediation process will occur with the Native American Heritage Commission. In the event that mediation is not successful, the landowner shall rebury the remains at a location free from future disturbance (see California Public Resources Code, Sections 5097.98[e] and 5097.94[k]).

3.4.7 Conclusion

Implementation of the proposed project would not impact any identified archaeological resources, historical resources, or any known human remains interred outside a formal cemetery. However, based on the analysis presented in Section 3.4.4, the potential exists for impacts to unknown cultural resources resulting from construction of the proposed project.

These potentially significant impacts to archaeological resources and human remains would be mitigated to below a level of significance through implementation of **MM-CR-1** through **MM-CR-4**. With incorporation of these mitigation measures, potential impacts to cultural resources associated with the proposed project would be reduced to a level of less than significant.

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3.5 Energy

This section describes the existing setting of the project site with respect to energy use and conservation, identifies associated regulatory requirements, and evaluates potential impacts related to implementation of the proposed Gran Vista Specific Plan Project (project).

Appendices F and G of the California Environmental Quality Act (CEQA) Guidelines require that an environmental impact report (EIR) discusses the potential energy impacts of proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy, to ensure that energy implications are considered in project-related decision-making processes. As such, this section analyzes the energy impacts of the project. Specifically, this section summarizes the existing conditions in the project area, discusses the regulatory framework, and discloses estimated energy use during the construction and operational phases of the proposed project. This analysis considers the electricity, natural gas, and transportation fuel (petroleum) demand of the proposed project.

Information in this section is based on the proposed project's Air Quality and Greenhouse Gas Emissions Technical Report (February 2023), prepared by Dudek, which is included as Appendix B of this EIR.

Table 3.5-1 summarizes the project- and cumulative-level energy impacts by threshold.

Table 3.5-1. Energy Summary of Impacts

Threshold of Significance	Project-Level Impact	Cumulative-Level Impact	Significance Determination
No. 1: Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.	Less than Significant	Less than Significant	Less than Significant
No. 2: Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.	Less than Significant	Less than Significant	Less than Significant

3.5.1 Existing Conditions

The environmental setting for the project related to electricity, natural gas, and petroleum, including associated service providers, supply sources, and estimated consumption, is discussed below. In summary, in 2019 (the latest calendar year for which data are uniformly available for all three types of energy sources), California's estimated annual energy use included the following:

- Approximately 250,379 gigawatt hours of electricity (EIA 2020a)
- Approximately 21.5 billion therms of natural gas (EIA 2021)
- Approximately 28.7 billion gallons of petroleum (EIA 2020b)

Electricity

According to the U.S. Energy Information Administration (EIA), California used approximately 250,379 gigawatt hours of electricity in 2019 (EIA 2020a). Electricity usage in California for different land uses varies substantially by the types of uses in a building, type of construction materials used in a building, and the efficiency of all

electricity-consuming devices within a building. By sector in 2017, commercial uses utilized 46% of the state's electricity, followed by 35% for residential uses, and 19% for industrial uses (EIA 2019). Due to the state's energy efficiency building standards and efficiency and conservation programs, California's electricity use per capita in the residential sector is lower than any other state except Hawaii (EIA 2020b).

San Diego Gas & Electric (SDG&E) provides electric services to 3.6 million customers through 1.4 million electric meters located in a 4,100-square-mile service area that includes San Diego County (County) and southern Orange County (SDG&E 2018). SDG&E is a subsidiary of Sempra Energy and would provide electricity to the proposed project. According to the California Public Utilities Commission (CPUC), SDG&E customers consumed approximately 19,169 million kilowatt-hours (kWh) of electricity in 2015 (CPUC 2016).

SDG&E receives electric power from a variety of sources. According to the California Energy Commission (CEC) Biennial Renewable Portfolio Standard Program Update, 39% of SDG&E's power came from eligible renewable energy sources in 2020, including biomass/waste, geothermal, small hydroelectric, solar, and wind sources (CPUC 2021).

Based on recent energy supply and demand projections in California, statewide annual peak electricity demand is projected to grow an average of 3,333 gigawatt-hours per year through 2030, or 1.2% annually (CEC 2020).

In the County, CEC reported an annual electrical consumption of approximately 19.0 billion kWh in 2019, with 12.4 billion kWh for non-residential use and 6.7 billion kWh for residential use (CEC 2020).

Natural Gas

CPUC regulates natural gas utility service for approximately 10.8 million customers who receive natural gas from Pacific Gas & Electric, Southern California Gas (SoCalGas), SDG&E, Southwest Gas, and several smaller natural gas utilities. CPUC also regulates independent storage operators Lodi Gas Storage, Wild Goose Storage, Central Valley Storage, and Gill Ranch Storage (CPUC 2021). SDG&E provides natural gas service to the counties of San Diego and Orange and would provide natural gas to the proposed project. SDG&E is a wholesale customer of SoCalGas and currently receives all of its natural gas from the SoCalGas system (CPUC 2021).

CPUC regulates California natural gas rates and natural gas services, including in-state transportation over transmission and distribution pipeline systems, storage, procurement, metering, and billing. Most of the natural gas used in California comes from out-of-state natural gas basins. California gas utilities may soon also begin receiving biogas into their pipeline systems (CPUC 2021).

In 2017, California customers received 38% of their natural gas supply from basins located in the Southwest, 27% from Canada, 27% from the Rocky Mountains, and 8% from basins located within California (CPUC 2021). Natural gas from out-of-state production basins is delivered into California through the interstate natural gas pipeline system. The major interstate pipelines that deliver out-of-state natural gas to California are the Gas Transmission Northwest Pipeline, Kern River Pipeline, Transwestern Pipeline, El Paso Pipeline, Ruby Pipeline, Southern Trails, and Mojave Pipeline. The North Baja–Baja Norte Pipeline takes gas off the El Paso Pipeline at the California/Arizona border and delivers it through California into Mexico. The Federal Energy Regulatory Commission regulates the transportation of natural gas on interstate pipelines, and CPUC often participates in Federal Energy Regulatory Commission regulatory proceedings to represent the interests of California natural gas consumers (CPUC 2021).

Most of the natural gas transported through interstate pipelines, as well as some California-produced natural gas, is delivered through the Pacific Gas & Electric and SoCalGas intrastate natural gas transmission pipeline systems (commonly referred to as California's "backbone" natural gas pipeline system). Natural gas on the backbone pipeline system typically is then delivered into local transmission and distribution pipeline systems or to natural gas storage fields. CPUC has regulatory jurisdiction over 100,000 miles of utility-owned natural gas pipelines, which transported 82% of the natural gas delivered to California's gas consumers in 2017 (CPUC 2021).

Petroleum

According to the U.S. Energy Information Administration, California used approximately 681 million barrels of petroleum in 2018, with the majority (584 million barrels) used for the transportation sector (EIA 2020b). This total annual consumption equates to a daily use of approximately 1.9 million barrels of petroleum. There are 42 U.S. gallons in a barrel, so California consumes approximately 78.4 million gallons of petroleum per day, adding up to an annual consumption of 28.7 billion gallons of petroleum. By sector, transportation sources utilize approximately 85.5% of the state's petroleum, followed by 11.1% from industrial, 2.5% from commercial, 0.9% from residential, and 0.01% from electric power uses (EIA 2018). Petroleum usage in California includes petroleum products such as motor gasoline, distillate fuel, liquefied petroleum gases, and jet fuel. California has implemented policies to improve vehicle efficiency and to support use of alternative transportation, which are described in Section 3.5.2, Regulatory Setting, below. As such, CEC anticipates an overall decrease of gasoline demand in the state over the next decade.

Existing Infrastructure

Electricity and natural gas would be provided by SDG&E. Electrical facilities throughout the City of San Marcos (City) include a combination of aboveground and belowground electrical distribution lines and utilities structures. The City's fiber-optic network is facilitated by a 72-strand fiber-optic line that runs on various streets throughout the City. All major arterials in the City have implemented fiber optics. There are existing electrical lines and a natural gas pipeline adjacent to the project site within N Las Posas Road.

3.5.2 Regulatory Setting

Federal, state, and local agencies regulate energy use and consumption through various means and programs. On the federal level, the U.S. Department of Transportation, the U.S. Department of Energy, and the U.S. Environmental Protection Agency (EPA) are three federal agencies with substantial influence over energy policies and programs. On the state level, CPUC and CEC are two agencies with authority over different aspects of energy. Relevant federal, state, and local energy-related regulations are summarized below. This information helps to place the impact analysis within its proper regulatory context.

Federal

Infrastructure Investment and Jobs Act

On November 6, 2021, Congress passed the Bipartisan Infrastructure Deal (Infrastructure Investment and Jobs Act), a once-in-a-generation investment in our nation's infrastructure and competitiveness. This Bipartisan Infrastructure Deal will rebuild America's roads, bridges, and rails; expand access to clean drinking water; ensure every American has access to high-speed internet; tackle the climate crisis; advance environmental justice; and invest in communities that have too often been left behind. The legislation will help ease inflationary pressures

and strengthen supply chains by making long-overdue improvements for our nation's ports, airports, rail, and roads. It will drive the creation of good-paying union jobs and grow the economy sustainably and equitably so that everyone gets ahead for decades to come. Combined with the President's Build Back Framework, it will add on average 1.5 million jobs per year for the next 10 years. It will improve transportation options for millions of Americans to reduce energy use and greenhouse gas (GHG) emissions. It will also increase investment in electric vehicle chargers and renewable energy production.

Federal Energy Policy and Conservation Act

In 1975, Congress enacted the Federal Energy Policy and Conservation Act, which established the first fuel economy standards for on-road motor vehicles in the United States. Pursuant to the act, the National Highway Traffic Safety Administration is responsible for establishing additional vehicle standards. In 2012, new fuel economy standards for passenger cars and light trucks were approved for model years 2017 through 2021 (77 FR 62624–63200). The National Highway Traffic Safety Administration is proposing to amend the Corporate Average Fuel Economy standards set in 2020 for passenger cars and light trucks manufactured in model years 2024–2026, so that standards would increase in stringency at a rate of 8% per year rather than the 1.5% per year set previously (49 CFR Part 531). Fuel economy is determined based on each manufacturer's average fuel economy for the fleet of vehicles available for sale in the United States.

Intermodal Surface Transportation Efficiency Act of 1991

The Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) promoted the development of intermodal transportation systems to maximize mobility and address national and local interests in air quality and energy. ISTEA contained factors that metropolitan planning organizations were to address in developing transportation plans and programs, including some energy-related factors. To meet the new ISTEA requirements, metropolitan planning organizations adopted policies defining the social, economic, energy, and environmental values guiding transportation decisions.

Transportation Equity Act for the 21st Century

The Transportation Equity Act for the 21st Century was signed into law in 1998 and builds on the initiatives established in the ISTEA legislation, discussed above. The act authorizes highway, highway safety, transit, and other efficient surface transportation programs. The act continues the program structure established for highways and transit under ISTEA, such as flexibility in the use of funds, emphasis on measures to improve the environment, and focus on a strong planning process as the foundation of transportation decisions. The act also provides for investment in research and its application to maximize the performance of the transportation system through, for example, deployment of intelligent transportation systems to help improve operations and management of transportation systems and vehicle safety.

Energy Independence and Security Act of 2007

On December 19, 2007, the Energy Independence and Security Act of 2007 (EISA) was signed into law. In addition to setting increased fuel efficiency standards for motor vehicles, the EISA includes the following other provisions related to energy efficiency:

- Renewable Fuel Standard (RFS) (Section 202)
- Appliance and Lighting Efficiency Standards (Sections 301–325)
- Building Energy Efficiency (Sections 411–441)

This federal legislation requires ever-increasing levels of renewable fuels (the RFS) to replace petroleum (EPA 2013). EPA is responsible for developing and implementing regulations to ensure that transportation fuel sold in the United States contains a minimum volume of renewable fuel. The RFS program regulations were developed in collaboration with refiners, renewable fuel producers, and many other stakeholders.

The RFS program was created under the Energy Policy Act of 2005 and established the first renewable fuel volume mandate in the United States. As required under the act, the original RFS program (RFS1) required 7.5 billion gallons of renewable fuel to be blended into gasoline by 2012. Under the EISA, the RFS program was expanded in several key ways that lay the foundation for achieving significant reductions in GHG emissions from the use of renewable fuels, reducing imported petroleum, and encouraging the development and expansion of the renewable fuels sector in the United States. The updated program is referred to as "RFS2" and includes the following:

- EISA expanded the RFS program to include diesel in addition to gasoline.
- EISA increased the volume of renewable fuel required to be blended into transportation fuel from 9 billion gallons in 2008 to 36 billion gallons by 2022.
- EISA established new categories of renewable fuel and set separate volume requirements for each one.
- EISA required EPA to apply lifecycle GHG performance threshold standards to ensure that each category of renewable fuel emits fewer GHGs than the petroleum fuel it replaces.

Additional provisions of the EISA address energy savings in government and public institutions, research for alternative energy, additional research in carbon capture, international energy programs, and the creation of "green" jobs.

State

The discussion below focuses primarily on those policies, regulations, and laws that directly pertain to energy-related resources. Refer to Section 3.7, Greenhouse Gas Emissions, of this EIR, which addresses various policies, regulations, and laws targeted to the reduction of GHG emissions that are expected to achieve co-benefits in the form of reduced demand for energy-related resources and enhanced efficiencies in the consumption of energy-related resources.

Warren-Alquist Act

The California Legislature passed the Warren-Alquist Act in 1974. The Warren-Alquist Act created the CEC. The legislation also incorporated the following three key provisions designed to address the demand side of the energy equation:

- It directed CEC to formulate and adopt the nation's first energy conservation standards for both buildings constructed and appliances sold in California.
- The act removed the responsibility of electricity demand forecasting from the utilities, which had a financial interest in high demand projections, and transferred it to a more impartial CEC.
- CEC was directed to embark on an ambitious research and development program, with a particular focus on fostering what were characterized as non-conventional energy sources.

State of California Energy Action Plan

CEC and CPUC approved the first State of California Energy Action Plan in 2003. The plan established shared goals and specific actions to ensure that adequate, reliable, and reasonably priced electrical power and natural

gas supplies are provided, and identified policies, strategies, and actions that are cost-effective and environmentally sound for California's consumers and taxpayers. In 2005, a second energy action plan was adopted by CEC and CPUC to reflect various policy changes and actions of the prior 2 years.

At the beginning of 2008, CEC and CPUC determined that it was not necessary or productive to prepare a new energy action plan. This determination was based in part on a finding that the state's energy policies have been significantly influenced by the passage of Assembly Bill (AB) 32, the California Global Warming Solutions Act of 2006 (discussed below). Rather than produce a new energy action plan, CEC and CPUC prepared an "update" that examines the state's ongoing actions in the context of global climate change.

Senate Bill 1078 (2002)

This bill established the California Renewable Portfolio Standard Program and required that a retail seller of electricity purchase a specified minimum percentage of electricity generated by eligible renewable energy resources as defined in any given year, culminating in a 20% standard by December 31, 2017. These retail sellers include electrical corporations, community choice aggregators, and electric service providers. The bill relatedly required CEC to certify eligible renewable energy resources, design and implement an accounting system to verify compliance with the Renewable Portfolio Standard by retail sellers, and allocate and award supplemental energy payments to cover above-market costs of renewable energy.

Senate Bill (SB) 350 (2015) requires retail seller and publicly owned utilities to procure 50% of their electricity from eligible renewable energy resources by 2030, with interim goals of 40% by 2024 and 45% by 2027.

SB 100 (2018) accelerated and expanded the standards set forth in SB 350 by establishing that 44% of the total electricity sold to retail customers in California per year by December 31, 2024, 52% by December 31, 2027, and 60% by December 31, 2030, be secured from qualifying renewable energy sources. SB 100 also states that it is the policy of the state that eligible renewable energy resources and zero-carbon resources supply 100% of the retail sales of electricity to California. This bill requires that the achievement of 100% zero-carbon electricity resources does not increase the carbon emissions elsewhere in the western grid and that the achievement not be attained through resource shuffling.

Assembly Bill 1007 (2005)

AB 1007 (2005) required CEC to prepare a statewide plan to increase the use of alternative fuels in California (State Alternative Fuels Plan). CEC prepared the plan in partnership with the California Air Resources Board (CARB) and in consultation with the other state, federal, and local agencies. The plan assessed various alternative fuels and developed fuel portfolios to meet California's goals to reduce petroleum consumption, increase alternative fuels use, reduce GHG emissions, and increase in-state production of biofuels without causing a significant degradation of public health and environmental quality.

Assembly Bill 32 (2006) and Senate Bill 32 (2016)

In 2006, the California Legislature enacted AB 32, the California Global Warming Solutions Act of 2006. AB 32 required California to reduce its GHG emissions to 1990 levels by 2020. In 2016, the California Legislature enacted SB 32, which extended the horizon year of the state's codified GHG reduction planning targets from 2020 to 2030, requiring California to reduce its GHG emissions to 40% below 1990 levels by 2030. In accordance with AB 32 and SB 32, CARB prepares scoping plans to guide the development of statewide policies and regulations for the reduction of GHG emissions. Many of the policy and regulatory concepts identified in the

scoping plans focused on increasing energy efficiencies and the use of renewable resources, and on reducing the consumption of petroleum-based fuels (such as gasoline and diesel). As such, the state's GHG emissions reduction planning framework creates co-benefits for energy-related resources. Additional information on AB 32 and SB 32 is provided in Section 3.7 of this EIR.

California Building Standards

Part 6 of Title 24 of the California Code of Regulations was established in 1978 and serves to enhance and regulate California's building standards. Part 6 establishes energy efficiency standards for residential and non-residential buildings constructed in California to reduce energy demand and consumption. Notably, Title 24 categorizes residential buildings that are four or more habitable levels as high-rise residential rather than mid-rise. High-rise residential buildings are included in the nonresidential section of Title 24 and subject to the nonresidential (not residential) code. Part 6 is updated periodically to incorporate and consider new energy efficiency technologies and methodologies.

The current Title 24, Part 6 standards, referred to as the 2019 Title 24 Building Energy Efficiency Standards, became effective on January 1, 2020. In general, single-family residences built to the 2019 standards are anticipated to use approximately 7% less energy due to energy efficiency measures than those built to the 2016 standards; once rooftop solar electricity generation is factored in, single-family residences built under the 2019 standards will use approximately 53% less energy than those under the 2016 standards (CEC 2018). Nonresidential buildings built to the 2019 standards are anticipated to use an estimated 30% less energy than those built to the 2016 standards (CEC 2018). The 2022 Title 24 Building Energy Efficiency Standards become effective on January 1, 2023. The 2022 standards encourage electric heat pump technology and use, establish electric-ready requirements when natural gas is installed, expand solar photovoltaic system and battery storage standards, and strengthen ventilation requirements to improve indoor air quality (CEC 2021).

Title 24 also includes Part 11, the California Green Building Standards (CALGreen). CALGreen establishes minimum mandatory standards and voluntary standards pertaining to the planning and design of sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and interior air quality. The 2019 CALGreen standards are the current applicable standards. For nonresidential projects (which the project is subject to), some of the key mandatory 2019 CALGreen standards involve requirements related to bicycle parking, designated parking for clean air vehicles, electric vehicle charging stations, shade trees, water conserving plumbing fixtures and fittings, outdoor potable water use in landscaped areas, recycled water supply systems, construction waste management, excavated soil and land clearing debris, and commissioning (24 CCR Part 11).

Integrated Energy Policy Report

CEC is responsible for preparing integrated energy policy reports that identify emerging trends related to energy supply, demand, and conservation; public health and safety; and maintenance of a healthy economy. CEC's 2021 Integrated Energy Policy Report discusses the state's policy goals of decarbonizing buildings, doubling energy efficiency savings, and increasing flexibility in the electricity grid system to integrate more renewable energy (CEC 2021). Specifically for the decarbonizing of building energy, the goal would be achieved by designing future commercial and residential buildings to have their energy sourced almost entirely from electricity in place of natural gas. Regarding the increase in renewable energy flexibility, the goal would be achieved through increases in energy storage capacity within the state, increases in energy efficiency, and adjusting energy use to the time of day when the most amount of renewable energy is being generated. Over time, these policies and trends would serve to beneficially reduce the project's GHG emissions profile and energy consumption as they are implemented.

Advanced Clean Cars Program

In January 2012, CARB approved the Advanced Clean Cars program, a new emissions-control program for model years 2015 through 2025. The program combines the control of smog- and soot-causing pollutants and GHG emissions into a single coordinated package. The package includes elements to reduce smog-forming pollution, reduce GHG emissions, promote clean cars, and provide the fuels for clean cars (CARB 2011). To improve air quality, CARB established emission standards to reduce smog-forming emissions beginning with 2015 model year vehicles. It is estimated that in 2025 cars will emit 75% less smog-forming pollution than the average new car sold today. To reduce GHG emissions, CARB, in conjunction with EPA and the National Highway Traffic Safety Administration, has adopted new GHG standards for model year 2017 to 2025 vehicles; the new standards are estimated to reduce GHG emissions by 34% in 2025. The zero-emission vehicle (ZEV) program will act as the focused technology of the Advanced Clean Cars program by requiring manufacturers to produce increasing numbers of ZEVs and plug-in hybrid electric vehicles in the 2018 to 2025 model years. The Clean Fuels Outlet regulation will ensure that fuels such as electricity and hydrogen are available to meet the fueling needs of the new advanced-technology vehicles as they come to the market.

Executive Order N-79-20

Executive Order N-79-20 (2020) sets the goal for the state that 100% of in-state sales of new passenger cars and trucks will be zero emission by 2035. Executive Order N-79-20 also sets goals for transition to 100% zero emission for all medium- and heavy-duty vehicles by 2045, zero emission for drayage trucks by 2035, and zero emission for off-road vehicles and equipment by 2035, where feasible. Among other directives to further this executive order, for passenger cars and trucks, the governor directed CARB to develop and propose regulations requiring increasing volumes of new zero-emission vehicles sold in the state toward the target of 100% of in-state sales by 2035. The governor also directed the Governor's Office of Business and Economic Development to develop a Zero-Emissions Vehicle Market Development Strategy, which was completed in February 2021[1]. The executive order also directs updates and assessments to ensure zero-emission vehicle infrastructure is in place to support the levels of electric vehicle adoption required by the order.

Sustainable Communities Strategy

The Sustainable Communities and Climate Protection Act of 2008, or SB 375, coordinates land use planning, regional transportation plans, and funding priorities to help California meet its GHG emissions reduction mandates. As codified in California Government Code, Section 65080, SB 375 requires metropolitan planning organizations (San Diego Association of Governments) to include a sustainable communities strategy in their regional transportation plan. The main focus of the sustainable communities strategy is to plan for growth in a fashion that will ultimately reduce GHG emissions, but the strategy is also a part of a bigger effort to address other development issues within the general vicinity, including transit and vehicle miles traveled (VMT), which influence the consumption of petroleum-based fuels.

[1] https://static.business.ca.gov/wp-content/uploads/2021/02/ZEV_Strategy_Feb2021.pdf

Local

SDG&E Long-Term Procurement Plan

In 2009, CPUC approved SDG&E's Long-Term Procurement Plan (LTPP), which identifies how SDG&E will meet the future energy needs of customers in SDG&E's service area (SDG&E 2009). The LTPP identifies several energy demand reduction targets (i.e., conservation) and goals for increasing renewable energy supplies, new local power generation, and increased transmission capacity.

The LTPP sets a standard for acquiring 20% of SDG&E's energy mix from renewables by 2010 and 33% by 2020. The LTPP also calls for greater use of in-region energy supplies, including renewable energy installations. The LTPP states that, by 2020, SDG&E intends to achieve and maintain the capacity to generate 75% of summer peak demand energy with in-County generation. The LTPP also identifies 44% of its renewables to be generated and distributed in-region by 2020.

San Diego Association of Governments Regional Plan

The 2021 Regional Plan provides a long-term blueprint for the San Diego region that seeks to meet regulatory requirements, address traffic congestion, and create equal access to jobs, education, healthcare, and other community resources (SANDAG 2021). The plan is the result of years of planning, data analysis, and community engagement to reimagine the San Diego region with a transformative transportation system, a sustainable pattern of growth and development, and innovative demand and management strategies.

The 2021 Regional Plan includes a Sustainable Communities Strategy, as required by California SB 375, for the San Diego region. This Sustainable Communities Strategy describes coordinated transportation and land use planning that exceeds the state's target for reducing per capita GHG emissions set by CARB. The state-mandated target is a 19% reduction—compared with 2005—in per-capita GHG emissions from cars and light-duty trucks by 2035. The 2021 Regional Plan achieves a 20% reduction by then.

The 2021 Regional Plan also puts forth a forecasted development pattern that is driven by regional goals for sustainability, mobility, housing affordability, and economic prosperity.

City of San Marcos General Plan

The City's General Plan (City of San Marcos 2012) includes various policies related to reducing GHG emissions and the co-benefit of reducing energy consumption. The project's consistency with the City's General Plan is provided in Section 3.10, Land Use and Planning. Applicable policies include the following:

Land Use and Community Design Element

Policy LU-2.1: Promote compact development patterns that reduce air pollution and automobile dependence and facilitate walking, bicycling, and transit use.

Policy LU-2.3: Require the incorporation of green building practices, technologies, and strategies into development projects per code standards.

Policy LU-2.5: Promote landscaping (e.g., native, drought tolerant plants) that minimizes demands on water supply.

Policy LU-2.7: Promote the instillation of trees to reduce the urban heat-island effect and green infrastructure to reduce storm water runoff.

Policy LU-3.1: Require that new development and redevelopment incorporate connections and reduce barriers between neighborhoods, transit corridors, and activity centers within the City.

Conservation and Open Space Element

Policy COS-4.5: Encourage energy conservation and the use of alternative energy sources within the community.

Policy COS-4.6: Promote efficient use of energy and conservation of available resources in the design, construction, maintenance and operation of public and private facilities, infrastructure and equipment.

City of San Marcos Climate Action Plan

The City adopted its Climate Action Plan (CAP) on December 8, 2020 (City of San Marcos 2020). The CAP acts as a roadmap to address challenges of climate change within the City. The CAP builds on the efforts and strategies identified in the City's 2013 CAP, and establishes GHG emission reduction targets and identifies achievable, locally based actions to reduce GHG emissions from municipal and community activities. The City has included energy-reducing measures in the CAP Consistency Review Checklist, such as electric vehicle charging stations, bicycle infrastructure, transportation demand management, reduced parking, electric water heaters, photovoltaic systems, landscaping water use, and urban tree canopy.

3.5.3 Thresholds of Significance

The significance criteria used to evaluate the proposed project's impact on energy are based on Appendix G of the CEQA Guidelines (14 CCR 15000 et seq.). According to Appendix G, a significant impact would occur if development of the project would do any of the following:

- **Threshold No. 1:** Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.
- **Threshold No. 2:** Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

3.5.4 Project Impact Analysis

Threshold No. 1: Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Electricity

Construction Use

Temporary electric power for as-necessary lighting and electronic equipment (such as computers inside temporary construction trailers and heating, ventilation, and air conditioning) would be provided by SDG&E. The amount of electricity used during project construction would be minimal because typical demand stems from the use of electronic equipment, in addition to electrically powered hand tools.

As the electricity used for construction activities would be temporary and minimal, impacts related to electricity consumption during project construction are determined to be **less than significant**.

Operational Use

The operation of the project would require electricity for multiple purposes, including cooling, lighting, appliances, and various equipment. Additionally, the supply, conveyance, treatment, and distribution of water would indirectly result in electricity usage.

The California Emissions Estimator Model (CalEEMod), version 2020.4.0, default values for electricity consumption for the residential land use were applied, which account for the 2019 Title 24 building code (CAPCOA 2021). The electricity use for residential buildings is calculated in CalEEMod using energy intensity value (electricity use per square foot per year) assumptions, which were based on the Residential Appliance Saturation Survey (CEC 2010). Per CEC's Impact Analysis for the 2019 Update to the California Energy Efficiency Standards for Residential and Non-Residential Buildings, single-family homes built with the 2019 standards will use about 7% less energy due to energy efficiency measures versus those built under the 2016 standards. Once rooftop solar electricity generation is factored in, homes built under the 2019 standards will use about 53% less energy than those under the 2016 standards (CEC 2019).

The proposed project's residential uses are estimated to have a total electrical demand of approximately 0.7 million kWh of electricity per year, including indirect electricity for water and wastewater use.

The project would also implement applicable City's CAP measures that would reduce operational electricity consumption, including installing electric water heaters. While this would increase electricity use, it would result in less natural gas use and is more efficient than heating water with natural gas as 15% of the energy is lost in the exhaust.

In summary, although electricity consumption would increase at the project site due to project implementation, the project would be required to comply with Title 24 and the City's CAP by implementing energy-efficiency measures. Furthermore, the project would be subject to the Title 24 building code that is adopted at the time building permits are obtained and thus may be subject to a more stringent energy standard than what was assumed herein. For these reasons, electricity consumption of the project would not be considered inefficient, wasteful, or unnecessary, and impacts would be **less than significant.**

Natural Gas

Construction Use

Natural gas is not anticipated to be required during construction of the proposed project. Fuels used for construction would primarily consist of diesel and gasoline, which are discussed under the subsection titled "Petroleum." Any minor amounts of natural gas that may be consumed as a result of construction would be temporary and negligible and would not have an adverse effect on the environment; therefore, impacts would be **less than significant**.

Operational Use

The operation of residential units would require natural gas for space heating and to power appliances. Default natural gas usage rates in CalEEMod for the proposed land use and climate zone were used based on compliance with 2019 Title 24 standards, which are assumed within CalEEMod 2020.4.0.

The operation of the project is estimated to use approximately 870 million British thermal units of natural gas per year, which is equivalent to 8,731 therms of natural gas per year.

As previously discussed, the project would be subject to statewide mandatory energy requirements as outlined in Title 24, Part 6, of the California Code of Regulations. Prior to building permit application, the applicant would ensure that project plans would meet Title 24 requirements applicable at that time, as required by state regulations, through their plan review process. Additionally, the project would implement the City's CAP measure that reduces operational natural gas consumption, which requires the installation of electric water heaters.

In summary, although natural gas usage would increase due to project implementation, project design features would be implemented, and usage would be decreased through green building standards. For these reasons, the natural gas consumption of the project would not be considered inefficient or wasteful, and impacts would be **less than significant.**

Petroleum

Construction Use

Petroleum would be consumed throughout construction of the proposed project. Fuel consumed by construction equipment would be the primary energy resource expended over the course of construction, and VMT associated with the transportation of construction materials and construction worker commutes would also result in petroleum consumption. Heavy-duty construction equipment associated with construction activities would rely on diesel fuel. Construction workers would travel to and from the project site throughout the duration of construction. It is assumed that construction workers would travel to and from the project site in gasoline-powered vehicles.

Heavy-duty construction equipment of various types would be used during each phase of construction. CalEEMod was used to estimate construction equipment usage, and results are included in Appendix B. Based on that analysis, over all phases of construction, diesel-fueled construction equipment would operate for an estimated 18,496 hours, as summarized in Table 3.5-2.

Table 3.5-2. Project Hours of Operation for Construction Equipment

Phase	Hours of Equipment Use
Site Preparation	192
Grading	1,344
Paving	15,720
Building Construction	1,120
Architectural Coating	120
Total	**18,496**

Source: Appendix B.

Fuel consumption from construction equipment was estimated by converting the total carbon dioxide (CO_2) emissions from each construction phase to gallons using conversion factors for CO_2 to gallons of gasoline or diesel. Construction is estimated to occur over an 18-month period (2023 through 2025) based on the construction phasing schedule. The conversion factor for gasoline is 8.78 kilograms per metric ton CO_2 per gallon, and the conversion factor for diesel is 10.21 kilograms per metric ton CO_2 per gallon (The Climate Registry 2021). The estimated diesel fuel use from construction equipment is shown in Table 3.5-3.

Table 3.5-3. Project Construction Equipment Diesel Demand

Phase	Equipment CO_2 (MT)	kg CO_2/Gallon	Gallons
Site Preparation	4.11	10.21	402.58
Grading	83.26	10.21	8,154.88
Building Construction	261.47	10.21	25,609.69
Paving	22.33	10.21	2,187.28
Architectural Coating	2.55	10.21	250.08
		Total	36,604.50

Sources: Appendix B (pieces of equipment and equipment CO_2); The Climate Registry 2021 (kg CO_2/gallon).
Notes: CO_2 = carbon dioxide; MT = metric ton; kg = kilogram.

Fuel consumption from worker and vendor trips is estimated by converting the total CO_2 emissions from each construction phase to gallons using the conversion factors for CO_2 to gallons of gasoline or diesel. Worker vehicles are assumed to be gasoline fueled, and vendor vehicles are assumed to be diesel fueled. Calculations for total worker and vendor fuel consumption are provided in Tables 3.5-4 and 3.5-5.

Table 3.5-4. Project Construction Worker Vehicle Gasoline Demand

Phase	Vehicle CO_2 (MT)	kg CO_2/Gallon	Gallons
Site Preparation	0.23	8.78	26.01
Grading	1.20	8.78	137.06
Building Construction	153.80	8.78	17,516.67
Paving	0.98	8.78	111.86
Architectural Coating	2.25	8.78	256.61
		Total	18,048.21

Sources: Appendix B (construction worker CO_2); The Climate Registry 2021 (kg CO_2/gallon).
Notes: CO_2 = carbon dioxide; MT = metric ton; kg = kilogram.

Table 3.5-5. Project Construction Vendor Truck Diesel Demand

Phase	Vehicle CO_2 (MT)	kg CO_2/Gallon	Gallons
Site Preparation	0.24	10.21	23.58
Grading	0.96	10.21	93.72
Building Construction	139.17	10.21	13,631.10
Paving	0.79	10.21	77.24
Architectural Coating	0.77	10.21	75.77
		Total	13,901.41

Sources: Appendix B (vendor truck CO_2); The Climate Registry 2021 (kg CO_2/gallon).
Notes: CO_2 = carbon dioxide; MT = metric ton; kg = kilogram.

As shown in Tables 3.5-3 through 3.5-5, implementation of the project is estimated to consume a total of 68,554 gallons of petroleum from off-road equipment and worker vehicle and vendor truck trips during the construction phase. Within the County, the estimated petroleum use in 2023 would be 1.7 billion gallons per year (CARB 2022).

The project would be required to comply with CARB's Airborne Toxics Control Measure, which restricts heavy-duty diesel vehicle idling time to 5 minutes. While construction activities would consume petroleum-based fuels, consumption of such resources would be temporary and would cease upon the completion of construction.

Further, the petroleum consumed related to construction would be typical of construction projects of similar types and sizes and would not necessitate new petroleum resources beyond what are typically consumed in California. Therefore, because petroleum use during project construction would be temporary and minimal and would not be wasteful or inefficient, impacts would be **less than significant**.

Operational Use

The majority of fuel consumption resulting from the operational phase of the project would be attributable to the use of resident motor vehicles traveling to and from the project site, as well as fuels used for alternative modes of transportation that may be used by residents. There is also gasoline use that could be associated with landscaping equipment.

Petroleum fuel consumption associated with motor vehicles traveling to and from the project site is a function of VMT as a result of operation. As shown in Appendix B, the VMT attributable to the project is expected to be approximately 1,422,938 VMT per year.

Similar to construction worker and vendor trips, fuel consumption was estimated by converting the total CO_2 emissions from each land use type to gallons using the conversion factors for CO_2 to gallons of gasoline or diesel. Based on the annual fleet mix provided in CalEEMod, 80% of the fleet range from light-duty to medium-duty vehicles and motorcycles was assumed to run on gasoline. The remaining 20% of vehicles represents medium-heavy duty to heavy-duty vehicles and buses/recreational vehicles, which were assumed to run on diesel.

Calculations for annual mobile-source fuel consumption are provided in Table 3.5-6.

Table 3.5-6. Mobile Source Fuel Consumption – Operation

Fuel	Vehicle MT CO_2	kg CO_2/Gallon	Gallons
Gasoline	367.82	8.78	41,893.04
Diesel	89.49	10.21	8,764.83
		Total	**50,657.87**

Sources: Appendix B (mobile source CO_2); The Climate Registry 2020 (kg CO_2/gallon).
Notes:
CO_2 = carbon dioxide; kg = kilogram; MT = metric ton

As shown in Table 3.5-6, mobile sources associated with the project would result in approximately 41,893 gallons of gasoline per year and 8,765 gallons of diesel consumed per year beginning in 2025. This is a conservative estimate because it does not account for usage of electric vehicles.

By comparison, California as a whole consumes approximately 28.7 billion gallons of petroleum per year (EIA 2017). Within the County, the estimated petroleum use in 2024 is 1.5 billion gallons per year (CARB 2022).

Over the lifetime of the project, the fuel efficiency of the vehicles being used by residents is expected to increase. As such, the amount of petroleum consumed as a result of vehicular trips to and from the project site during operation would decrease over time. As discussed under Section 3.5.2, there are numerous regulations in place that require and encourage increased fuel efficiency. For example, CARB has adopted a new approach to passenger vehicles by combining the control of smog-causing pollutants and GHG emissions into a single coordinated package of standards. The new approach also includes efforts to support and accelerate the numbers of plug-in hybrids and ZEVs in California (CARB 2017). Additionally, in response to SB 375, CARB has adopted the goal of reducing per-

capita GHG emissions from 2005 levels by 15% by the year 2020 and 19% by the year 2035 for light-duty passenger vehicles in the San Diego Association of Governments planning area. This reduction would occur by reducing vehicle miles traveled through the integration of land use planning and transportation (CARB 2019). As such, petroleum use is anticipated to decrease over time due to advances in fuel economy.

Bus service is located in front of the project site. The project site is located approximately 0.3 miles from the SPRINTER station, which provides light rail access into the nearby cities of Escondido, Vista, and Oceanside. Additionally, the SPRINTER connects to the Surfliner and Coaster routes, which provide north–south access to Los Angeles County, Orange County, and the City of San Diego. Furthermore, the project would implement applicable measures in Title 24 and the City's 2020 CAP, including installing electric vehicle charging stations, installing bicycle infrastructure, implementing a Transportation Demand Management plan, and reducing parking near transit. These measures would further reduce VMT and petroleum consumption from operation, increase access to transit, and encourage alternative modes of transportation.

In summary, although the project would increase petroleum use during operation, the use would be a small fraction of the statewide use and, due to efficiency increases, would diminish over time. Given these considerations, petroleum consumption associated with the project would not result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, and impacts would be **less than significant**.

Threshold No. 2: Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

The project would be subject to and would comply with, at a minimum, the California Building Energy Efficiency Standards (24 CCR, Part 6). Part 6 of Title 24 establishes energy efficiency standards for residential and non-residential buildings constructed in California in order to reduce energy demand and consumption. The project would also be subject to Part 11 of Title 24, also known as the CalGreen building standards. These standards were adopted into the City's building design criteria. Furthermore, the project would be consistent with the City's CAP measures through its implementation of installing electric vehicle charging stations, bicycle infrastructure, and electric water heaters; reducing landscaping water use; and planting trees that would further reduce operational energy use. The project would be built and operated in accordance with all existing, applicable regulations at the time of construction. For these reasons stated, the project would result in a **less-than-significant** impact associated with the potential to conflict with energy standards and regulations.

3.5.5 Cumulative Impact Analysis

Potential cumulative impacts on energy would result if the proposed project, in combination with past, present, and future projects, would result in the wasteful or inefficient use of energy. This could result from development that would not incorporate sufficient building energy efficiency features, would not achieve building energy efficiency standards, or would result in the unnecessary use of energy during construction and/or operation. The cumulative projects within the areas serviced by the energy service providers would be applicable to this analysis; this includes existing aging structures that are energy inefficient. Projects that include development of large buildings or other structures that would have the potential to consume energy in an inefficient manner would have the potential to contribute to a cumulative impact. Projects that would mostly include construction, such as transportation infrastructure, could also contribute to a cumulative impact; however, the impact of these projects would be limited because they would typically not involve substantial ongoing energy use.

As described previously, the project would not result in significant environmental impacts due to wasteful, inefficient, or unnecessary use of energy due to various design features, including installing electric vehicle charging stations, installing electric water heaters, reducing landscaping water use, and planting trees that would be required of the proposed project. Like the project, cumulative projects would be subject to CALGreen, which provides energy efficiency standards for commercial and residential buildings. Over time, CALGreen would implement increasingly stringent energy efficiency standards that would require the project, and the cumulative projects, to minimize the wasteful and inefficient use of energy. In addition, cumulative projects would be required—at a minimum—to meet Title 24 building standards, further avoiding the inefficient use of energy. Furthermore, various federal and state regulations, including the Low Carbon Fuel Standard, Pavley Clean Car Standards, and Low Emission Vehicle Program, would serve to reduce the transportation fuel demand of cumulative projects. Project impacts to energy are not determined to be cumulatively considerable and would be **less than significant**.

3.5.6 Mitigation Measures

Impacts would be less than significant, and no mitigation measures are required.

3.5.7 Conclusion

The project would comply with regulatory requirements and would implement project design features in the City's CAP that would reduce operational energy consumption. For example, the project would be required to install electric vehicle charging stations, install electric water heaters, incorporate solar panels, reduce landscaping water use, and plant trees. Furthermore, the project's location as an infill development and its close proximity to resident services and transit would inherently result in less VMT and petroleum use compared to a sprawling project. As such, the project would not result in the wasteful or inefficient use of electricity. Additionally, the project would not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing energy consumption, including the City's General Plan policies and City's CAP. As a result, impacts would be less than significant.

3.6 Geology and Soils

This section describes the existing geological setting of the proposed Gran Vista Specific Plan Project (project), identifies associated regulatory requirements, and evaluates potential impacts related to implementation of the project, including seismic activity, liquefaction, landslides, loss of topsoil, soil erosion, soil stability, and soil expansion. Preparation of this environmental impact report (EIR) section relied on information provided in the Geotechnical Evaluation prepared for the project by LGC Geotechnical Inc. dated July 15, 2021. The Geotechnical Evaluation is included as Appendix E to this EIR.

A summary of the project- and cumulative-level geology and soils analysis by threshold is provided in Table 3.6-1.

Table 3.6-1. Geology and Soils Summary of Impacts

Threshold of Significance	Project-Level Impact	Cumulative-Level Impact	Significance Determination
No. 1: Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault. Refer to Division of Mines and Geology Special Publication 42.	Less than Significant	Less than Significant	Less than Significant
No. 2: Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking.	Less than Significant	Less than Significant	Less than Significant
No. 3: Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic-related ground failure, including liquefaction.	Less than Significant	Less than Significant	Less than Significant
No. 4: Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides.	Less than Significant	Less than Significant	Less than Significant
No. 5: Result in substantial soil erosion or the loss of topsoil.	Less than Significant	Less than Significant	Less than Significant
No. 6: Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse.	Less than Significant	Less than Significant	Less than Significant
No. 7: Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property.	Less than Significant	Less than Significant	Less than Significant
No. 8: Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water.	Less than Significant	Less than Significant	Less than Significant
No. 9: Directly or indirectly destroy a unique paleontological resource or site unique geologic feature.	Less than Significant	Less than Significant	Less than Significant

3.6.1 Existing Conditions

Soils

A brief description of the earth materials encountered during subsurface exploration is presented in the following sections. Based on field observations and review of published geologic maps, the project site is locally underlain by older artificial fill overly Quaternary older alluvium.

A field study was conducted on June 7, 2021, and consisted of a site reconnaissance and excavation of nine geotechnical hollow stem auger borings. Borings HS-1 through HS-6 were excavated to depths ranging from approximately 5 to 15.5 feet, and Borings I-1 through I-3 were excavated to approximately 10 feet below grade. The borings were drilled and included collection of bulk and relatively undisturbed driven soil samples for subsequent laboratory testing.

Older Artificial Fill (Map Symbol afo)

Older artificial fill as depicted on the Geotechnical Map (Appendix E) generally indicates material that has been placed over native on-site soils as part of prior rough grading activities. The materials encountered consisted of light to medium brown clayey sands and sandy clays that are slightly moist to moist and dense and/or stiff. The artificial fill materials encountered during the subsurface evaluation ranged from approximately existing grade to 8 feet in depth (Appendix E).

Quaternary Older Alluvium (Map Symbol Qal)

Quaternary older alluvium was encountered in the exploratory test pits and borings on the project site. These soils consisted of light to dark brown, slightly moist, dense to very dense clayey sands and stiff to hard sand clays with gravel and lesser amounts of cobbles. The alluvial materials encountered during the subsurface evaluation ranged from approximately 2 feet to a maximum of 15.5 feet in depth.

Surface Water and Groundwater

Surface Water

Surface water was not observed during the project site visit. If encountered during earthwork construction, surface water on this site is likely the result of precipitation. Overall site area drainage is in a southeast direction.

Groundwater

Shallow groundwater conditions were not encountered during the field visit, which included excavations up to 15.5 feet below the existing ground surface. Groundwater levels fluctuate with the seasons and local zones of perched groundwater may be present within the near-surface deposits due to local seepage or during rainy seasons (Appendix E).

Earthquake Hazards

California and the project site are located between the Pacific and North American Tectonic Plates. Several major fault zones are found in Southern California including the San Andreas Fault Zone, with sub parallel faults including the Elsinore, Newport-Inglewood, Rose Canyon, and Coronado Banks Faults. No faults are shown in the immediate project site vicinity (Appendix E).

Surface Fault Rupture

The geologic structure of the entire Southern California area is dominated mainly by northwest trending faults associated with the San Andreas system. The project site is in a seismically active region. No active or potentially active fault is known to exist at the project site nor is the project site situated within an Alquist-Priolo Earthquake Fault Zone or a Special Studies Zone (Appendix E). The nearest known active fault is the Rose Canyon fault located about 11.7 miles west of the project site.

Liquefaction/Seismic Settlement

Liquefaction describes a phenomenon in which loose, saturated, granular soils behave similarly to a fluid when subject to high-intensity ground shaking. These soils may thereby acquire a high degree of mobility, which can lead to lateral movement, sliding, consolidation and settlement of loose sediments, sand boils, and other damaging deformations. The factors known to influence liquefaction potential include soil type and grain size, relative density, groundwater level, and intensity and duration of ground shaking. Based on the lack of shallow groundwater, the dense nature of the on-site soils, and the presence of fine-grained soils, the potential for liquefaction or settlement to impact the site is considered very low (Appendix E).

Other Seismic Hazards

Due to the relatively flat nature of the project site, the potential for landslides and rockfall is considered negligible. The project site is located in a zone with zero susceptibility to landslides (City of San Marcos 2012).

In addition, the potential for secondary seismic hazards such as seiche and tsunami is remote due to site elevation and distance from an open body of water.

Paleontological Resources

The project site is underlain by older artificial fill (afo) and Quaternary older alluvium (Qcol). The preliminary geotechnical evaluation prepared for the project did not identify any unique geologic features on the project site. Furthermore, as determined in the Cultural Resources Report prepared for the project site (Appendix D), no archaeological resources were identified within the project site's area of potential effect. As such, the project site is unlikely to yield paleontological resources.

3.6.2 Regulatory Setting

This section describes the federal, state, and local regulations related to geology and soils.

Federal

Federal Disaster Mitigation Act of 2000

The Disaster Mitigation Act of 2000 provides a set of mitigation plan requirements that encourage state and local jurisdictions to coordinate disaster mitigation planning and implementation. The act also encourages states to complete a natural mitigation plan. California's relevant and updated State Hazard Mitigation Plan was adopted and approved by the Federal Emergency Management Agency Region IX in 2007. In accordance with this act, the County of San Diego prepared its Multi-Jurisdictional Hazard Mitigation Plan, which is discussed in more detail below.

Federal Response Plan

The Federal Response Plan of 1999 is a signed agreement among 27 federal departments and agencies, including the American Red Cross, that provides the mechanism for coordinating delivery of federal assistance and resources to augment efforts of state and local governments overwhelmed by a major disaster or emergency; supports implementation of the Robert T. Stafford Disaster Relief and Emergency Act, as well as individual agency statutory authorities; and supplements other federal emergency operations plans developed to address specific hazards. The Federal Response Plan is implemented in anticipation of a significant event likely to result in a need for federal assistance or in response to an actual event requiring federal assistance under a presidential declaration of a major disaster or emergency.

U.S. Geological Survey Landslide Hazard Identification Program

The U.S. Geological Survey, in fulfillment of the requirements of Public Law 106-113, created the National Landslide Hazards Program to reduce long-term losses from landslide hazards by improving understanding of the causes of ground failure and suggesting mitigation strategies. The Federal Emergency Management Agency is the responsible agency for the long-term management of natural hazards.

International Building Code

The International Building Code (IBC) is a model building code developed by the International Code Council that provides the basis for the California Building Code (CBC). The purpose of the IBC is to provide minimum standards for building construction to ensure public safety, health, and welfare. Prior to the creation of the IBC, several different building codes were used; however, by the year 2000, the IBC had replaced these previous codes. The IBC is updated every 3 years.

State

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act mitigates the hazard of surface fault rupture by regulating structures designated for human occupancy near active faults. As required by the act, the California Geological Survey has delineated Earthquake Fault Zones along known active faults in California.

California Geologic Survey

The California Geologic Survey provides guidance with regard to seismic hazards. The California Geologic Survey's Special Publication 117A, Guidelines for Evaluating and Mitigating Seismic Hazards in California (CGS 2008), provides guidance for the evaluation and mitigation of earthquake-related hazards for projects located within certain designated zones.

California Surface Mining and Reclamation Act

Enacted to promote conservation and protection of significant mineral deposits, the California Surface Mining and Reclamation Act requires cities address the significant aggregate resources classified by the State Geologist and designated by the State Mining and Geology Board in their general plans. The act ensures that significant aggregate resources are recognized and considered before land use decisions are made that may compromise the availability of these resources.

Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act was enacted in 1997 to protect the public from strong ground shaking, liquefaction, landslides, or other ground failure and from other hazards caused by earthquakes. This act requires the State Geologist to map areas subject to seismic hazard. Before a development permit may be granted for projects located in designated areas, a geotechnical evaluation of the site must be prepared and appropriate mitigation measures incorporated into the project design. Additionally, the act requires a Standardized Natural Hazards Disclosure Statement form be completed by real estate sellers if a property is within one of the designated natural hazards areas.

Natural Hazards Disclosure Act

The Natural Hazards Disclosure Act (effective June 1, 1998), requires "sellers of real property and their agents provide prospective buyers with a 'Natural Hazard Disclosure Statement' when the property being sold lies within one or more state-mapped hazard areas, including a Seismic Hazard Zone." The Seismic Hazards Mapping Act, discussed above, specifies two ways this disclosure can be made:

- The Local Option Real Estate Transfer Disclosure Statement as provided in Section 1102.6a of the Civil Code
- The Natural Hazard Disclosure Statement as provided in Section 1103.2 of the Civil Code

The Local Option Real Estate Disclosure Statement can be substituted for the Natural Hazards Disclosure Statement if it contains substantially the same information and substantially the same warning as the Natural Hazards Disclosure Statement. Both the Alquist-Priolo Act and the Seismic Hazards Mapping Act require that real estate agents, or sellers of real estate acting without an agent, disclose to prospective buyers that the property is located in an Alquist-Priolo Earthquake Fault Zone or Seismic Hazard Mapping Zone.

California Building Code

The CBC is codified in Title 24 of the California Code of Regulations. Part 2 of the CBC specifies standards for geologic and seismic hazards, other than surface faulting. Chapter 23 of the CBC addresses seismic safety and includes regulations for earthquake-resistant design and construction. The 2022 edition of the CBC went into effect January 1, 2023 (California Building Standards Commission 2021).

Local

County of San Diego Multi-Jurisdictional Hazard Mitigation Plan

To comply with the Disaster Mitigation Act of 2000, the County of San Diego prepared the Multi- Jurisdictional Hazard Mitigation Plan in 2004, revised in 2017. The plan serves as both a county-wide plan and a plan for local jurisdictions that identifies risks posed by natural and human-made disasters before a hazard event occurs. The plan includes overall goals and objectives shared by many jurisdictions, as well as specific goals, objectives, and mitigation action items for each of the participating jurisdictions, including the City of San Marcos (City), developed to help minimize the effects of the specified hazards that potentially affect their jurisdiction (County of San Diego 2017).

San Marcos Grading Ordinance

The City's Grading Ordinance (found in Chapter 17.32 of the San Marcos Municipal Code) contains regulations for the purpose of protecting public health and safety with respect to the design and construction of building sites and

the development of property by grading. The ordinance sets forth rules and regulations to control excavation, grading and earthwork construction, engineering analysis of soil conditions, and the administrative procedure for issuance of grading permits, approval of grading plans, and site inspections.

City of San Marcos General Plan

The Safety Element of the City of San Marcos General Plan (General Plan) contains several policies pertaining to natural geologic hazards. The following goal and policies apply to the project (City of San Marcos 2012):

Goal S-1: Reduce risks to the community from earthquakes by regulating new development and redevelopment to prevent the creation of new geologic and seismic hazards.

Policy S-1.1: Reduce the risk of impacts from geologic and seismic hazards by applying current and proper land use planning, development engineering, building construction, and retrofitting requirements.

Policy S-1.2: Investigate specific groundwater levels and geologic conditions underlying all new development or redevelopment proposals in areas where potential fault rupture, liquefaction, or other geologic hazards are suspected.

The project's consistency with applicable General Plan goals and policies is discussed in Section 3.10, Land Use and Planning. As detailed in Section 3.10, the project is consistent with the applicable General Plan goals and policies pertaining to geology and soils.

3.6.3 Thresholds of Significance

As defined in Appendix G of the California Environmental Quality Act Guidelines, project impacts to geological resources are considered significant if the project would:

- **Threshold No. 1:** Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of as known fault. Refer to Division of Mines and Geology Special Publication 42.
- **Threshold No. 2:** Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking.
- **Threshold No. 3:** Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction.
- **Threshold No. 4:** Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides.
- **Threshold No. 5:** Result in substantial soil erosion or the loss of topsoil.
- **Threshold No. 6:** Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse.
- **Threshold No. 7:** Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property.

- **Threshold No. 8:** Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water.
- **Threshold No. 9:** Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

3.6.4 Project Impact Analysis

The project area of potential effect includes the entire 7.6-acre project site. Impacts to geology and soils that may result from ground disturbing activities associated with the project are analyzed below.

Threshold No. 1: Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of as known fault. (Refer to Division of Mines and Geology Special Publication 42)?

The project site is located in tectonically active Southern California. However, no Alquist-Priolo Fault Hazard Zones or other known active faults run through the project site. The closest known active fault is the Rose Canyon Fault, located 11.7 miles southwest of the project site. Based on the lack of active or potentially active faults underlying the project area, the potential for surface rupture is low and the project site would not be subject to a greater seismic risk than other locations within the region. Additionally, per the Alquist-Priolo Earthquake Fault Zoning Act, because the project site is not located in an Alquist Priolo Fault Zone, the project would not place any prohibited uses (e.g., uses containing structures with a capacity of 300 people or more; uses with the potential to severely damage the environment or cause major loss of life; or specific civic uses including police and fire stations, schools, hospitals, rest homes, nursing homes, and emergency communication facilities) within an Alquist–Priolo Fault Zone. Thus, the potential for loss, injury, or death involving rupture of a known earthquake fault is considered low.

The project would be required to comply with applicable CBC requirements and proposed plans would be subject to City review. For these reasons, impacts would be **less than significant.**

Threshold No. 2: Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?

There are no known active faults that run through the project site. The project would be designed in accordance with applicable CBC criteria, including those specific to resistance to seismic shaking. Furthermore, the project would be constructed in accordance with other applicable regulations, current seismic design specifications of the Structural Engineers Association of California, and applicable requirements of the State of California Occupational Safety and Health Administration. These required seismic design considerations are used to minimize structural damage in the event of ground shaking.

Additionally, the project would implement all recommendations from the Preliminary Geotechnical Evaluation (Appendix E), as well as any project-specific recommendations from any potential supplemental geotechnical evaluations in compliance with Section 17.32.040(d) of the San Marcos Municipal Code. Section 17.32.040(d) of the Municipal Code requires the incorporation of recommendations of geotechnical reports into grading plans prior to the approval of a grading permit. These recommendations include general provisions regarding compliance with grading ordinances, as well as recommendations related to property clearing and preparation, removal depths, remedial grading, engineered fill, excavation, shrinkage and bulking, trench compacting, and backfill. The Geotechnical Evaluation includes design recommendations, retaining wall design and construction recommendations, and post-construction considerations. The detailed recommendations are included in Section 5 of the Geotechnical Evaluation

(see Appendix E). The Development Services Department shall review and approve project design and construction to verify that the recommendations of the geotechnical evaluation have been incorporated. With adherence to all regulations and geotechnical recommendations from the Geotechnical Evaluation conducted for the project, impacts related to seismic ground shaking would be considered **less than significant**.

Threshold No. 3: Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?

As described in Section 3.6.1, Existing Conditions, liquefaction occurs when site conditions include shallow groundwater, low density non-cohesive (granular) soils, and high-intensity ground motion. Based on the Geotechnical Evaluation mapping, subsurface exploration, and laboratory testing, the project site is not identified as being susceptible to liquefaction (Appendix E). No shallow groundwater was identified on site, and soils on site consist of relatively dense material. The potential for liquefaction or dynamic settlement to occur on site is considered very low. Additionally, the project site is identified in the City's Safety Element as having zero susceptibility to liquefaction (Figure 6-1 of the General Plan) (City of San Marcos 2012). As such, the project site is not considered susceptible to liquefaction or significant amounts of seismic settlement.

Furthermore, the project would implement all remedial grading and drainage recommendations contained within the Geotechnical Evaluation (see Appendix E of this EIR), which would ensure potential impacts would not be substantial. For these reasons, implementation of the project would not result in seismic-related ground failure, including liquefaction, and impacts would be **less than significant.**

Threshold No. 4: Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?

The project site is relatively flat, ranging in elevation from approximately 570 to 580 feet above mean sea level. The project site is identified in the City's Safety Element as having zero susceptibility to landslides (Figure 6-1 of the General Plan) (City of San Marcos 2012). Therefore, the project site is not considered susceptible to landslides and project impacts would be **less than significant.**

Threshold No. 5: Would the project result in substantial soil erosion or the loss of topsoil?

The project would be required to comply with the City's Grading Ordinance, which contains design standards and performance requirements that must be met to avoid or reduce, to an acceptable level, excessive erosion. Furthermore, in accordance with Municipal Code requirements, the project would implement all recommendations pertaining to soil erosion or loss of topsoil as contained within the Geotechnical Evaluation (see Appendix E of this EIR), in addition to any additional recommendations from any supplemental geotechnical reports prepared for the project and the stormwater pollution prevention plan to be prepared for the project. For these reasons, implementation of the project would not result in substantial soil erosion or the loss of topsoil, and impacts would be **less than significant.**

Threshold No. 6: Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

As previously described under Threshold Nos. 3 and 4, the potential for landslides and/or liquefaction on site is considered low. The project would be required to comply with the recommendations of the Geotechnical Evaluation (Appendix E). Site preparation, removals, and excavation associated with the project would be performed consistent

with Chapter 5 of the Geotechnical Evaluation (Appendix E) and any supplemental geotechnical evaluation. In addition, grading associated with the project would be accomplished under the observation and testing of the project geotechnical engineer and engineering geologist, in accordance with the requirements of the CBC, the City, and the County of San Diego. Areas to receive fill would be required to be properly cut and/or benched in accordance with current industry standards of practice, CBC guidelines, and City requirements.

Therefore, compliance with applicable regulations and the recommendations in the Geotechnical Evaluation would ensure that impacts from unstable conditions that could result in on- or off-site lateral spread, subsidence, liquefaction, or collapse would be **less than significant**.

Threshold No. 7: Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

As described in the Geotechnical Evaluation (Appendix E), two of the nine borings yielded Expansion Index values of 32 and 55, which are classified as low and medium potential for expansion, respectively. The project would be required to implement CBC guidelines, regulations, and further recommendations to ensure that such soils are fully remediated and/or the project is designed appropriately to minimize impacts of expansive soils. The geotechnical evaluation also recommends concrete flatwork, use of sandy soils with a maximum of 35% fines and very low expansion potential for backfill materials, and the foundation design parameter implementation. With adherence to the Geotechnical Evaluation recommendations, as required for grading permit issuance, impacts related to expansive soils would be **less than significant**.

Threshold No. 8: Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

The project does not include septic tanks or alternative wastewater disposal systems. As described in Section 3.17, Utilities and Service Systems, the project would construct private on-site sewer lines that would connect to existing City infrastructure. Therefore, impacts would be **less than significant**.

Threshold No. 9: Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

As discussed in Section 3.6.1, the potential for paleontological resources to be located on the project site is considered low. Although ground-disturbing activities associated with the project have the potential to unearth previously unidentified paleontological resources, the Geotechnical Evaluation prepared for the project did not identify any unique geologic features on the project site, and therefore impacts would be **less than significant**.

3.6.5 Cumulative Impact Analysis

Due to the localized nature of geology and soils, cumulative projects would address potential impacts to geology and soils on a project-by-project basis, as potential geologic hazards and soil composition vary by site. Each cumulative project would be required to assess individual and site-specific geologic conditions, which would inform construction and development of each site. All cumulative development would be subject to similar requirements to those imposed and implemented for the project and would be required to adhere to applicable regulations, standards, and procedures.

Further, as discussed in Section 3.6.4, the project site is unlikely to yield paleontological resources. Thus, impacts to paleontological resources from implementation of the project would be less than significant. While some of the projects on the cumulative list are located in areas that may contain paleontological resources, the presence of these resources is typically unknown prior to construction, and it is expected that mitigation measures would be included with approval of cumulative projects to ensure that impacts to paleontological resources are minimized. As implementation of the project would not result in any significant impacts to geology and soils on the project site, and all cumulative projects would be required to analyze site-specific conditions and implement recommendations or mitigation, cumulative impacts related to geology and soils would be **less than significant**.

3.6.6 Mitigation Measures

Based upon the analysis presented in Sections 3.6.4 and 3.6.5, all project- and cumulative-level geology and soil related impacts would be less than significant, and no mitigation is required.

3.6.7 Conclusion

Based upon the analysis presented in Section 3.6.4, impacts associated with seismicity, liquefaction, landslides, erosion/loss of topsoil, compressible soils, expansive soils, and paleontological resources were determined to be less than significant. The project would be required to adhere to all recommendations in the Geotechnical Evaluation prepared for the project and would be required to comply with all applicable regulations outlined in Section 3.6.2.

3.7 Greenhouse Gas Emissions

This environmental impact report (EIR) section describes the existing setting of the project site related to greenhouse gas (GHG) emissions and climate change, identifies associated regulatory requirements, and evaluates potential impacts related to implementation of the proposed Gran Vista Specific Plan Project (project). Information for this section relies on the Air Quality and Greenhouse Gas Emissions Technical Report prepared for the project by Dudek in February 2023. The Air Quality and Greenhouse Gas Emissions Technical Report is included as Appendix B to this EIR.

A summary of the project- and cumulative-level GHG analysis by threshold is provided in Table 3.7-1.

Table 3.7-1. Greenhouse Gas Emissions Summary of Impacts

Threshold of Significance	Project Direct Impact	Project Cumulative Impact	Significance Determination
No. 1: Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment.	Less than Significant	Less than Significant	Less than Significant
No. 2: Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHGs.	Less than Significant	Less than Significant	Less than Significant

3.7.1 Existing Conditions

This section introduces the environmental setting as it relates to GHG emissions, providing a climate change overview; information on GHG and climate forcing substances, global warming potential, and sources of GHG emissions; and descriptions of potential effects of climate change in the region of the proposed project.

Climate Change Overview

Climate change refers to any significant change in measures of climate, such as temperature, precipitation, or wind patterns, lasting for an extended period of time (decades or longer). The Earth's temperature depends on the balance between energy entering and leaving the planet's system. Many factors, both natural and human, can cause changes in Earth's energy balance, including variations in the sun's energy reaching Earth, changes in the reflectivity of Earth's atmosphere and surface, and changes in the greenhouse effect, which affects the amount of heat retained by Earth's atmosphere (EPA 2017a).

The greenhouse effect is the trapping and build-up of heat in the atmosphere (troposphere) near the Earth's surface. The greenhouse effect traps heat in the troposphere through a threefold process: short-wave radiation emitted by the sun is absorbed by the Earth, the Earth emits a portion of this energy in the form of long-wave radiation, and GHGs in the upper atmosphere absorb this long-wave radiation and emit it into space and toward the Earth. The greenhouse effect is a natural process that contributes to regulating the Earth's temperature and creates a pleasant, livable environment on the Earth. Human activities that emit additional GHGs to the atmosphere increase the amount of infrared radiation that gets absorbed before escaping into space, thus enhancing the greenhouse effect and causing the Earth's surface temperature to rise.

The scientific record of the Earth's climate shows that the climate system varies naturally over a wide range of time scales and that, in general, climate changes prior to the Industrial Revolution in the 1700s can be explained by natural causes, such as changes in solar energy, volcanic eruptions, and natural changes in GHG concentrations. Recent climate changes, in particular the warming observed over the past century, however, cannot be explained by natural causes alone. Rather, it is extremely likely that human activities have been the dominant cause of that warming since the mid-twentieth century and is the most significant driver of observed climate change (EPA 2017a; IPCC 2013). Human influence on the climate system is evident from the increasing GHG concentrations in the atmosphere, positive radiative forcing, observed warming, and improved understanding of the climate system (IPCC 2013). The atmospheric concentrations of GHGs have increased to levels unprecedented in the last 800,000 years, primarily from fossil fuel emissions and secondarily from emissions associated with land use changes (IPCC 2013). Continued emissions of GHGs will cause further warming and changes in all components of the climate system.

Greenhouse Gases and Other Climate Forcing Substances

A GHG is any gas that absorbs infrared radiation in the atmosphere; in other words, GHGs trap heat in the atmosphere. GHGs include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), ozone (O_3), water vapor, hydrofluorocarbons (HFCs), hydrochlorofluorocarbons (HCFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6).[1] Some GHGs, such as CO_2, CH_4, and N_2O, occur naturally and are emitted to the atmosphere through natural processes and human activities. Of these gases, CO_2 and CH_4 are emitted in the greatest quantities from human activities. Manufactured GHGs, which have a much greater heat-absorption potential than CO_2, include fluorinated gases, such as HFCs, HCFCs, PFCs, and SF_6, which are associated with certain industrial products and processes. A summary of the most common GHGs and their sources is included in the following text.[2] Also included is a discussion of other climate-forcing substances.

Carbon Dioxide. CO_2 is a naturally occurring gas and a byproduct of human activities and is the principal anthropogenic GHG that affects the Earth's radiative balance. Natural sources of CO_2 include respiration of bacteria, plants, animals, and fungus; evaporation from oceans; volcanic out-gassing; and decomposition of dead organic matter. Human activities that generate CO_2 are the combustion of fuels such as coal, oil, natural gas, and wood and changes in land use.

Methane. CH_4 is produced through both natural and human activities. CH_4 is a flammable gas and is the main component of natural gas. CH_4 is produced through anaerobic (without oxygen) decomposition of waste in landfills, flooded rice fields, animal digestion, decomposition of animal waste, production and distribution of natural gas and petroleum, coal production, and incomplete fossil fuel combustion.

Nitrous Oxide. N_2O is produced through natural and human activities, mainly through agricultural activities and natural biological processes, although fuel burning and other processes also create N_2O. Sources of N_2O include soil cultivation practices (microbial processes in soil and water), especially the use of commercial and organic fertilizers; manure management; industrial processes (such as in nitric acid production, nylon production, and fossil-fuel-fired power plants); vehicle emissions; and using N_2O as a propellant (such as in rockets, racecars, and aerosol sprays).

[1] California Health and Safety Code, Section 38505, identifies seven GHGs that CARB is responsible for monitoring and regulating to reduce emissions: CO_2, CH_4, N_2O, SF_6, HFCs, PFCs, and nitrogen trifluoride.

[2] The descriptions of GHGs are summarized from the Intergovernmental Panel on Climate Change (IPCC) Second Assessment Report (IPCC 1995), IPCC Fourth Assessment Report (IPCC 2007), CARB's Glossary of Terms Used in GHG Inventories (CARB 2015), and EPA's Glossary of Climate Change Terms (EPA 2016).

Fluorinated Gases. Fluorinated gases (also referred to as F-gases) are powerful synthetic GHGs emitted from many industrial processes. Fluorinated gases are commonly used as substitutes for stratospheric O_3-depleting substances (e.g., chlorofluorocarbons, HCFCs, and halons). The most prevalent fluorinated gases are the following:

- **Hydrofluorocarbons:** HFCs are compounds containing only hydrogen, fluorine, and carbon atoms. HFCs are synthetic chemicals used as alternatives to O3-depleting substances in serving many industrial, commercial, and personal needs. HFCs are emitted as byproducts of industrial processes and are used in manufacturing.
- **Perfluorocarbons:** PFCs are a group of human-made chemicals composed of carbon and fluorine only. These chemicals were introduced as alternatives, with HFCs, to the O3-depleting substances. The two main sources of PFCs are primary aluminum production and semiconductor manufacturing. Since PFCs have stable molecular structures and do not break down through the chemical processes in the lower atmosphere, these chemicals have long lifetimes, ranging between 10,000 and 50,000 years.
- **Sulfur Hexafluoride:** SF6 is a colorless gas soluble in alcohol and ether and slightly soluble in water. SF6 is used for insulation in electric power transmission and distribution equipment, semiconductor manufacturing, the magnesium industry, and as a tracer gas for leak detection.
- **Nitrogen Trifluoride:** Nitrogen trifluoride is used in the manufacture of a variety of electronics, including semiconductors and flat panel displays.

Chlorofluorocarbons. Chlorofluorocarbons are synthetic chemicals that have been used as cleaning solvents, refrigerants, and aerosol propellants. They are chemically unreactive in the lower atmosphere (troposphere). The production of chlorofluorocarbons was prohibited beginning in 1987 due to the chemical destruction of stratospheric O_3.

Hydrochlorofluorocarbons. HCFCs are a large group of compounds whose structure is very close to that of chlorofluorocarbons—containing hydrogen, fluorine, chlorine, and carbon atoms—but that include one or more hydrogen atoms. Like HFCs, HCFCs are used in refrigerants and propellants. HCFCs were also used in place of chlorofluorocarbons for some applications; however, their use is being phased out.

Black Carbon. Black carbon is a component of fine particulate matter, which has been identified as a leading environmental risk factor for premature death. It is produced from the incomplete combustion of fossil fuels and biomass burning, particularly from older diesel engines and wildfires. Black carbon warms the atmosphere by absorbing solar radiation, influences cloud formation, and darkens the surface of snow and ice, which accelerates heat absorption and melting. Black carbon is a short-lived species that varies spatially, which makes it difficult to quantify its global warming potential. Diesel particulate matter emissions are a major source of black carbon and are toxic air contaminants that have been regulated and controlled in California for several decades to protect public health. In relation to declining diesel particulate matter from the California Air Resources Board (CARB) regulations pertaining to diesel engines, diesel fuels, and burning activities, CARB estimates that annual black carbon emissions in California have been reduced by 70% between 1990 and 2010, with 95% control expected by 2020 (CARB 2014).

Water Vapor. The primary source of water vapor is evaporation from the ocean, with additional vapor generated by sublimation (change from solid to gas) from ice and snow, evaporation from other water bodies, and transpiration from plant leaves. Water vapor is the most important, abundant, and variable GHG in the atmosphere and maintains a climate necessary for life.

Ozone. Tropospheric O_3, which is created by photochemical reactions involving gases from natural sources and human activities, acts as a GHG. Stratospheric O_3, which is created by the interaction between solar ultraviolet radiation and molecular oxygen (O_2), plays a decisive role in the stratospheric radiative balance. Depletion of stratospheric O_3, due to chemical reactions that may be enhanced by climate change results in an increased ground-level flux of ultraviolet-B radiation.

Aerosols. Aerosols are suspensions of particulate matter in a gas emitted into the air through burning biomass (plant material) and fossil fuels. Aerosols can warm the atmosphere by absorbing and emitting heat and can cool the atmosphere by reflecting light.

Global Warming Potential

Gases in the atmosphere can contribute to climate change both directly and indirectly. Direct effects occur when the gas itself absorbs radiation. Indirect radiative forcing occurs when chemical transformations of the substance produce other GHGs, when a gas influences the atmospheric lifetimes of other gases, and/or when a gas affects atmospheric processes that alter the radiative balance of the Earth (e.g., affects cloud formation or albedo) (EPA 2017b). The Intergovernmental Panel on Climate Change developed the global warming potential (GWP) concept to compare the ability of each GHG to trap heat in the atmosphere relative to another gas. The GWP of a GHG is defined as the ratio of the time-integrated radiative forcing from the instantaneous release of 1 kilogram of a trace substance relative to that of 1 kilogram of a reference gas (IPCC 2014). The reference gas used is CO_2; therefore, GWP-weighted emissions are measured in metric tons (MT) of carbon dioxide equivalent (CO_2e).

Sources of Greenhouse Gas Emissions

Anthropogenic GHG emissions worldwide in 2019 (the most recent year for which data is available) totaled approximately 52.4 million metric tons (MMT) of CO_2e, excluding land use change and forestry (PBL 2020). Six countries—China, the United States, the Russian Federation, India, Japan, and Brazil—and the European community accounted for approximately 62% of the total global emissions, or approximately 32.5 MMT CO_2e (PBL 2020).

Per the U.S. Environmental Protection Agency (EPA) Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990–2019, total United States GHG emissions were approximately 6,558.3 MMT CO_2e in 2019 (EPA 2021). Overall, from 1990 to 2019, total emissions of CO_2 increased by 142.4 MMT CO_2e (2.8%), while total emissions of CH_4 decreased by 117.2 MMT CO_2e (15.1%) and emissions of N_2O increased by 4.5 MMT CO_2e (1.0%). During the same period, aggregate weighted emissions of HFCs, PFCs, SF_6, and nitrogen trifluoride rose by 86.0 MMT CO_2e (86.3%). From 1990 to 2019, HFCs increased by 128.1 MMT CO_2e (275.4%), PFCs decreased by 19.8 MMT CO_2e (81.5%), SF_6 decreased by 22.9 MMT CO_2e (79.5%), and nitrogen trifluoride increased by 0.6 MMT CO_2e (1,162.7%).

According to California's 2000–2019 GHG emissions inventory (2021 edition), California emitted 418.2 MMT CO_2e in 2019, including emissions resulting from out-of-state electrical generation (CARB 2021). The sources of GHG emissions in California include transportation, industrial uses, electric power production from both in-state and out-of-state sources, commercial and residential uses, agriculture, high-GWP substances, and recycling and waste. The California GHG emission source categories and their relative contributions in 2019 are shown in Table 3.7-2.

Table 3.7-2. Greenhouse Gas Emissions Sources in California

Source Category	Annual GHG Emissions (MMT CO_2e)	Percent of Total[a]
Transportation	166.1	40%
Industrial uses	88.2	21%

Table 3.7-2. Greenhouse Gas Emissions Sources in California

Source Category	Annual GHG Emissions (MMT CO_2e)	Percent of Total[a]
Electricity generation[b]	58.8	14%
Residential and commercial uses	43.8	10%
Agriculture	31.8	8%
High global warming potential substances	20.6	5%
Recycling and waste	8.9	2%
Totals	**418.2**	**100%**

Source: CARB 2021.
Notes: GHG = greenhouse gas; MMT CO_2e = million metric tons of carbon dioxide equivalent.
Emissions reflect 2019 California GHG inventory.
[a] Percentage of total has been rounded and total may not sum due to rounding.
[b] Includes emissions associated with imported electricity, which account for 21.7 MMT CO_2e.

The City's community-wide GHG emissions baseline inventory in 2012 was estimated to be 599,000 MT CO_2e (City of San Marcos 2020). On-road transportation is the largest contributor to the emissions, accounting for 54% (or 322,000 MT CO_2e) of the City's 2012 total, followed by electricity at 27% (or 162,000 MT CO_2e) of the emissions. Accounting for future population and economic growth, the City projects GHG emissions of 526,000 MT CO_2e in 2020 and 429,000 MT CO_2e in 2030. The projections assume population, housing, employment, and transportation activity will continue to grow over time, and accounts for GHG emission reductions associated with implementation of the City's Climate Action Plan (CAP) and legislative reductions (City of San Marcos 2020).

Potential Effects of Climate Change

Globally, climate change has the potential to affect numerous environmental resources through uncertain impacts related to future air temperatures and precipitation patterns. The 2014 Intergovernmental Panel on Climate Change Synthesis Report indicated that warming of the climate system is unequivocal, and many of the observed changes since the 1950s are unprecedented. Signs that global climate change has occurred include warming of the atmosphere and ocean, diminished amounts of snow and ice pack, and rising sea levels (IPCC 2014). In California, climate change impacts have the potential to affect sea-level rise, agriculture, snowpack and water supply, forestry, wildfire risk, public health, frequency of severe weather events, and electricity demand and supply. Potential effects of climate change are outlined in detail in Appendix B to this EIR.

3.7.2 Regulatory Setting

The following section provides a summary of the applicable regulatory requirements pertaining to GHGs, including federal, state, and local guidelines; additional detail can be found in Appendix B.

Federal

Infrastructure Investment and Jobs Act

On November 6, 2021, Congress passed the Bipartisan Infrastructure Deal (Infrastructure Investment and Jobs Act), a once-in-a-generation investment in our nation's infrastructure and competitiveness. This Bipartisan Infrastructure Deal will rebuild America's roads, bridges, and rails; expand access to clean drinking water; ensure every American has access to high-speed internet; tackle the climate crisis; advance environmental justice; and invest in communities that have too often been left behind. The legislation will help ease inflationary pressures and strengthen supply chains

by making long overdue improvements for our nation's ports, airports, rail, and roads. It will drive the creation of good-paying union jobs and grow the economy sustainably and equitably so that everyone gets ahead for decades to come. Combined with the president's Build Back Framework, it will add on average 1.5 million jobs per year for the next 10 years. It will improve transportation options for millions of Americans to reduce energy use and GHG emissions. It will increase investment in electric vehicle chargers and renewable energy production.

Massachusetts v. U.S. Environmental Protection Agency

In *Massachusetts v. EPA* (2007), the U.S. Supreme Court directed the EPA administrator to determine whether GHG emissions from new motor vehicles cause or contribute to air pollution that may reasonably be anticipated to endanger public health or welfare, or whether the science is too uncertain to make a reasoned decision. In December 2009, the administrator signed a final rule with the following two distinct findings regarding GHGs under Section 202(a) of the federal Clean Air Act:

- The Administrator found that elevated concentrations of GHGs—CO_2, CH_4, N_2O, HFCs, PFCs, and SF_6—in the atmosphere threaten the public health and welfare of current and future generations. This is the "endangerment finding."
- The Administrator further found the combined emissions of GHGs—CO_2, CH_4, N_2O, and HFCs—from new motor vehicles and new motor vehicle engines contribute to the GHG air pollution that endangers public health and welfare. This is the "cause or contribute finding."

These two findings were necessary to establish the foundation for regulation of GHGs from new motor vehicles as air pollutants under the Clean Air Act.

Energy Independence and Security Act

The Energy Independence and Security Act of 2007, among other key measures, did the following to aid in the reduction of national GHG emissions:

1. Increase the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard requiring fuel producers to use at least 36 billion gallons of biofuel in 2022.
2. Set a target of 35 miles per gallon for the combined fleet of cars and light trucks by model year 2020 and direct the National Highway Traffic Safety Administration (NHTSA) to establish a fuel economy program for medium- and heavy-duty trucks and create a separate fuel economy standard for work trucks.
3. Prescribe or revise standards affecting regional efficiency for heating and cooling products and procedures for new or amended standards, energy conservation, energy efficiency labeling for consumer electronic products, residential boiler efficiency, electric motor efficiency, and home appliances.

Federal Vehicle Standards

In August 2016, EPA and NHTSA announced the adoption of the phase two program related to the fuel economy and GHG standards for medium- and heavy-duty trucks. The phase two program will apply to vehicles with model year 2018–2027 for certain trailers and model years 2021–2027 for semi-trucks, large pickup trucks, vans, and all types and sizes of buses and work trucks. The final standards are expected to lower CO_2 emissions by approximately 1.1 billion MT and reduce oil consumption by up to 2 billion barrels over the lifetime of the vehicles sold under the program (EPA and NHTSA 2016).

On September 27, 2019, EPA and NHTSA also published their Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule Part One: One National Program (84 FR 51,310), which became effective November 26, 2019. The Part One Rule revoked California's authority to set its own GHG emissions standards and set ZEV mandates in California. On March 31, 2020, EPA and NHTSA issued Part Two of the SAFE Rule, which went into effect June 29, 2020 (85 FR 24174). The Part Two Rule set CO_2 emissions standards and corporate average fuel economy standards for passenger vehicles and light duty trucks for model years 2021 through 2026. On January 20, 2021, President Joe Biden issued an executive order titled Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis, which included review of the Part One Rule by April 2021 and review of the Part Two Rule by July 2021 (The White House 2021). On April 22, 2021, NHTSA issued a notice of proposed rulemaking that would repeal those portions of the Part One Rule (including the regulatory text and interpretive statements in the preamble) that found California's GHG and ZEV mandates pre-empted by EPA. One day after NHTSA issued its notice, EPA announced its parallel action on SAFE Part One. On December 21, 2021, after reviewing all the public comments submitted on NHTSA's April 2021 Notice of Proposed Rulemaking, NHTSA finalized the SAFE pre-emption rulemaking to withdraw its portions of the SAFE Part One Rule.

State

The statewide GHG emissions regulatory framework is summarized below by category: state climate change targets, building energy, renewable energy and energy procurement, mobile sources, solid waste, water, and other state regulations and goals. The following text describes executive orders, legislation, regulations, and other plans and policies that would directly or indirectly reduce GHG emissions and/or address climate change issues.

State Climate Change Targets

Executive Order S-3-05

Executive Order (EO) S-3-05 (2005) established the following statewide goals: GHG emissions should be reduced to 2000 levels by 2010, GHG emissions should be reduced to 1990 levels by 2020, and GHG emissions should be reduced to 80% below 1990 levels by 2050.

Assembly Bill 32

In furtherance of the goals established in EO S-3-05, the legislature enacted AB 32. The bill is referred to as the California Global Warming Solutions Act of 2006. AB 32 provided initial direction on creating a comprehensive multiyear program to limit California's GHG emissions at 1990 levels by 2020 and initiate the transformations required to achieve the state's long-range climate objectives.

Executive Order B-55-18

EO B-55-18 (2018) established a statewide policy for the state to achieve carbon neutrality as soon as possible, no later than 2045, and achieve and maintain net negative emissions thereafter. The goal is an addition to the existing statewide targets of reducing the state's GHG emissions. CARB will work with relevant state agencies to ensure that future scoping plans identify and recommend measures to achieve the carbon neutrality goal.

California Air Resources Board's Climate Change Scoping Plan

One specific requirement of AB 32 was for CARB to prepare a scoping plan for achieving the maximum technologically feasible and cost-effective GHG emission reductions by 2020 (California Health and Safety Code Section 38561[a]) and to update the plan at least once every 5 years. In 2008, CARB approved the first scoping

plan. The Climate Change Scoping Plan: A Framework for Change (Scoping Plan) included a mix of recommended strategies that combined direct regulations, market-based approaches, voluntary measures, policies, and other emission reduction programs calculated to meet the 2020 statewide GHG emissions limit and initiate the transformations needed to achieve the state's long-range climate objectives. The key elements of the Scoping Plan included the following (CARB 2008):

1. Expanding and strengthening existing energy efficiency programs, as well as building and appliance standards.
2. Achieving a statewide renewable energy mix of 33%.
3. Developing a California cap-and-trade program that links with other Western Climate Initiative partner programs to create a regional market system and caps sources contributing 85% of California's GHG emissions.
4. Establishing targets for transportation-related GHG emissions for regions throughout California, and pursuing policies and incentives to achieve those targets.
5. Adopting and implementing measures pursuant to existing state laws and policies, including California's clean car standards, goods movement measures, and the Low Carbon Fuel Standard (17 CCR 95480 et seq.).
6. Creating targeted fees, including a public goods charge on water use, fees on high GWP gases, and a fee to fund the administrative costs of the State of California's long-term commitment to AB 32 implementation.

The Scoping Plan also identified local governments as essential partners in achieving California's goals to reduce GHG emissions because they have broad influence and, in some cases, exclusive authority over activities that contribute to significant direct and indirect GHG emissions through their planning and permitting processes, local ordinances, outreach and education efforts, and municipal operations. Specifically, the Scoping Plan encouraged local governments to adopt a reduction goal for municipal operations, and for community emissions to reduce GHGs by approximately 15% from then levels (2008) by 2020. Many local governments developed community-scale local GHG reduction plans based on this Scoping Plan recommendation.

In 2014, CARB approved the first update to the Scoping Plan. The First Update to the Climate Change Scoping Plan: Building on the Framework (First Update) defined the state's GHG emission reduction priorities for the next 5 years and laid the groundwork to start the transition to the post-2020 goals set forth in EO S-3-05 and EO B-16-2012. The First Update concluded that California is on track to meet the 2020 target but recommended a 2030 mid-term GHG reduction target be established to ensure a continuum of action to reduce emissions. The First Update recommended a mix of technologies in key economic sectors to reduce emissions through 2050, including energy demand reduction through efficiency and activity changes; large-scale electrification of on-road vehicles, buildings, and industrial machinery; decarbonizing electricity and fuel supplies; and the rapid market penetration of efficient and clean energy technologies. As part of the First Update, CARB recalculated the state's 1990 emissions level, using more recent GWPs identified by the Intergovernmental Panel on Climate Change, from 427 MMT CO_2e to 431MMT CO_2e (CARB 2014).

In 2015, as directed by EO B-30-15 (discussed below), CARB began working on an update to the Scoping Plan to incorporate the 2030 target of 40% below 1990 levels to keep California on its trajectory toward meeting or exceeding the long-term goal of reducing GHG emissions to 80% below 1990 levels by 2050 as set forth in EO S-3-05. The governor called on California to pursue a new and ambitious set of strategies, in line with the five climate change pillars from his inaugural address, to reduce GHG emissions and prepare for the unavoidable impacts of climate change. In the summer of 2016, the legislature affirmed the importance of addressing climate change through passage of SB 32.

In December 2017, CARB adopted California's 2017 Climate Change Scoping Plan (2017 Scoping Plan) for public review and comment (CARB 2017). The 2017 Scoping Plan builds on the successful framework established in the initial Scoping Plan and First Update while identifying new, technologically feasible and cost-effective strategies that will serve as the framework to achieve the 2030 GHG target as established by SB 32 and define the state's climate change priorities to 2030 and beyond. The strategies' commitments include implementing renewable energy and energy efficiency strategies (including the mandates of SB 350), increasing stringency of the Low Carbon Fuel Standard, implementing measures identified in the Mobile Source and Freight Strategies, implementing measures identified in the proposed Short-Lived Climate Pollutant Reduction Strategy, and increasing stringency of SB 375 targets. To fill the gap in additional reductions needed to achieve the 2030 target, it recommends continuing the Cap-and-Trade Program.

For local governments, the 2017 Scoping Plan replaced the initial Scoping Plan's 15% reduction goal with a recommendation to aim for a community-wide goal of no more than 6 MT CO_2e per capita by 2030, and no more than 2 MT CO_2e per capita by 2050, which are consistent with the state's long-term goals. These goals are also consistent with the Under 2 Memorandum of Understanding (Under 2 Coalition 2016) and the Paris Agreement, which are developed around the scientifically based levels necessary to limit global warming to below 2°C. The 2017 Scoping Plan recognized the benefits of local government GHG planning (e.g., through CAPs) and provided more information regarding tools CARB is working on to support those efforts. It also recognized the California Environmental Quality Act (CEQA) streamlining provisions for project-level review where there is a legally adequate CAP.

The Scoping Plan recommends strategies for implementation at the statewide level to meet the goals of AB 32, SB 32, and the executive orders, and establishes an overall framework for the measures that will be adopted to reduce California's GHG emissions. A project is considered consistent with the statutes and executive orders if it meets the general policies in reducing GHG emissions to facilitate the achievement of the state's goals and does not impede attainment of those goals. A project would be consistent if it would further the objectives and not obstruct their attainment.

CARB is presently preparing the 2022 Scoping Plan Update, which will assess progress towards achievement of the state's 2030 reduction target and lay out a path for the state's achievement of carbon neutrality by 2045. CARB has held a number of public workshops to provide information on the plan update and solicit feedback from stakeholders. A draft plan has not yet been released for public review and comment.

Executive Order B-30-15

EO B-30-15 (2015) identified an interim GHG reduction target in support of targets previously identified under EO S-3-05 and AB 32. EO B-30-15 specifically set an interim target goal of reducing statewide GHG emissions to 40% below 1990 levels by 2030 to keep California on its trajectory toward meeting or exceeding the long-term goal of reducing statewide GHG emissions to 80% below 1990 levels by 2050, as set forth in EO S-3-05. To facilitate achievement of this goal, EO B-30-15 called for an update to CARB's Scoping Plan to express the 2030 target in terms of MMT CO_2e. The executive order also called for state agencies to continue to develop and implement GHG emissions reduction programs in support of the reduction targets. Sector-specific agencies in transportation, energy, water, and forestry were required to prepare GHG reduction plans by September 2015, followed by a report on action taken in relation to these plans in June 2016. EO B-30-15 did not require local agencies to take any action to meet the new interim GHG reduction target.

Senate Bill 32 and Assembly Bill 197

SB 32 and AB 197 (enacted in 2016) are companion bills that set new statewide GHG reduction targets, made changes to CARB's membership and increased legislative oversight of CARB's climate change-based activities, and expanded dissemination of GHG and other air-quality-related emissions data to enhance transparency and accountability. More specifically, SB 32 codified the 2030 emissions reduction goal of EO B-30-15 by requiring CARB to ensure that statewide GHG emissions are reduced to 40% below 1990 levels by 2030. AB 197 established the Joint Legislative Committee on Climate Change Policies, consisting of at least three members of the Senate and three members of the Assembly, to provide ongoing oversight over implementation of the state's climate policies. AB 197 also added two members of the Legislature to CARB as nonvoting members; requires CARB to make available and update (at least annually via its website) emissions data for GHGs, criteria air pollutants, and toxic air contaminants from reporting facilities; and requires CARB to identify specific information for GHG emissions reduction measures when updating the Scoping Plan.

Senate Bill 605 and Senate Bill 1383

SB 605 (2014) required CARB to complete a comprehensive strategy to reduce emissions of short-lived climate pollutants in the state, and SB 1383 (2016) required CARB to approve and implement that strategy by January 1, 2018. SB 1383 also established specific targets for the reduction of short-lived climate pollutants (40% below 2013 levels by 2030 for CH_4 and HFCs and 50% below 2013 levels by 2030 for anthropogenic black carbon) and provided direction for reductions from dairy and livestock operations and landfills. The Short-Lived Climate Pollutants Reduction Strategy was approved by CARB in March 2017 and lays out a range of options to reduce short-lived climate pollutant emissions in California, including regulations, incentives, and other market-supporting activities.

Building Energy

Title 24, California Code of Regulations, Part 6

Title 24 of the California Code of Regulations was established in 1978 and serves to enhance and regulate California's building standards. Although not initially promulgated to reduce GHG emissions, Part 6 of Title 24 specifically established Building Energy Efficiency Standards that are designed to ensure new and existing buildings in California achieve energy efficiency and preserve outdoor and indoor environmental quality. These energy efficiency standards are reviewed every few years by the Building Standards Commission and California Energy Commission (CEC) and revised if necessary (California Public Resources Code [PRC], Section 25402[b][1]). The regulations receive input from members of industry and the public, with the goal of "reducing of wasteful, uneconomic, inefficient, or unnecessary consumption of energy" (PRC Section 25402). These regulations are carefully scrutinized and analyzed for technological and economic feasibility (PRC Section 25402[d]) and cost effectiveness (PRC Sections 25402[b][2] and [b][3]). As a result, these standards save energy, increase electricity supply reliability, increase indoor comfort, avoid the need to construct new power plants, and help preserve the environment.

The 2019 Title 24 standards are the currently applicable building energy efficiency standards, and became effective on January 1, 2020. The 2019 Title 24 Building Energy Efficiency Standards will further reduce energy used and associated GHG emissions compared to prior standards. In general, single-family residences built to the 2019 standards are anticipated to use approximately 7% less energy due to energy efficiency measures than those built to the 2016 standards; once rooftop solar electricity generation is factored in, single-family residences built under the 2019 standards will use approximately 53% less energy than those under the 2016 standards

(CEC 2018). Nonresidential buildings built to the 2019 standards are anticipated to use an estimated 30% less energy than those built to the 2016 standards (CEC 2018). The project's apartments and affordable flats are subject to the nonresidential standards due to the number of stories, while the rowhomes and villas are subject to the residential standards.

On August 11, 2021, CEC adopted the 2022 Energy Code. In December 2021, it was approved by the California Building Standards Commission for inclusion into the California Building Standards Code. The 2022 Energy Code encourages efficient electric heat pumps, establishes electric-ready requirements for new homes, expands solar photovoltaic and battery storage standards, strengthens ventilation standards, and more. Buildings whose permit applications are applied for on or after January 1, 2023, must comply with the 2022 Energy Code.

Title 24, California Code of Regulations, Part 11

In addition to the CEC's efforts, in 2008, the California Building Standards Commission adopted the nation's first green building standards. The California Green Building Standards Code (Part 11 of Title 24 of the California Code of Regulations) is commonly referred to as CALGreen, and establishes minimum mandatory standards and voluntary standards pertaining to the planning and design of sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and interior air quality. The CALGreen standards took effect in January 2011 and instituted mandatory minimum environmental performance standards for all ground-up, new construction of commercial, low-rise residential and state-owned buildings, schools, and hospitals. The CALGreen 2019 standards, which are the current standards, became effective January 1, 2020.

Title 20, California Code of Regulations

Title 20 of the California Code of Regulations requires manufacturers of appliances to meet state and federal standards for energy and water efficiency. Performance of appliances must be certified through CEC to demonstrate compliance with standards. New appliances regulated under Title 20 include refrigerators, refrigerator-freezers, and freezers; room air conditioners and room air-conditioning heat pumps; central air conditioners; spot air conditioners; vented gas space heaters; gas pool heaters; plumbing fittings and plumbing fixtures; fluorescent lamp ballasts; lamps; emergency lighting; traffic signal modules; dishwashers; clothes washers and dryers; cooking products; electric motors; low voltage dry-type distribution transformers; power supplies; televisions and consumer audio and video equipment; and battery charger systems. Title 20 presents protocols for testing for each type of appliance covered under the regulations, and appliances must meet the standards for energy performance, energy design, water performance, and water design. Title 20 contains three types of standards for appliances: federal and state standards for federally regulated appliances, state standards for federally regulated appliances, and state standards for non-federally regulated appliances.

Assembly Bill 1109

Enacted in 2007, AB 1109 required CEC to adopt minimum energy efficiency standards for general-purpose lighting to reduce electricity consumption by 50% for indoor residential lighting and by 25% for indoor commercial lighting.

Senate Bill 1

SB 1 (2006) established a $3 billion rebate program to support the goal of the state to install rooftop solar energy systems with a generation capacity of 3,000 megawatts through 2016. SB 1 added sections to the PRC, including Chapter 8.8 (California Solar Initiative), that require building projects applying for ratepayer-funded incentives for

photovoltaic systems to meet minimum energy efficiency levels and performance requirements. Section 25780 established that it is a goal of the state to establish a self-sufficient solar industry. The goals included establishing solar energy systems as a viable mainstream option for homes and businesses within 10 years of adoption and placing solar energy systems on 50% of new homes within 13 years of adoption. SB 1, also termed "Go Solar California," was previously titled "Million Solar Roofs."

Assembly Bill 1470

This bill established the Solar Water Heating and Efficiency Act of 2007. AB 1470 makes findings and declarations of the Legislature relating to the promotion of solar water heating systems and other technologies that reduce natural gas demand. AB 1470 defines several terms for purposes of the act. The bill required a commission to evaluate the data available from a specified pilot program and to design and implement a program of incentives for the installation of 200,000 solar water heating systems in homes and businesses throughout the state by 2017.

Renewable Energy and Energy Procurement

SB 1078 (2002) established the Renewables Portfolio Standard (RPS) program, which requires an annual increase in renewable generation by the utilities. Initially, the RPS required utilities to obtain 20% of their power from renewable sources by 2010. SB X1-2 (2011) subsequently expanded the RPS by establishing that 33% of the total electricity sold to retail customers in California per year by December 31, 2020, and in subsequent years, be secured from qualifying renewable energy sources. SB 350 (2015) further expanded the RPS by establishing that 50% of the total electricity sold to retail customers in California per year by December 31, 2030, be secured from qualifying renewable energy sources. And SB 100 (2018) further accelerated the RPS, requiring achievement of a 50% RPS by December 31, 2026, and a 60% RPS by December 31, 2030. SB 100 also established a new state policy goal that calls for eligible renewable energy resources and zero-carbon resources to supply 100% of electricity retail sales and 100% of electricity procured to serve all state agencies by December 31, 2045.

Under the program, a renewable electrical generation facility is one that uses biomass, solar thermal, photovoltaic, wind, geothermal, fuel cells using renewable fuels, small hydroelectric generation of 30 megawatts or less, digester gas, municipal solid waste conversion, landfill gas, ocean wave, ocean thermal, or tidal current, and that meets other specified requirements with respect to its location.

California Air Resources Board's Mobile Source Strategy

On May 16, 2016, CARB released the 2016 Mobile Source Strategy that demonstrates how the state can simultaneously meet air quality standards, achieve GHG emission reduction targets, decrease health risk from transportation emissions, and reduce petroleum consumption over the next 15 years. The actions contained in the 2016 Mobile Source Strategy will deliver broad environmental and public health benefits, as well as support much needed efforts to modernize and upgrade transportation infrastructure, enhance system-wide efficiency and mobility options, and promote clean economic growth in the mobile sector. The 2016 Mobile Source Strategy would also result in a 45% reduction in GHG emissions and a 50% reduction in the consumption of petroleum-based fuels (CARB 2016).

On October 28, 2021, CARB received and heard the 2020 Mobile Source Strategy, which continues and builds upon the foundation established by the 2016 Mobile Source Strategy. The 2020 Mobile Source Strategy, if implemented, would achieve a 76% reduction in GHG emissions from 2020 levels from mobile sources by 2045, as largely attributable to transitioning towards a zero-emissions fleet. Moving forward, CARB anticipates that the programs and concepts in the 2020 Mobile Source Strategy will be incorporated into other aspects of CARB's regulatory and planning frameworks.

State Vehicle Standards

AB 1493 (2002) was enacted in response to the transportation sector accounting for more than one-half of California's CO_2 emissions. AB 1493 required CARB to set GHG emission standards for passenger vehicles, light-duty trucks, and other vehicles determined by the state board to be vehicles that are primarily used for noncommercial personal transportation in the state. AB 1493 required that CARB set GHG emission standards for motor vehicles manufactured in 2009 and all subsequent model years. CARB adopted the standards in September 2004.

As explained under the "Federal Vehicle Standards" subsection above, EPA and NHTSA approved the SAFE Vehicles Rule Part One and Two, which revoked California's authority to set its own GHG emissions standards and set ZEV mandates in California. Because the EPA rule is the subject of pending legal challenges, and because President Biden issued an executive order to review Part One and Part Two, this analysis used the best available information at this time, as set forth in EMFAC and assumed in the California Emissions Estimator Model (CalEEMod).

The Advanced Clean Cars program (2012) is an emissions-control program for model years 2015 through 2025. The program combines the control of smog- and soot-causing pollutants and GHG emissions into a single coordinated package. The package includes elements to reduce smog-forming pollution, reduce GHG emissions, promote clean cars, and provide the fuels for clean cars. To improve air quality, CARB implemented new emission standards to reduce smog-forming emissions beginning with 2015 model year vehicles. It is estimated that by 2025, cars will emit 75% less smog-forming pollution than the average new car sold in 2012. To reduce GHG emissions, CARB, in conjunction with EPA and NHTSA, adopted new GHG standards for model year 2017 to 2025 vehicles; the new standards are estimated to reduce GHG emissions by 34% in 2025. The ZEV program will act as the focused technology of the Advanced Clean Cars program by requiring manufacturers to produce increasing numbers of ZEVs and plug-in hybrid electric vehicles in the 2018 to 2025 model years.

Executive Order S-1-07

Issued on January 18, 2007, EO S-1-07 sets a declining Low Carbon Fuel Standard for GHG emissions measured in CO_2e grams per unit of fuel energy sold in California. The initial target of the Low Carbon Fuel Standard was to reduce the carbon intensity of California passenger vehicle fuels by at least 10% by 2020. The Low Carbon Fuel Standard was subsequently amended in 2018 to require a 20% reduction in carbon intensity by 2030. This new requirement aligns with the California's overall 2030 target of reducing climate changing emissions to 40% below 1990 levels by 2030, set by SB 32. CARB has adopted implementing regulations for both the 10% and 20% carbon intensity reduction targets.

Senate Bill 375

SB 375 (2008) addresses GHG emissions associated with the transportation sector through regional transportation and sustainability plans. SB 375 required CARB to adopt regional GHG reduction targets for the automobile and light-truck sector for 2020 and 2035. Regional metropolitan planning organizations are then responsible for preparing a Sustainable Communities Strategy (SCS) within their Regional Transportation Plan (RTP). The goal of the SCS is to establish a forecasted development pattern for the region that, after considering transportation measures and policies, will achieve, if feasible, the GHG reduction targets. If an SCS is unable to achieve the GHG reduction target, a metropolitan planning organization must prepare an Alternative Planning Strategy demonstrating how the GHG reduction target would be achieved through alternative development patterns, infrastructure, or additional transportation measures or policies.

Pursuant to California Government Code Section 65080(b)(2)(K), an SCS does not regulate the use of land; supersede the land use authority of cities and counties; or require that a city's or county's land use policies and regulations, including those in a general plan, be consistent with it. Nonetheless, SB 375 makes regional and local planning agencies responsible for developing those strategies as part of the federally required metropolitan transportation planning process and the state-mandated housing element process.

In 2010, CARB adopted the SB 375 targets for the regional metropolitan planning organizations. The targets adopted for the San Diego Association of Governments (SANDAG) in 2010 are a 7% reduction in per-capita passenger-vehicle GHG emissions by 2020 and a 13% reduction by 2035, measured relative to 2005 GHG emissions. In 2018, CARB adopted the second round of SB 375 reduction targets and increased SANDAG's 2020 target to a 15% reduction in per-capita passenger-vehicle GHG emissions, and the 2035 target to a 19% reduction using the same 2005 baseline.

Senate Bill 350

In 2015, SB 350—the Clean Energy and Pollution Reduction Act—was enacted into law. As one of its elements, SB 350 establishes a statewide policy for widespread electrification of the transportation sector, recognizing that such electrification is required for achievement of the state's 2030 and 2050 reduction targets (see California Public Utilities Code, Section 740.12).

Assembly Bill 1236

AB 1236 (2015) required a city, county, or city and county to approve an application for the installation of electric vehicle charging stations, as defined, through the issuance of specified permits unless the city or county makes specified written findings based on substantial evidence in the record that the proposed installation would have a specific, adverse impact upon the public health or safety, and there is no feasible method to satisfactorily mitigate or avoid the specific, adverse impact. AB 1236 provided for appeal of that decision to the planning commission, as specified. The bill provided that the implementation of consistent statewide standards to achieve the timely and cost-effective installation of electric vehicle charging stations is a matter of statewide concern. The bill required electric vehicle charging stations to meet specified standards. AB 1236 required a city, county, or city and county with a population of 200,000 or more residents to adopt an ordinance, by September 30, 2016, that created an expedited and streamlined permitting process for electric vehicle charging stations. The bill also required a city, county, or city and county with a population of fewer than 200,000 residents to adopt this ordinance by September 30, 2017.

Executive Order B-16-12

EO B-16-12 (2012) directs state entities under the governor's direction and control to support and facilitate the development and distribution of ZEVs. On a statewide basis, EO B-16-12 also establishes a GHG emissions reduction target from the transportation sector equaling 80% less than 1990 levels by 2050. In furtherance of this executive order, the governor convened an Interagency Working Group on ZEVs that has published multiple reports regarding the progress. It ordered CARB, CEC, the California Public Utilities Commission, and other relevant agencies to work with the Plug-In Electric Vehicle Collaborative and the California Fuel Cell Partnership to establish benchmarks to help achieve goals by 2015, 2020, and 2025. This directive did not apply to vehicles that have special performance requirements necessary for the protection of the public safety and welfare.

Executive Order N-79-20

EO N-79-20 (2020) sets the goal for the state that 100% of in-state sales of new passenger cars and trucks will be zero-emission by 2035. EO-N-79-20 also sets goals for transition to 100% zero emission medium- and heavy-duty vehicles by 2045, zero emission drayage trucks by 2035, and zero emission off-road vehicles and equipment by 2035, where feasible. Among other directives to further this executive order, for passenger cars and trucks, the governor directed CARB to develop and propose regulations requiring increasing volumes of new ZEVs sold in the state towards the target of 100% of in-state sales by 2035. The governor also directed the Governor's Office of Business and Economic Development to develop a Zero-Emissions Vehicle Market Development Strategy, which was completed in February 2021.[3] The executive order also directs updates and assessments to ensure ZEV infrastructure is in place to support the levels of electric vehicle adoption required by the order.

Small Offroad Engines

CARB approved a measure on December 9, 2021, that will require most newly manufactured small off-road engines such as those found in leaf blowers, lawn mowers, and other equipment be zero emission starting in 2024. Portable generators, including those in recreational vehicles, would be required to meet more stringent standards in 2024 and meet zero-emission standards starting in 2028.

Assembly Bills 939 and 341

In 1989, AB 939, known as the Integrated Waste Management Act (PRC Sections 40000 et seq.), was passed because of the increase in waste stream and decrease in landfill capacity. The statute established the California Integrated Waste Management Board, which oversees a disposal reporting system. AB 939 mandated a reduction of waste being disposed of, where jurisdictions were required to meet diversion goals of all solid waste through source reduction, recycling, and composting activities of 25% by 1995 and 50% by 2000.

AB 341 (Chapter 476, Statutes of 2011) amended the California Integrated Waste Management Act of 1989 to include a provision declaring that it is the policy goal of the state that not less than 75% of solid waste generated be source-reduced, recycled, or composted by 2020 and annually thereafter. In addition, AB 341 required the California Department of Resources Recycling and Recovery (CalRecycle) to develop strategies to achieve the state's policy goal. CalRecycle conducted several general stakeholder workshops and several focused workshops, and in August 2015 published a discussion document titled AB 341 Report to the Legislature, which identified five priority strategies that CalRecycle believed would assist the state in reaching the 75% goal by 2020, legislative and regulatory recommendations, and an evaluation of program effectiveness (CalRecycle 2015).

Senate Bill 1383

Beginning in 2022, SB 1383 required every jurisdiction to provide organic waste collection services to all residents and businesses. Jurisdictions can select from a variety of organic waste collection services to match their unique communities and local infrastructure, while producing clean streams of organic feedstock that can be recycled into high-quality, marketable recycled products, including compost, renewable natural gas, electricity, and paper. Jurisdictions will educate all residents and businesses about collection requirements, including what materials to put in curbside bins. Education to residents and businesses may vary by jurisdiction and educational content may be provided electronically, through hard copy materials, or through direct outreach.

[3] https://static.business.ca.gov/wp-content/uploads/2021/02/ZEV_Strategy_Feb2021.pdf

Executive Order B-29-15

In response to the ongoing drought in California, EO B-29-15 (2015) set a goal of achieving a statewide reduction in potable urban water usage of 25% relative to water use in 2013. The term of the executive order extended through February 28, 2016, although many of the directives have since become permanent water-efficiency standards and requirements. The executive order includes specific directives that set strict limits on water usage in the state. In response to EO B-29-15, the California Department of Water Resources modified and adopted a revised version of the Model Water Efficient Landscape Ordinance that, among other changes, significantly increased the requirements for landscape water use efficiency and broadened its applicability to include new development projects with smaller landscape areas.

Executive Order B-37-16

Issued May 2016, EO B-37-16 directed the State Water Resources Control Board to adjust emergency water conservation regulations through the end of January 2017 to reflect differing water supply conditions across the state. The State Water Resources Control Board also developed a proposal to achieve a mandatory reduction of potable urban water usage that builds off the mandatory 25% reduction called for in EO B-29-15. The State Water Resources Control Board and Department of Water Resources developed new, permanent water use targets that build on the existing state law requirements that the state achieve 20% reduction in urban water usage by 2020. EO B-37-16 also specifies that the State Water Resources Control Board permanently prohibit water-wasting practices such as hosing off sidewalks, driveways, and other hardscapes; washing automobiles with hoses not equipped with a shut-off nozzle; using non-recirculated water in fountains and other decorative water features; watering lawns in a manner that causes runoff or within 48 hours after measurable precipitation; and irrigating ornamental turf on public street medians.

Senate Bill 97

SB 97 (2007) directed the Governor's Office of Planning and Research to develop guidelines under CEQA for the mitigation of GHG emissions. The California Natural Resources Agency adopted the CEQA Guidelines amendments in December 2009, which became effective in March 2010. The CEQA Guidelines were subsequently amended in 2018 and the changes became effective on December 28, 2018.

Under the amended CEQA Guidelines, a lead agency has the discretion to determine whether to use a quantitative or qualitative analysis or apply performance standards to determine the significance of GHG emissions resulting from a particular project (14 CCR 15064.4[a]). The CEQA Guidelines provide that a lead agency should also consider the extent to which a project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions (14 CCR 15064.4[b]). The CEQA Guidelines also allow a lead agency to consider feasible means of mitigating the significant effects of GHG emissions, including reductions in emissions through the implementation of project features; off-site measures, including offsets that are not otherwise required; measures in an existing plan or mitigation program; and measures that sequester GHGs (14 CRR 15126.4[c]). The adopted amendments do not establish a GHG emissions threshold, instead allowing a lead agency to develop, adopt, and apply its own thresholds of significance or those developed by other agencies or experts (14 CCR 15064.7). The CEQA Guidelines also permit using environmental standards (i.e., an applicable and relevant quantitative, qualitative or performance requirement found in an ordinance, resolution, rule, regulation, order, plan or other environmental requirement that has been adopted for the purpose of environmental protection) as a threshold of significance to promote consistency in significance determinations (14 CCR 15064.7[d]).

With respect to GHG emissions, the CEQA Guidelines state in Section 15064.4(a) that lead agencies should "make a good faith effort, to the extent possible on scientific and factual data, to describe, calculate or estimate" GHG emissions. The CEQA Guidelines note that an agency may identify emissions by either quantifying the emissions resulting from a project or by relying on "qualitative analysis or other performance-based standards" (14 CCR 15064.4[a]). Section 15064.4(b) states that the lead agency should focus on the reasonably foreseeable incremental contribution of the project's emissions to the effects of climate change. The analysis should consider a timeframe appropriate for the project, and must reasonably reflect evolving scientific knowledge and state regulatory schemes (14 CCR 15064.4[b]).

Section 15183.5 of the CEQA Guidelines allows agencies to tier from qualified GHG reduction plans developed in accordance with subsection (b). Specifically, the GHG reduction plan must quantify GHG emissions, both existing and projected over a specified time period, resulting from activities within a defined geographic area; establish a level, based on substantial evidence, below which the contribution to GHG emissions from activities covered by the plan would not be cumulatively considerable; identify and analyze the GHG emissions resulting from specific actions or categories of actions anticipated within the geographic area; specify measures or a group of measures, including performance standards, that substantial evidence demonstrates, if implemented on a project-by-project basis, would collectively achieve the specified emissions level; establish a mechanism to monitor the plan's progress toward achieving the level and to require amendment if the plan is not achieving specified levels; and be adopted in a public process following environmental review.

Executive Order S-13-08

EO S-13-08 (2008) is intended to hasten California's response to the impacts of global climate change, particularly sea-level rise. Therefore, the executive order directs state agencies to take specified actions to assess and plan for such impacts. The final 2009 California Climate Adaptation Strategy report was issued in December 2009 (CNRA 2009a); an update, Safeguarding California: Reducing Climate Risk, followed in July 2014 (CNRA 2014), and another was published in 2018, Safeguarding California Plan: 2018 Update California's Climate Adaptation Strategy (CNRA 2018). The draft 2021 California Climate Adaptation Strategy was released for public comment on October 18, 2021, and closed on November 17, 2021. The 2021 California Climate Adaption Strategy has since been adopted (State of California 2023). To assess the state's vulnerability, the report summarizes key climate change impacts to the state for the following areas: agriculture, biodiversity and habitat, emergency management, energy, forestry, ocean and coastal ecosystems and resources, public health, transportation, and water.

Local

San Diego Association of Governments Regional Transportation Plan/Sustainable Communities Strategy

SANDAG completed and adopted its 2050 RTP/SCS in October 2011. In November 2011, CARB, by resolution, accepted SANDAG's GHG emissions quantification analysis and determination that, if implemented, the SCS would achieve CARB's 2020 and 2035 GHG emissions reduction targets for the region.

In October 2015, SANDAG adopted San Diego Forward: The Regional Plan (SANDAG 2015). Like the 2050 RTP/SCS, San Diego Forward: The Regional Plan meets CARB's 2020 and 2035 reduction targets for the region (SANDAG 2015). In December 2015, CARB, by resolution, accepted SANDAG's GHG emissions quantification analysis and determination that, if implemented, the SCS would achieve CARB's 2020 and 2035 GHG emissions reduction targets for the region.

The 2021 Regional Plan, adopted by SANDAG on December 10, 2021, provides a long-term blueprint for the San Diego region that seeks to meet regulatory requirements, address traffic congestion, and create equal access to jobs, education, healthcare, and other community resources (SANDAG 2021). The plan is the result of years of planning, data analysis, and community engagement to reimagine the San Diego region with a transformative transportation system, a sustainable pattern of growth and development, and innovative demand and management strategies.

The 2021 Regional Plan includes an SCS, as required by California SB 375 (2008), for the San Diego region. This SCS describes coordinated transportation and land use planning that exceeds the state's target for reducing per capita GHG emissions set by CARB. The state-mandated target is a 19% reduction—compared with 2005—in per capita GHG emissions from cars and light-duty trucks by 2035. The 2021 Regional Plan achieves a 20% reduction by then.

The 2021 Regional Plan also puts forth a forecasted development pattern that is driven by regional goals for sustainability, mobility, housing affordability, and economic prosperity.

City of San Marcos Climate Action Plan

The City adopted its currently applicable CAP on December 8, 2020 (City of San Marcos 2020). The CAP acts as a roadmap to address challenges of climate change within the City. The CAP builds on the efforts and strategies identified in the City's 2013 CAP and establishes GHG emission reduction targets and identifies achievable, locally based actions to reduce GHG emissions from municipal and community activities. The CAP includes a baseline GHG emissions inventory for 2012, GHG emissions forecasts for 2020 and 2030, local GHG emissions reduction strategies and measures to help the City achieve the 2030 target, climate adaptation measures for the City, and implementation and monitoring mechanisms to ensure the City's measures and targets are achieved. The CAP establishes GHG emissions reduction goals of 4% below 2012 levels by 2020 and 42% below 2012 levels by 2030 (City of San Marcos 2020).

The CAP was prepared in accordance with the requirements within CEQA Guidelines Section 15183.5, and the CAP Consistency Checklist is used in this analysis to evaluate the proposed project's significance with respect to GHG emissions. As provided in the checklist, projects that are consistent with the CAP "may rely on the CAP for the cumulative impact analysis of GHG emissions" and "may be determined not to be cumulatively considerable" (City of San Marcos 2020)

City of San Marcos General Plan

The City's General Plan (City of San Marcos 2012) includes various policies related to reducing GHG emissions. Applicable policies include the following.

Land Use and Community Design Element

Goal LU-1: Achieve a balanced distribution and compatible mix of land uses to meet the present and future needs of all residents and the business community.

Policy LU-1.1: Ensure that adjacent land uses complement one another by considering compatibility of activities, development patterns and architectural character elements and access to various mobility choices.

Goal LU-2: Promote development standards and land use patterns that encourage long-term environmental sustainability.

Policy LU-2.1: Promote compact development patterns that reduce air pollution and automobile dependence and facilitate walking, bicycling, and transit use.

Policy LU-2.3: Require the incorporation of green building practices, technologies, and strategies into development projects per code standards.

Policy LU-2.5: Promote landscaping (e.g., native, drought tolerant plants) that minimizes demands on water supply.

Policy LU-2.7: Promote the instillation of trees to reduce the urban heat-island effect and green infrastructure to reduce storm water runoff.

Policy LU-3.1: Require that new development and redevelopment incorporate connections and reduce barriers between neighborhoods, transit corridors, and activity centers within the City.

Mobility Element

Policy M-1.3: Require new developments to prepare and implement Transportation Demand Management (TDM) programs to minimize vehicle trip generation and promote alternative modes of travel within the City.

Goal M-3: Promote and encourage use of alternative transportation modes, including transit, bicycles, neighborhood electric vehicles (NEVs), and walking, within the City.

Policy M-3.1: Develop an integrated, multimodal circulation system that accommodates transit, bicycles, pedestrians, and vehicles; provides opportunities to reduce air pollution and GHG emissions; and reinforces the role of the street as a public space that unites the City.

Conservation and Open Space Element

Goal COS-4: Improve regional air quality and reduce greenhouse gas emissions that contribute to climate change.

Policy COS-4.5: Encourage energy conservation and the use of alternative energy sources within the community.

Policy COS-4.6: Promote efficient use of energy and conservation of available resources in the design, construction, maintenance and operation of public and private facilities, infrastructure and equipment.

3.7.3 Thresholds of Significance

California has developed guidelines to address the significance of GHG emissions impacts that are contained in Appendix G of the CEQA Guidelines (14 CCR 15000 et seq.). Appendix G provides that a project would have a significant environmental impact if it would:

- **Threshold No. 1:** Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.
- **Threshold No. 2:** Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

The CEQA Guidelines provide that in determining the significance of impacts from GHG emissions, an agency may consider the extent to which the project complies with a local plan for the reduction or mitigation of GHG emissions. (See CEQA Guidelines Sections 15064.4(b)(3) and 15183.5.) Relatedly, project specific GHG analyses can tier from plans adopted for the reductions of GHGs (14 CCR 15183.5.) As indicated above, the City has adopted such a plan when it adopted its CAP on December 8, 2020. Accordingly, for the purposes of GHG Threshold No. 1, the project's GHG emissions are assessed by evaluating the project's consistency with the City's CAP, which is discussed below in detail. For purposes of GHG Threshold No. 2, the project is assessed based on its potential to conflict with the City's CAP, as well as with statewide and regional plans for emissions reductions.

Analysis Approach and Methodology

City of San Marcos Climate Action Plan Consistency

The City adopted an updated CAP on December 8, 2020. The CAP outlines strategies and measures that the City will undertake to achieve its proportional share of state GHG emissions reduction targets. The CAP is a plan for the reduction of GHG emissions in accordance with CEQA Guidelines Section 15183.5. Pursuant to CEQA Guidelines Sections 15064(h)(3), 15130(d), and 15183(b), a project's incremental contribution to a cumulative GHG emissions effect may be determined not to be cumulatively considerable if it complies with the requirements of the CAP. The City has also developed a CAP Consistency Checklist, in conjunction with the CAP, to provide a streamlined review process for proposed new development projects that are subject to discretionary review and trigger environmental review pursuant to CEQA.

A GHG screening threshold of 500 MT CO_2e per year is established for new development projects to determine if a project would need to demonstrate consistency with the CAP through the checklist. Projects that are projected to emit fewer than 500 MT CO_2e annually would not make a considerable contribution to the cumulative impact of climate change and would not need to provide additional analysis to demonstrate consistency with the CAP. For proposed projects at or above the screening threshold of 500 MT CO_2e, applicants are required to complete the CAP Consistency Checklist, which is meant to provide a streamlined review process for proposed new development projects that are subject to discretionary review and require environmental review pursuant to CEQA. A properly completed checklist documents how a project complies with the CAP and, in so doing, demonstrates that the project's contribution to climate change impacts is not cumulatively considerable. The City also developed a service population threshold for the CAP to show that projects are consistent with GHG reduction measures. The City determined that a GHG threshold of 2.1 MT CO_2e per service population per year (SP/yr) would be consistent with GHG emissions within the CAP. Because of this, this EIR quantifies the projected GHG emissions of the project using the following methodology to compare them against the City's service population threshold.

Construction

CalEEMod Version 2020.4.0 was used to estimate potential project-generated GHG emissions during construction. Construction of the project would result in GHG emissions primarily associated with the use of off-road construction equipment, on-road hauling and vendor (material delivery) trucks, and worker vehicles. All construction-related details discussed in Section 3.2, Air Quality, of this EIR are also applicable for the estimation of construction-related GHG emissions for the proposed project.

Existing Land Use Designation

To compare the GHG emissions intensity of the proposed project and the land use built under the existing land use designation, the following section summarizes the construction methodology for the existing land use designation. Construction assumptions, including timing, phasing, equipment type and quantity, and worker and vendor truck trips, were based on the maximum allowed buildout of the existing land use designation for the site. The Commercial (C) zoning buildout, consistent with the existing land use alternative, would include 69,000 square feet of grocery store and gas station uses, as well as 23,000 square feet of office space. This alternative would include 276 parking spaces. An assumption of 10 fueling positions (5 pumps) was made for calculation purposes.

Default values provided by CalEEMod were used where zoning information was not available. For purposes of estimating GHG emissions, it was assumed that construction of the land use built under the existing land use designation would commence in December 2023[4] and would end in December 2024. Construction of the land use built under the existing land use designation would be anticipated to occur in five phases. Accordingly, five phases consisting of site preparation, grading, building construction, paving, and architectural coating were assumed. The analysis contained herein is based on the following assumptions (the duration of phases is approximate):

- Site Preparation: 1 week (December 2023)
- Grading: 1 week (December 2023)
- Building Construction: 11 months (December 2023–November 2024)
- Paving: 1 month (November 2024)
- Architectural Coating: 1 month (December 2024)

The construction equipment mix used for estimating the construction emissions of the existing land use designation is based on CalEEMod defaults and is shown in Table 3.7-3. For worker and vendor truck trips, the default CalEEMod assumptions for one-way trips were rounded up to the nearest even number to account for whole round trips. For this analysis, it was generally assumed that heavy construction equipment would operate 5 days a week (22 days per month) during project construction. Grading activities were anticipated to be minimal for the land use built under the existing land use designation; therefore, no haul trucks would be required to import or export material.

Table 3.7-3. Construction Scenario Assumptions – Existing Land Use Designation

Construction Phase	One-Way Trips			Equipment	Quantity	Hours Per Day
	Daily Workers	Daily Vendor Trucks	Total Haul Trucks			
Site Preparation	18	0	0	Rubber Tired Dozers	3	8
				Tractors/Loaders/ Backhoes	4	8
Grading	16	0	0	Excavators	1	8
				Graders	1	8
				Rubber Tired Dozers	1	8
				Tractors/Loaders/ Backhoes	3	8

[4] The analysis assumes a construction start date of June 2023, which represents the earliest date construction would initiate (although unlikely). Assuming the earliest start date for construction represents the worst-case scenario for emissions because equipment and vehicle emission factors for later years would be slightly less due to more stringent standards for in-use off-road equipment and heavy-duty trucks, as well as fleet turnover replacing older equipment and vehicles in later years.

Table 3.7-3. Construction Scenario Assumptions – Existing Land Use Designation

Construction Phase	One-Way Trips			Equipment	Quantity	Hours Per Day
	Daily Workers	Daily Vendor Trucks	Total Haul Trucks			
Building Construction	76	34	0	Cranes	1	7
				Forklifts	3	8
				Generator Sets	1	8
				Tractors/Loaders/ Backhoes	3	7
				Welders	1	8
Paving	20	0	0	Cement and Mortar Mixers	2	6
				Pavers	1	8
				Paving Equipment	2	6
				Rollers	2	6
				Tractors/Loaders/ Backhoes	1	8
Architectural Coating	16	0	0	Air Compressors	1	6

Note: See Appendix B.

Operation

Existing Land Use Designation

Similar to construction, emissions from the operational phase of the existing land use designation and project were estimated using CalEEMod. Operational year 2030 was assumed consistent with Appendix D of the City's CAP (City of San Marcos 2020).

Area Sources

CalEEMod was used to estimate operational emissions from area sources, including emissions from landscape maintenance equipment. Emissions associated with natural gas usage in space heating and water heating were calculated in the building energy use module of CalEEMod, as described in the following text.

Landscape maintenance includes fuel combustion emissions from equipment such as lawn mowers, rototillers, shredders/grinders, blowers, trimmers, chainsaws, and hedge trimmers. The emissions associated with landscape equipment use were estimated based on CalEEMod default values for emission factors (grams per square foot of building space per day) and number of summer days (when landscape maintenance would generally be performed) and winter days. Based on CalEEMod defaults for the County, the average annual number of summer days is estimated at 180 days (CAPCOA 2021).

Energy Sources

CalEEMod default values for electricity use and natural gas consumption for each land use type (industrial park) were applied for the existing land use designation. The energy use from commercial and industrial land uses is calculated in CalEEMod based on the Commercial End-Use Survey (CAPCOA 2021). Energy use in buildings (both natural gas and electricity) is divided by CalEEMod into end-use categories subject to Title 24 requirements (end uses associated with the building envelope, such as the heating, ventilation, and air conditioning system; water heating system; and integrated lighting) and those not subject to Title 24 requirements (such as appliances, electronics, and miscellaneous "plug-in" uses).

Operational GHG emissions from energy sources include natural gas combustion for appliances and space and water heating. The current California Code of Regulations, Title 24, Part 6 standards, referred to as the 2019 Title 24 Building Energy Efficiency Standards, became effective on January 1, 2020. The current version of CalEEMod assumes compliance with the 2019 Title 24 Building Energy Efficiency Standards (CAPCOA 2021).

CalEEMod default energy intensity factors (CO_2, CH_4, and N_2O mass emissions per kilowatt hour) for San Diego Gas & Electric (SDG&E) were based on the value for SDG&E's energy mix in 2021. As explained in Section 3.7.2, SB X1-2 established a target of 33% from renewable energy sources for all electricity providers in California by 2020, and SB 350 calls for further development of renewable energy, with a target of 50% by 2030. SB 100 revised this target to 60% by 2030. Consistent with the City's CAP, the GHG intensity for 2030 was assumed to be 44 pounds per megawatt-hour for SDG&E (City of San Marcos 2020). In accordance with the City's CAP Measure E-2, the existing land use designation was assumed to install 2 watts of solar photovoltaics for every square foot of gross floor area. This resulted in 184 kilowatts of solar. The production of the solar photovoltaic system was estimated using the National Renewable Energy Laboratories's PVWatts calculator (Appendix B).

Mobile Sources

The land use built under the existing land use designation would generate GHG emissions from mobile sources (vehicular traffic) as a result of trucks, customers, and employee vehicles. CalEEMod was used to estimate emissions from proposed vehicular sources (refer to Appendix B). CalEEMod default data, including trip rates, trip modes, trip lengths, fleet mix, and emissions factors, were used for the model inputs. CalEEMod default vehicle emission factors and vehicle fleet mix for 2030, as based on CARB's EMFAC2017 model, were used to estimate emissions associated with vehicular sources. Consistent with Measure T-2 of the City's CAP, 5% of the proposed parking spaces (14) were assumed to be EV charging stations.

Solid Waste

The land use built under the existing land use designation would generate solid waste and therefore would result in CO_2e emissions associated with landfill off-gassing. CalEEMod default values were used to estimate GHG emissions associated with solid waste.

Water and Wastewater

Supply, conveyance, treatment, and distribution of water for the land use built under the existing land use designation would require the use of electricity, which would result in associated indirect GHG emissions. Similarly, wastewater generated by the land use built under the existing land use designation would require the use of electricity for conveyance and treatment, and additional GHG emissions would be generated during wastewater treatment. Water consumption estimates for both indoor and outdoor water use relied on CalEEMod default assumptions.

Proposed Project

CalEEMod Version 2020.4.0 was used to estimate potential project-generated operational GHG emissions from vehicular sources, area sources (natural gas combustion and landscape maintenance), electrical generation (including electrical generation associated with water supply and wastewater treatment), and solid waste. Emissions from each category—area sources, energy sources, mobile sources, solid waste, and water supply and wastewater treatment—are discussed in the following text with respect to the project. See Section 3.2 of this EIR for a discussion of operational emission calculation methodology and assumptions, specifically for area, energy (natural gas), and mobile sources. Consistent with Appendix D of the City's CAP, operational year 2030 was assumed consistent with the CAP horizon year (City of San Marcos 2013). The following additional methodologies beyond those described in Section 3.2 are included for evaluating GHG emissions.

Energy Sources

Consistent with the City's CAP, the GHG intensity for 2030 was assumed to be 44 pounds per megawatt-hour for SDG&E (City of San Marcos 2020).

The project would include alternatively fueled water heaters in accordance with the City's CAP Measure E-1. When using the CAP's GHG reduction methodology as shown in Appendix B, the net GHG reduction (emissions avoided from natural gas minus emissions from electricity) would be 84 MT CO_2e per year. However, this exceeds the total GHG emissions from natural gas from the project as estimated in CalEEMod. Therefore, using the Energy Information Administration's estimate of 46% of residential natural gas use being attributed to water heating, this amount was applied to the CalEEMod GHG estimate to account for the reduction from alternatively fueled water heaters (Appendix B).

Mobile Sources (Motor Vehicles)

CalEEMod was used to estimate mobile source emissions from the project. See Section 3.2 for a discussion of mobile source emissions calculations. The operational year was adjusted to 2030 consistent with the City's CAP Guidance Appendix D (City of San Marcos 2020).

Solid Waste

The project would generate solid waste and therefore would result in CO_2e emissions associated with landfill off-gassing. CalEEMod default values for solid waste generation were used to estimate GHG emissions associated with solid waste.

Water and Wastewater

Supply, conveyance, treatment, and distribution of water for the project require the use of electricity, which would result in associated indirect GHG emissions. Similarly, wastewater generated by the project requires the use of electricity for conveyance and treatment, and GHG emissions would be generated during wastewater treatment. Water consumption estimates for both indoor and outdoor water use and associated electricity consumption from water use and wastewater generation were estimated using CalEEMod default values. The project is designed to include low-flow fixtures and water-efficient irrigation systems consistent with CAP Measure W-1.

Due to the project's location and design, the following reduction measures were estimated using a spreadsheet based model (see Appendix B for calculation details):

- California Air Pollution Control Officers Association Final Handbook: T-1 Increase Residential Density
- California Air Pollution Control Officers Association Final Handbook: T-18 Provide Pedestrian Network Improvement

- City of San Marcos CAP: Measure T-2 Require Electric Vehicle Charging Stations in New Development
- City of San Marcos CAP: Measure E-1 Require New Residential Developments to Install Alternatively-Fueled Water Heaters

3.7.4 Project Impact Analysis

This section evaluates the GHG emissions impacts associated with the proposed project. The significance criteria described in Section 3.7.3, Thresholds of Significance, were used to evaluate impacts associated with the construction and operation of the proposed project.

Threshold No. 1: Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

This section includes a comparison of the existing land use designation's GHG emissions to the project's GHG emissions. This section then evaluates the proposed project's impacts to GHGs in accordance with the City's 2020 CAP Consistency Checklist. The City's numerical GHG threshold of 2.1 MT/SP/yr is used to evaluate the project's consistency with the City's CAP and determine its impact with respect to GHG emissions. The project's construction and operational GHG emissions are quantified below in accordance with the methodology presented in Section 3.7.3 and compared to the City's threshold.

Existing Land Use Designation

Construction Emissions

Construction of the existing land use designation would result in GHG emissions that are primarily associated with use of off-road construction equipment, on-road vendor trucks, and worker vehicles. CalEEMod was used to calculate the GHG emissions based on the construction scenario described in Section 3.7.3 and Appendix B. Construction of the existing land use designation would be anticipated to commence in December 2023, lasting a total of approximately 11 months. On-site sources of GHG emissions include off-road equipment and off-site sources include on-road vehicles (haul trucks, vendor trucks, and worker vehicles). Table 3.7-4 presents construction emissions for the existing land use designation from on-site and off-site emission sources.

Table 3.7-4. Estimated Annual Construction GHG Emissions – Existing Land Use Designation

Year	CO_2	CH_4	N_2O	CO_2e
	Metric Tons			
2023	33.41	0.01	0.00	33.76
2024	402.57	0.07	0.01	407.95
			Total	**441.71**
			Emissions amortized over 30 years	**14.72**

Notes: CO_2 = carbon dioxide; CH_4 = methane; N_2O = nitrous oxide; CO_2e = carbon dioxide equivalent.
See Appendix B for complete results.

As shown in Table 3.7-4, the estimated total GHG emissions during construction of the existing land use designation would be approximately 442 MT CO_2e. Construction GHG emissions of the existing land use designation amortized over 30 years would be approximately 15 MT CO_2e per year. Amortized construction emissions are added to operational emissions to be compared to the proposed project for this assessment.

Operational Emissions

Operation of the existing land use designation would generate GHG emissions through area sources; motor vehicle trips to and from the project site; energy use (natural gas and generation of electricity consumed by the existing land use designation); solid waste disposal; and generation of electricity associated with water supply, treatment, and distribution and wastewater treatment. CalEEMod was used to calculate the annual GHG emissions based on the operational assumptions described in Section 3.7.3. The estimated operational emissions of the existing land use designation are presented in Table 3.7-5.

Table 3.7-5. Estimated Annual Operational GHG Emissions – Existing Land Use Designation

Emission Source	CO_2	CH_4	N_2O	CO_2e
	Metric Tons			
Area	0.01	0.00	0.00	0.01
Energy	167.08	0.00	0.00	167.78
Mobile[1]	3,181.44	0.31	0.19	3,245.70
Waste	84.43	4.99	0.00	209.18
Water	6.47	0.33	0.01	17.10
			Total	**3,639.77**
			Amortized construction emissions	**14.72**
			Total with amortized construction emissions	**3,654.49**

Notes: CO_2 = carbon dioxide; CH_4 = methane; N_2O = nitrous oxide; CO_2e = carbon dioxide equivalent.
See Appendix B for complete results.
[1] Mobile emissions include reductions from EV charging stations.

As shown in Table 3.7-5, estimated annual GHG emissions from the existing land use designation would be approximately 3,640 MT CO_2e per year. With amortized construction emissions, the annual operational emissions would be approximately 3,655 MT CO_2e per year.

Proposed Project

Construction Emissions

Construction of the project would result in GHG emissions that are primarily associated with use of off-road construction equipment, on-road vendor trucks, and worker vehicles. Table 3.7-6 presents construction emissions for the project from construction-related sources.

Table 3.7-6. Estimated Annual Construction GHG Emissions – Proposed Project

Year	CO_2	CH_4	N_2O	CO_2e
	Metric Tons			
2023	57.99	0.02	0.00	58.49
2024	549.96	0.06	0.02	558.00
2025	66.17	0.01	0.00	67.14
			Total	**683.63**
			Emissions amortized over 30 years	**22.79**

Source: Appendix B
Notes: CO_2 = carbon dioxide; CH_4 = methane; N_2O = nitrous oxide; CO_2e = carbon dioxide equivalent.

As shown in Table 3.7-6, the estimated total GHG emissions during construction of the project would be approximately 684 MT CO_2e. Construction GHG emissions amortized over 30 years would be approximately 23 MT CO_2e per year. Amortized construction emissions are added to operational emissions to be compared to the City's threshold.

Operational Emissions

Operation of the project would generate GHG emissions through area sources; motor vehicle trips to and from the project site; energy use (natural gas and generation of electricity consumed by the project); solid waste disposal; and generation of electricity associated with water supply, treatment, and distribution and wastewater treatment. The estimated operational emissions of the project are presented in Table 3.7-7.

Table 3.7-7. Estimated Annual Operational GHG Emissions – Proposed Project

Emission Source	CO_2	CH_4	N_2O	CO_2e
	Metric Tons			
Area	1.46	<0.01	0.00	1.49
Energy	36.62	<0.01	<0.01	36.77
Mobile[1]	517.81	0.04	0.03	526.46
Waste	11.26	0.67	0.00	27.91
Water	5.48	0.20	<0.01	12.01
			Total	**604.64**
			Amortized construction emissions	**22.79**
			Total with amortized construction emissions	**627.43**

Source: Appendix B.
Notes: CO_2 = carbon dioxide; CH_4 = methane; N_2O = nitrous oxide; CO_2e = carbon dioxide equivalent; <0.01 = reported value less than 0.01.
1 Includes reduction from EV chargers as discussed in Section 3.2.3.

As shown in Table 3.7-7, estimated annual GHG emissions from the project would be approximately 605 MT CO_2e per year. With amortized construction emissions, the annual operational emissions would be approximately 627 MT CO_2e per year.

Using the land use in the Master Geographic Reference Area file obtained from the SANDAG activity-based regional travel demand model, the number of multifamily households and corresponding household population within the City was reviewed. The values for the base year (2016) of the 2021 Regional Plan and the Series 14 land use forecast were used. It was found that the average household size for multifamily households in San Marcos is approximately 3.4 (SANDAG 2022). Using this household ratio of 3.4, development of 120 residential dwelling units at the project site would generate approximately 408 people.

As outlined above, the project would result in an estimated 627 MT CO_2e per year, including amortized construction GHG emissions. With an estimated service population of 408 persons, the project would result in 1.5 MT CO_2e/SP/yr. The project would result in GHG emissions below the City's significance threshold of 2.1 MT CO_2e/SP/yr. Therefore, implementation of the project would be consistent with the City's 2020 CAP and impacts to GHG emissions would be **less than significant**. In addition, this analysis is based upon the project's compliance with Title 24 of the California Code of Regulations as adopted in 2019. However, Title 24 will be updated effective January 2023. The project will be required to comply with the updated Title 24 regulations. These updated regulations likely will lead to a reduction in GHG emissions compared to what was analyzed in the September 2022 Air Quality and GHG Emissions Technical Report (Appendix B).

Threshold No. 2: Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Consistency with Statewide Greenhouse Gas Reduction Strategies

The proposed project's consistency with statewide GHG reduction strategies is summarized in detail in Table 3.7-8 through consideration of the project's various construction and operational components and their relationship to specified laws and regulations designed to reduce GHG emissions from such components.

Table 3.7-8. Relevant Greenhouse Gas-Related Laws and Regulations

Project Component	Applicable Laws/Regulations	GHG Reduction Measures Required for Project
Building Components/Facility Operations		
Roofs/Ceilings/Insulation	CALGreen Code (Title 24, Part 11) California Energy Code (Title 24, Part 6)	The project must comply with efficiency standards regarding roofing, ceilings, and insulation. For example: Roofs/Ceilings: New construction must reduce roof heat island effects per CALGreen Code Section 106.11.2, which requires use of roofing materials having a minimum aged solar reflectance, thermal emittance complying with Section A5.106.11.2.2 and A5.106.11.2.3 or a minimum aged Solar Reflectance Index as specified in Tables A5.106.11.2.2, or A5.106.11.2.3. Roofing materials must also meet solar reflectance and thermal emittance standards contained in Title 20 Standards. Roof/Ceiling Insulation: There are also requirements for the installation of roofing and ceiling insulation. (See Title 24, Part 6 Compliance Manual, Section 3.2.2.)
Flooring	CALGreen Code	The project must comply with efficiency standards regarding flooring materials. For example, 80% of floor area receiving "resilient flooring" must meet applicable installation and material requirements contained in CALGreen Code Section 5.504.4.6.
Window and Doors (Fenestration)	California Energy Code	The project must comply with fenestration efficiency requirements. For example, the choice of windows, glazed doors, and any skylights for the project must conform to energy consumption requirements affecting size, orientation, and types of fenestration products used. (See Title 24, Part 6 Compliance Manual, Section 3.3.)
Building Walls/Insulation	CALGreen Code California Energy Code	The project must comply with efficiency requirements for building walls and insulation. Exterior Walls: Must meet requirements in current edition of California Energy Code, and comply with Sections A5.106.7.1 or A5.106.7.2 of CALGreen

Table 3.7-8. Relevant Greenhouse Gas-Related Laws and Regulations

Project Component	Applicable Laws/Regulations	GHG Reduction Measures Required for Project
		Code for wall surfaces, as well as Section 5.407.1, which required weather-resistant exterior wall and foundation envelope as required by California Building Code Section 1403.2. Construction must also meet requirements contained in Title 24, Part 6, which vary by material of the exterior walls. (See Title 24, Part 6 Compliance Manual, Section 3.2.3.) Demising (Interior) Walls: Mandatory insulation requirements for demising walls (which separate conditioned from non-conditions space) differ by the type of wall material used. (Id. at 3.2.4.) Door Insulation: There are mandatory requirements for air infiltration rates to improve insulation efficiency; they differ according to the type of door. (Id. at 3.2.5.) Flooring Insulation: There are mandatory requirements for insulation that depend on the material and location of the flooring. (Id. at 3.2.6.)
Finish Materials	CALGreen Code	The project must comply with pollutant control requirements for finish materials. For example, materials including adhesives, sealants, caulks, paints and coatings, carpet systems, and composite wood products must meet requirements in CALGreen to ensure pollutant control. (CALGreen Section 5.504.4.)
Wet Appliances (Toilets/Faucets/Urinals, Dishwasher/Clothes Washer, Spa and Pool/Water Heater)	CALGreen Code California Energy Code Appliance Efficiency Regulations (Title 20 Standards)	Wet appliances associated with the project must meet various efficiency requirements. For example: Spa and Pool: Use associated with the project is subject to appliance efficiency requirements for service water heating systems and equipment, spa and pool heating systems and equipment. (Title 24, Part 6, Sections 110.3, 110.4, 110.5; Title 20 Standards, Sections 1605.1[g], 1605.3[g]; see also California Energy Code.) Toilets/Faucets/Urinals: Use associated with the project is subject to new maximum rates for toilets, urinals, and faucets effective January 1, 2016: Showerheads maximum flow rate 2.5 gpm at 80 psi Wash fountains 2.2 × (rim space in inches/20) gpm at 60 psi Metering faucets 0.25 gallons/cycle Lavatory faucets and aerators 1.2 gpm at 60 psi Kitchen faucets and aerators 1.8 gpm with optional temporary flow of 2.2 gpm at 60 psi

Table 3.7-8. Relevant Greenhouse Gas-Related Laws and Regulations

Project Component	Applicable Laws/Regulations	GHG Reduction Measures Required for Project
		Public lavatory faucets 0.5 gpm at 60 psi Trough-type urinals 16 inches length Wall mounted urinals 0.125 gallons per flush Other urinals 0.5 gallons per flush (Title 20 Standards, Sections 1605.1[h], [i] 1065.3[h], [i].) Water Heaters: Use associated with the project is subject to appliance efficiency requirements for water heaters. (Title 20 Standards, Sections 1605.1(f), 1605.3[f].) Dishwasher/Clothes Washer: Use associated with the project is subject to appliance efficiency requirements for dishwashers and clothes washers. (Title 20 Standards, Sections 1605.1[o], [p], [q], 1605.3[o], [p], [q].)
Dry Appliances (Refrigerator/Freezer, Heater/Air Conditioner, Clothes Dryer)	Title 20 Standards CALGreen Code	Dry appliances associated with the project must meet various efficiency requirements. For example: Refrigerator/Freezer: Use associated with the project is subject to appliance efficiency requirements for refrigerators and freezers. (Title 20 Standards, Sections 1605.1[a], 1605.3[a].) Heater/Air Conditioner: Use associated with the project is subject to appliance efficiency requirements for heaters and air conditioners. (Title 20 Standards, Sections 1605.1[b], [c], [d], [e], 1605.3[b], [c], [d], [e] as applicable.) Clothes Dryer: Use associated with the project is subject to appliance efficiency requirements for clothes dryers. (Title 20 Standards, Section 1605.1[q].)
	CALGreen Code	Installations of HVAC, refrigeration and fire suppression equipment must comply with CALGreen Code Sections 5.508.1.1 and 508.1.2, which prohibits CFCs, halons, and certain HCFCs and HFCs.
Lighting	Title 20 Standards	Lighting associated with the project will be subject to energy efficiency requirements contained in Title 20 Standards. General Lighting: Indoor and outdoor lighting associated with the project must comply with applicable appliance efficiency regulations (Title 20 Standards, Sections 1605.1[j], [k], [n], 1605.3[j], [k], [n].)

Table 3.7-8. Relevant Greenhouse Gas-Related Laws and Regulations

Project Component	Applicable Laws/Regulations	GHG Reduction Measures Required for Project
		Emergency lighting and self-contained lighting: the proposes project must also comply with applicable appliance efficiency regulations (Title 20 Standards, Sections 1605.1[l], 1605.3[l].) Traffic Signal Lighting: For any necessary project improvements involving traffic lighting, traffic signal modules and traffic signal lamps will need to comply with applicable appliance efficiency regulations (Title 20 Standards, Sections 1605.1[m], 1605.3[m].)
	California Energy Code	Lighting associated with a use implementing the project will also be subject to energy efficiency requirements contained in Title 24, Part 6, which contains energy standards for non-residential indoor lighting and outdoor lighting. (See Title 24, Part 6 Compliance Manual, Sections 5, 6.) Mandatory lighting controls for indoor lighting include, for example, regulations for automatic shut-off, automatic daytime controls, demand responsive controls, and certificates of installation. (Id. at Section 5.) Regulations for outdoor lighting include, for example, creation of lighting zones, lighting power requirements, a hardscape lighting power allowance, requirements for outdoor incandescent and luminaire lighting, and lighting control functionality. (Id. at Section 6.)
	AB 1109	Lighting associated with implementing the project will be subject to energy efficiency requirements adopted pursuant to AB 1109. Enacted in 2007, AB 1109 required the CEC to adopt minimum energy efficiency standards for general purpose lighting, to reduce electricity consumption 50% for indoor residential lighting and 25% for indoor commercial lighting.
Bicycle and Vehicle Parking	CALGreen Code	A use implementing the project will be required to provide compliant bicycle parking, fuel-efficient vehicle parking, and electric vehicle charging spaces (CALGreen Sections 5.106.4, 5.106.5.1, 5.106.5.3)
	California Energy Code	The project is also subject to parking requirements contained in Title 24, Party 6. For example, parking capacity is to meet but not exceed minimum local zoning requirements, and the project should employ approved strategies to reduce parking capacity (Title 24, Part 6, Section 106.6)

Table 3.7-8. Relevant Greenhouse Gas-Related Laws and Regulations

Project Component	Applicable Laws/Regulations	GHG Reduction Measures Required for Project
Landscaping	CALGreen Code	The CALGreen Code requires and has further voluntary provisions for: A water budget for landscape irrigation use For new water service, separate meters or submeters must be installed for indoor and outdoor potable water use for landscaped areas of 1,000-5,000 square feet Provide water-efficient landscape design that reduces use of potable water beyond initial requirements for plant installation and establishment
	Model Water Efficient Landscaping Ordinance	The model ordinance promotes efficient landscaping in new developments and establishes an outdoor water budget for new and renovated landscaped areas that are 500 square feet or larger. (Title 23, Division 2, Chapter 2.7.)
	Cap-and-Trade Program	Transportation fuels used in landscape maintenance equipment (e.g., gasoline) would be subject to the Cap-and-Trade Program. Fuel refineries and suppliers are subject to the Cap-and-Trade requirements. (See "Energy Use," below.)
Refrigerants	CARB Management of High GWP Refrigerants for Stationary Sources	Any refrigerants associated with the project will be subject to CARB standards. CARB's Regulation for the Management of High GWP Refrigerants for Stationary Sources (1) reduces emissions of high-GWP refrigerants from leaky stationary, non-residential refrigeration equipment; (2) reduces emissions resulting from the installation and servicing of stationary refrigeration and air conditioning appliances using high-GWP refrigerants; and (3) requires verification GHG emission reductions. (Title 17, Division 3, Chapter 1, Subchapter 10, Article 4, Subarticle 5.1, Section 95380 et seq.)
Consumer Products	CARB High GWP GHGs in Consumer Products	All consumer products associated with the project will be subject to CARB standards. CARB's consumer products regulations set VOC limits for numerous categories of consumer products, and limits the reactivity of the ingredients used in numerous categories of aerosol coating products (Title 17, Division 3, Chapter 1, Subchapter 8.5.)
Construction		
Use of Off-Road Diesel Engines, Vehicles, and Equipment	CARB In-Use Off-Road Diesel Vehicle Regulation	Any relevant vehicle or machine use associated with the project will be subject to CARB standards. The CARB In-Use-Off-Road Diesel Vehicle Regulation applies to certain off-road diesel engines, vehicles, or equipment greater than 25 horsepower. The

Table 3.7-8. Relevant Greenhouse Gas-Related Laws and Regulations

Project Component	Applicable Laws/Regulations	GHG Reduction Measures Required for Project
		regulation (1) imposes limits on idling, requires a written idling policy, and requires a disclosure when selling vehicles; (2) requires all vehicles to be reported to CARB (using the Diesel Off-Road Online Reporting System) and labeled; (3) restricts the adding of older vehicles into fleets starting on January 1, 2014; and (4) requires fleets to reduce their emissions by retiring, replacing, or repowering older engines, or installing Verified Diesel Emission Control Strategies (i.e., exhaust retrofits). The requirements and compliance dates of the Off-Road regulation vary by fleet size, as defined by the regulation.
	Cap-and-Trade Program	Transportation fuels (e.g., gasoline) used in equipment operation would be subject to the Cap-and-Trade Program. Fuel refineries and suppliers are subject to the Cap-and-Trade requirements. (See "Energy Use," below.)
Greening New Construction	CALGreen Code	All new construction must comply with CALGreen Code, as discussed in more detail throughout this table. Adoption of the mandatory CALGreen Code standards for construction has been essential for improving the overall environmental performance of new buildings; it also sets voluntary targets for builders to exceed the mandatory requirements.
Construction Waste	CALGreen Code	The project will be subject to CALGreen Code requirements for construction waste reduction, disposal, and recycling, such as a requirement to recycle and/or salvage for reuse a minimum of 50% of the non-hazardous construction waste in accordance with Section 5.408.1.1, 5.408.1.2, or 5.408.1.3; or meet a local construction and demolition waste management ordinance, whichever is more stringent.
Solid Waste		
Solid Waste Management	Landfill Methane Control Measure	Waste associated with a use implementing the project will be disposed per state requirements for landfills, material recovery facilities, and transfer stations. Per the statewide GHG emissions inventory, the largest emissions from waste management sectors come from landfills, and are in the form of CH_4. In 2010, CARB adopted a regulation that reduces emissions from methane in landfills, primarily by requiring owners and operators of certain uncontrolled municipal solid waste landfills to install gas collection and control systems, and requires

Table 3.7-8. Relevant Greenhouse Gas-Related Laws and Regulations

Project Component	Applicable Laws/Regulations	GHG Reduction Measures Required for Project
		existing and newly installed gas and control systems to operate in an optimal manner. The regulation allows local air districts to voluntarily enter into a memorandum of understanding with CARB to implement and enforce the regulation and to assess fees to cover costs of implementation.
	Mandatory Commercial Recycling (AB 341)	AB 341 will require a use implementing the proposed project, if it generates four cubic yards or more of commercial solid waste per week, to arrange for recycling services, using one of the following: self-haul; subscribe to a hauler(s); arranging for pickup of recyclable materials; subscribing to a recycling service that may include mixed waste processing that yields diversion results comparable to source separation. The project will also be subject to local commercial solid waste recycling program required to be implemented by each jurisdiction under AB 341.
	CALGreen Code	The project will be subject to CALGreen Code requirement to provide areas that serve the entire building and are identified for the depositing, storage and collection of nonhazardous materials for recycling (CALGreen Section 5.410.1)
Energy Use		
Electricity/Natural Gas Generation	Cap-and-Trade Program	Electricity and natural gas generated and/or imported into the state which may be used for the project will be subject to the Cap-and-Trade Program. The rules came into effect on January 1, 2013, applying to large electric power plants and large industrial plants. In 2015, importers and distributors of fossil fuels were added to the Cap-and-Trade Program in the second phase. Specifically, on January 1, 2015, cap-and-trade compliance obligations were phased in for suppliers of natural gas, reformulated gasoline blendstock for oxygenate blending (RBOB), distillate fuel oils, and liquefied petroleum gas that meet or exceed specified emissions thresholds. The threshold that triggers a cap-and-trade compliance obligation for a fuel supplier is 25,000 metric tons or more of CO_2e annually from the GHG emissions that would result from full combustion or oxidation of quantities of fuels (including natural gas, RBOB, distillate fuel oil, liquefied petroleum gas, and blended fuels that contain these fuels) imported and/or delivered to California.

Table 3.7-8. Relevant Greenhouse Gas-Related Laws and Regulations

Project Component	Applicable Laws/Regulations	GHG Reduction Measures Required for Project
Renewable Energy	California RPS (SB X1-2, SB 350, and SB 100)	Energy providers to the project will be required to comply with RPS set by SB X1 2, SB 350, and SB 100. SB X1 2 requires investor-owned utilities, publicly owned utilities, and electric service providers to increase purchases of renewable energy such that at least 33% of retail sales are procured from renewable energy resources by December 31, 2020. In the interim, each entity was required to procure an average of 20% of renewable energy for the period of January 1, 2011, through December 31, 2013; and will be required to procure an average of 25% by December 31, 2016, and 33% by 2020. SB 350 requires retail sellers and publicly owned utilities to procure 50% of their electricity from eligible renewable energy resources by 2030. SB 100 increased the standards set forth in SB 350 establishing that 44% of the total electricity sold to retail customers in California per year by December 31, 2024, 52% by December 31, 2027, and 60% by December 31, 2030, be secured from qualifying renewable energy sources. SB 100 states that it is the policy of the state that eligible renewable energy resources and zero-carbon resources supply 100% of the retail sales of electricity to California by 2045.
	Million Solar Roofs Program (SB 1)	The project will participate in California's energy market by pre-wiring roofs for future installation of solar, which is affected by implementation of the Million Solar Roofs Program. As part of Governor Schwarzenegger's Million Solar Roofs Program, California has set a goal to install 3,000 megawatts of new, solar capacity through 2016. The Million Solar Roofs Program is a ratepayer-financed incentive program aimed at transforming the market for rooftop solar systems by driving down costs over time.
	California Solar Initiative- Thermal Program	The project will derive energy from California's energy market, which is affected by implementation of the California Solar Initiative – Thermal Program. The program offers cash rebates of up to $4,366 on solar water heating systems for single-family residential customers. Multifamily and Commercial properties qualify for rebates of up to $800,000 on solar water heating systems and eligible solar pool heating systems qualify for rebates of up to $500,000. Funding for the California Solar Initiative-Thermal program comes from ratepayers of Pacific

Table 3.7-8. Relevant Greenhouse Gas-Related Laws and Regulations

Project Component	Applicable Laws/Regulations	GHG Reduction Measures Required for Project
		Gas & Electric, Southern California Edison, Southern California Gas Company, and San Diego Gas & Electric. The rebate program is overseen by the CPUC as part of the California Solar Initiative.
	Waste Heat and Carbon Emissions Reduction Act (AB 1613, AB 2791)	The project will derive energy from California's energy market, which is affected by implementation of the Waste Heat and Carbon Emissions Reduction Act. Originally enacted in 2007 and amended in 2008, this act directed the CEC, CPUC, and CARB to implement a program that would encourage the development of new combined heat and power systems in California with a generating capacity of not more than 20 megawatts, to increase combined heat and power use by 30,000 gigawatt-hour. The CPUC publicly owned electric utilities, and CEC duly established policies and procedures for the purchase of electricity from eligible combined heat and power systems. CEC guidelines require combined heat and power systems to be designed to reduce waste energy; have a minimum efficiency of 60%; have NO_x emissions of no more than 0.07 pounds per megawatt-hour; be sized to meet eligible customer generation thermal load; operate continuously in a manner that meets expected thermal load and optimizes efficient use of waste heat; and be cost effective, technologically feasible, and environmentally beneficial.
Vehicular/Mobile Sources		
General	SB 375 and SANDAG RTP/SCS	The project complies with, and is subject to, the SANDAG adopted RTP/SCS, which CARB approved as meeting its regional GHG targets in 2016. The most recent plan was adopted in December 2021, but CARB has not accepted it as of this writing. See discussion below.
Fuel	Low Carbon Fuel Standard (LCFS)/ EO S-01-07	Auto trips associated with the project will be subject to LCFS (EO S-01-07), which requires a 20% or greater reduction in the average fuel carbon intensity by 2030 with a 2010 baseline for transportation fuels in California regulated by CARB. The program establishes a strong framework to promote the low carbon fuel adoption necessary to achieve statewide GHG reduction goals.

Table 3.7-8. Relevant Greenhouse Gas-Related Laws and Regulations

Project Component	Applicable Laws/Regulations	GHG Reduction Measures Required for Project
	Cap-and-Trade Program	Gasoline used for project implementation will be subject to the Cap-and-Trade Program. The rules came into effect on January 1, 2013, applying to large electric power plants and large industrial plants. In 2015, importers and distributors of fossil fuels were added to the Cap-and-Trade Program in the second phase. Specifically, on January 1, 2015, cap-and-trade compliance obligations were phased in for suppliers of natural gas, RBOB, distillate fuel oils, and liquefied petroleum gas that meet or exceed specified emissions thresholds. The threshold that triggers a cap-and-trade compliance obligation for a fuel supplier is 25,000 MT or more of CO_2e annually from the GHG emissions that would result from full combustion or oxidation of quantities of fuels (including natural gas, RBOB, distillate fuel oil, liquefied petroleum gas, and blended fuels that contain these fuels) imported and/or delivered to California.
Light-Duty Vehicles	AB 1493 (or the Pavley Standard)	Cars that drive to and from the project will be subject to AB 1493, which directed CARB to adopt a regulation requiring the maximum feasible and cost-effective reduction of GHG emissions from new passenger vehicles. Pursuant to AB 1493, CARB adopted regulations that establish a declining fleet average standard for CO2, CH4, N2O, and HFCs (air conditioner refrigerants) in new passenger vehicles and light-duty trucks beginning with the 2009 model year and phased-in through the 2016 model year. These standards are divided into those applicable to lighter and those applicable to heavier portions of the passenger vehicle fleet. The regulations will reduce “upstream” smog-forming emissions from refining, marketing, and distribution of fuel.
	Advanced Clean Car and ZEV Programs	Cars that drive to and from the project will be subject to the Advanced Clean Car and ZEV Programs. In January 2012, CARB approved a new emissions-control program for model years 2017 through 2025. The program combines the control of smog, soot and global warming gases and requirements for greater numbers of zero-emission vehicles into a single package of standards called Advanced Clean

Table 3.7-8. Relevant Greenhouse Gas-Related Laws and Regulations

Project Component	Applicable Laws/Regulations	GHG Reduction Measures Required for Project
		Cars. By 2025, new automobiles will emit 34% fewer global warming gases and 75% fewer smog forming emissions. The ZEV program will act as the focused technology of the Advanced Clean Cars program by requiring manufacturers to produce increasing numbers of ZEVs and plug-in hybrid electric vehicles in the 2018-2025 model years.
	Tire Inflation Regulation	Cars that drive to and from the project will be subject to the CARB Tire Inflation Regulation, which took effect on September 1, 2010, and applies to vehicles with a gross vehicle weight rating of 10,000 pounds or less. Under this regulation, automotive service providers must, inter alia, check and inflate each vehicle's tires to the recommended tire pressure rating, with air or nitrogen, as appropriate, at the time of performing any automotive maintenance or repair service, and to keep a copy of the service invoice for a minimum of three years, and make the vehicle service invoice available to the CARB, or its authorized representative upon request.
	EPA and NHTSA GHG and CAFE Standards	Mobile sources that travel to and from the project would be subject to EPA and NHTSA GHG and CAFE standards for passenger cars, light-duty trucks, and medium-duty passenger vehicles. (75 FR 25324–25728 and 77 FR 62624–63200.)
Water Use		
Water Use Efficiency	Emergency State Water Board Regulations	Water use associated with the project will be subject to emergency regulations. On May 18, 2016, partially in response to EO B-27-16, the State Water Board adopted emergency water use regulations (CCR, title 23, Section 864.5 and amended and re-adopted Sections 863, 864, 865, and 866). The regulation directs the State Water Board, Department of Water Resources, and CPUC to implement rates and pricing structures to incentivize water conservation, and calls upon water suppliers, homeowners' associations, California businesses, landlords and tenants, and wholesale water agencies to take stronger conservation measures.

Table 3.7-8. Relevant Greenhouse Gas-Related Laws and Regulations

Project Component	Applicable Laws/Regulations	GHG Reduction Measures Required for Project
	EO B-37-16	Water use associated with the project will be subject to Emergency EO B-37-16, issued May 9, 2016, which directs the State Water Resources Control Board to adjust emergency water conservation regulations through the end of January 2017 to reflect differing water supply conditions across the state. The Water Board must also develop a proposal to achieve a mandatory reduction of potable urban water usage that builds off the mandatory 25% reduction called for in EO B-29-15. The Water Board and Department of Water Resources will develop new, permanent water use targets to which the project will be subject. The Water Board will permanently prohibit water-wasting practices such as hosing off sidewalks, driveways, and other hardscapes; washing automobiles with hoses not equipped with a shut-off nozzle; using non-recirculated water in a fountain or other decorative water feature; watering lawns in a manner that causes runoff, or within 48 hours after measurable precipitation; and irrigating ornamental turf on public street medians.
	EO B-40-17	EO B-40-17 lifted the drought emergency in all California counties except Fresno, Kings, Tulare, and Tuolumne. It also rescinds EO B-29-15, but expressly states that EO B-37-16 remains in effect and directs the State Water Resources Control Board to continue development of permanent prohibitions on wasteful water use to which the project will be subject.
	SB X7-7	Water provided to the project will be affected by SB X7-7's requirements for water suppliers. SB X7-7, or the Water Conservation Act of 2009, requires all water suppliers to increase water use efficiency. It also requires, among other things, that the Department of Water Resources, in consultation with other state agencies, develop a single standardized water use reporting form, which would be used by both urban and agricultural water agencies.
	CALGreen Code	The project is subject to CALGreen Code's water efficiency standards, including a required 20% mandatory reduction in indoor water use. (CALGreen, Division 4.3.)

Table 3.7-8. Relevant Greenhouse Gas-Related Laws and Regulations

Project Component	Applicable Laws/Regulations	GHG Reduction Measures Required for Project
	California Water Code, Division 6, Part 2.10, Sections 10910–10915.	Development and approval of the project would require the development of a project-specific Water Supply Assessment assessing the projects water demand and its inclusion within the City's urban water management plan.
	Cap-and-Trade Program	Electricity usage associated with water and wastewater supply, treatment and distribution would be subject to the Cap-and-Trade Program.
	California RPS (SB X1-2, SB 350, SB 100)	Electricity usage associated with water and wastewater supply, treatment and distribution associated with the project will be required to comply with RPS set by SB X1-2, SB 350, and SB 100.

Source: Appendix B.
Notes: AB = Assembly Bill; CARB = California Air Resources Board; CEC = California Energy Commission; CFC = chlorofluorocarbon; CH_4 = methane; CO_2 = carbon dioxide; CO_2e = carbon dioxide equivalent; CPUC = California Public Utilities Commission; EO = Executive Order; EPA = Environmental Protection Agency; GHG = greenhouse gas; GWP = global warming potential; HCFC = hydrochlorofluorocarbon; HFC = hydrofluorocarbon; gpm = gallons per minute; MT = metric tons; N_2O = nitrous oxide; NHTSA = National Highway Traffic Safety Administration; PM = particulate matter; RPS = Renewable Portfolio Standard; RTP/SCS = Regional Transportation Plan/Sustainable Communities Strategy; SB = Senate Bill; SANDAG = San Diego Association of Governments; VOC = volatile organic compound; ZEV = zero emission vehicle

As shown in the table above, the project would be consistent with and would not conflict with the applicable GHG-reducing strategies of the state that apply to the construction and operational components.

In addition, the project would help support achievement of the statewide 2030 goal (as codified in SB 32) and the long-term, carbon neutrality 2045 goal (as set forth in EO B-55-18) by being infill development with access to multimodal transportation options and incorporating features such as electric vehicle charging stations, bicycle infrastructure, transportation demand management, electric water heaters, smart landscaping irrigation, and an urban tree canopy.

Consistency with San Diego Association of Governments' Regional Transportation Plan/ Sustainable Communities Strategy

At the regional level, SANDAG's RTP/SCS has been adopted for the purpose of reducing GHG emissions attributable to passenger vehicles in the San Diego region. In December 2021, SANDAG adopted its RTP/SCS (The 2021 Regional Plan), which shows that the San Diego region reduced per capita CO_2 emissions by 17.9% in 2020 compared to 2005 baseline, which exceeds the 2020 target set for SANDAG of 15% reduction. Implementation of the 2021 RTP/SCS is estimated to result in a 20% CO_2 emissions reduction for cars and light-duty trucks by 2035, exceeding the 19% target from 2005 levels set by CARB. The RTP/SCS does not regulate land use or supersede the exercise of land use authority by SANDAG's member jurisdictions, but it is a relevant regional reference document for purposes of evaluating the intersection of land use and transportation patterns and the corresponding GHG emissions.

For purposes of the RTP/SCS consistency evaluation, the project would increase access to transit because it is located approximately 0.3 miles from the Palomar College SPRINTER station and two bus stops are located in front of the project site off W Mission Road.[5] The project site's proximity to State Route 78 further allows for easy regional connectivity to employment centers, shopping areas, and recreation opportunities. The proposed density, land use type, and location are consistent with the SANDAG's RTP/SCS, which increases access to transit and promotes regional connectivity to employment centers, shopping areas, and recreation opportunities. The features mentioned above would help facilitate alternative transit usage and reduce the overall vehicle trips, thereby reducing the project's regional GHG emissions.

Based on the considerations outlined above, the project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs, and potential impacts would be **less than significant**.

3.7.5 Cumulative Impact Analysis

A "cumulative impact" refers to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental effects. Pursuant to CEQA Guidelines Section 15130(b)(1)(A)(B), an adequate discussion of a project's significant cumulative impact, in combination with other closely related projects, can be based on either a list of past, present, and probable future producing related impacts or a summary of projections contained in an adopted local, regional, or statewide plan or related planning document that describes conditions contributing to the cumulative effect.

Due to the global nature of the assessment of GHG emissions and the effects of global climate change, GHG emissions analysis, by its nature, is a cumulative impact analysis. Therefore, the information and analysis provided above in Section 3.7.4 to determine project-level impacts applies here and the project's contribution to global climate change would not be cumulatively considerable.

This approach is consistent with the supporting documentation published by the California Natural Resources Agency when promulgating the SB 97-related CEQA amendments, which indicated that the impact of GHG emissions should be considered in the context of a cumulative impact, rather than a project-level impact (CNRA 2009b). The California Natural Resources Agency similarly advised that an environmental document must analyze the incremental contribution of a project to GHG levels and determine whether those emissions are cumulatively considerable (CNRA 2009a). The adopted CEQA Guideline (14 CCR 15064.4) confirms that the analysis of climate change impacts is cumulative and, in the most recent update to the Guidelines, text was added to Section 15064.4 to clarify as much (CNRA 2018). Section 15064.4 now states, "In determining the significance of a project's greenhouse gas emissions, the lead agency should focus its analysis on the reasonably foreseeable incremental contribution of the project's emissions to the effects of climate change."

For the reasons stated above, the project's cumulative impacts would be **less than significant**.

[5] The City uses the North County Transit District (NCTD) for Coaster rail service, SPRINTER light rail service, and Breeze bus service for connections throughout the County of San Diego. SPRINTER service operates between Escondido and Oceanside with connections to Interstate 5 and the Coaster rail service operating out of the City of Oceanside. The NCTD operates the Palomar College SPRINTER, which is within a short walk from the project area. In addition, a bus stop is located in front of the project site. Connections to Orange County can be made via the Metrolink in the City of Oceanside. Similarly, connections to Riverside Transit Authority buses can be made via the transit station in Oceanside and Escondido. Both the Metrolink connection in Oceanside and the Riverside Transit Authority Bus connection in Oceanside and Escondido are accessible through SPRINTER light rail service. These public transit options will offer residents of the project area quick access to a variety of alternative modes of transportation.

3.7.5 Mitigation Measures

The project would not result in significant impacts; therefore, no mitigation is required.

3.7.6 Conclusion

As presented in Section 3.7.4, the project would result in approximately 749 MT CO_2e per year and would not exceed the City's significance threshold of 2.1 MT CO_2e/SP/yr. Therefore, the project would be consistent with the City's 2020 CAP. Furthermore, the project would be consistent with and would not conflict with the applicable GHG-reducing strategies of the state, would be consistent with CARB's Scoping Plan, and would be consistent with SANDAG's RTP/SCS. In summary, impacts with regard to GHG emissions would be less than significant.

3.8 Hazards and Hazardous Materials

This section describes the existing hazards and hazardous materials within the vicinity of the proposed Gran Vista Specific Plan Project (project), identifies associated regulatory requirements, and evaluates potential impacts related to implementation of the project. Information from the Phase I Environmental Site Assessment (Phase I ESA), prepared for the project by Hillmann Consulting on June 23, 2021, was used in preparation of this chapter and is included as Appendix F to this EIR.

Table 3.8-1 summarizes the hazards and hazardous materials and cumulative-level impact analysis, by threshold, for the project.

Table 3.8-1. Hazards and Hazardous Materials Summary of Impacts

Threshold of Significance	Project-Level Impact	Cumulative-Level Impact	Significance Determination
No. 1: Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.	Less than Significant	Less than Significant	Less than Significant
No. 2: Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.	Less than Significant	Less than Significant	Less than Significant
No. 3: Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.	Less than Significant	Less than Significant	Less than Significant
No. 4: Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment.	Less than Significant	Less than Significant	Less than Significant
No. 5: For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area.	Less than Significant	Less than Significant	Less than Significant
No. 6: Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.	Less than Significant	Less than Significant	Less than Significant
No. 7: Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires.	Less than Significant	Less than Significant	Less than Significant

3.8.1 Existing Conditions

This section describes the existing conditions on the project site related to hazards and hazardous materials. The Phase I ESA assesses the likelihood of any recognized hazardous substances or petroleum products that might be present on site as a result of current or historical land uses or adjacent uses. The Phase I ESA included a review of the historical records of the project site, a site reconnaissance of the project site, reconnaissance of adjoining properties, a vapor encroachment screen for the project site, and a limited soil investigation. The Phase I ESA did not identify any evidence of recognized environmental conditions on the project site.

The 7.6-acre project site is an undeveloped lot located in the northwestern portion of the City of San Marcos (City) in an urbanized area. The project site is located in an area largely characterized by commercial and industrial facilities, and residences, with Palomar College approximately 0.2 miles to the east. The project site is bounded by N Las Posas Road along the eastern boundary, W Mission Road along the southwest boundary, an existing CVS Pharmacy to the south, and existing single-family residential development to the north and west, as well as to the east across N Las Posas Road.

Visual evidence of hazardous substances and wastes was not observed during the project site reconnaissance, and no visual indication of spills or leaks was observed. No other pungent or acrid odors were observed emanating from the project site. Additionally, there was no evidence of underground or aboveground fuel storage tanks or equipment that may contain polychlorinated biphenyls.

Site and Surrounding Area History

The Phase I ESA completed for the project reviewed reasonably ascertainable public documents, including aerial photographs, topographic maps, city directories, and fire insurance maps.

Aerial photographs were reviewed for the following years: 1928, 1939, 1946, 1953, 1964, 1967, 1970, 1979, 1985, 1989, 1990, 1994, 2005, 2009, 2012, and 2016 (Appendix F). In each photograph, the project site appears to be vacant and undeveloped land.

Included in Appendix F is an Environmental Data Resources Inc. Historical Topo Map Report, which reviewed the Escondido Quadrangle (15-minute series), dated 1893; the Escondido Quadrangle (15-minute series), dated 1901; the Escondido Quadrangle (15-minute series), dated 1947; the San Marcos (7.5-minute series), dated 1948; the San Marcos (7.5-minute series), dated 1949; the San Marcos Quadrangle (7.5-minute series), dated 1968; the San Marcos Quadrangle (7.5-minute series), dated 1983; the San Marcos Quadrangle (7.5-minute series), dated 1996; and the San Marcos Quadrangle (7.5-minute series), dated 2012 (Appendix F). The project site appears to be vacant land on all the topographic map sheets reviewed for this assessment. The 2012 topographic map sheet shows little detail other than streets in the vicinity (Appendix F).

Based on readily available historical information, the project site appears to have been vacant and undeveloped land from 1928 to 2005, used as a staging area for the construction of the CVS Pharmacy to the south, and has remained vacant since 2012. According to Google Earth images, the project site was used as an overflow parking lot for Palomar College in 2017 and 2018. Historically, the surrounding properties appear to have been vacant land from at least 1928 to at least 1953. Numerous structures and some vacant land can be observed from 1964 to 2005. Data gaps exist from 1901 to 1927, 1929 to 1939, 1940 to 1945, 1950 to 1952, 1954 to 1963, 1965 to 1966, 1971 to 1978, 1980 to 1982, 1984, 1986 to 1987, 1991 to 1995, and 1997 to 2004, due to the limited records that are reasonably ascertainable in the local area. However, according to Appendix F, additional historical information, if it were to become available, is likely insignificant and not likely to change the impact determination herein.

The surrounding properties appear to have a structure in 1893 and 1901 aerial photographs; railroad track, an unpaved road, and a structure in 1947 through 1949; multiple structures in 1968 and 1983; and in 1996 the remaining adjacent properties become developed. The 2012 maps show little detail other than streets in the vicinity (Appendix F).

Regulatory Database Review

As explained in Appendix F, Hillmann Consulting obtained and reviewed an environmental database report of the federal and state environmental records specified by international standard practice guidance (ASTM E 1527-13). The database report was provided by Environmental Data Resources Inc. of Shelton, Connecticut, and tracks the presence of underground storage tanks (USTs), hazardous waste generation, and hazardous waste generators, or other environmental concerns, such as spills, leaks, or aboveground tanks. Table 3.8-2, Environmental Database, shows that the project site was not listed on any of these regulatory databases and four site listings were present on adjacent sites.

Table 3.8-2. Environmental Database

Environmental Database	Minimum Search Distance (miles)	Site	Adjacent	Total Listed
Federal National Priorities List (NPL) and Proposed NPL	1.0	No	0	0
Delisted NPL	0.5	No	0	0
Federal Superfund Enterprise Management System (SEMS), including archived sites (formerly CERCLIS)	0.5	No	0	0
Federal SEMS-ARCHIVE (formally known as CERCLIS NFRAP)	0.5	No	0	3
Federal Resource Conservation and Recovery Act (RCRA), Corrective Action Sites (CORRACTS)	1.0	No	0	1
Federal RCRA, Treatment, Storage, and Disposal facilities (TSD) sites	0.5	No	0	1
Federal RCRA Generators (LQG, SGQ, and CESQG)	Site and Adjacent	No	1	1
Federal Institutional Control/Engineering Control (IC/EC) registries	Site	No	0	0
Federal Emergency Response Notification System (ERNS)	Site	No	0	0
State/Tribal Hazardous Waste Sites (SHWS)	1.0	No	0	1
State/Tribal Landfill and/or Solid Waste Disposal (LF/SWF)	0.5	No	0	1
State/Tribal Leaking Storage Tanks	0.5	No	0	20
State/Tribal Registered Storage Tanks	Site and Adjoining	No	0	0
State/Tribal IC/EC Registries	Site	No	0	0
State/Tribal Voluntary Cleanup Sites	0.5	No	0	0
State/Tribal Brownfields	0.5	No	0	0
Additional Federal, State, Tribal and Local Environmental Databases	Variable	No	2	0

Source: Appendix F.

National Priorities List

The National Priorities List (NPL) is the U.S. Environmental Protection Agency's (EPA) list of confirmed or proposed Superfund sites. The Phase I ESA reviewed the NPL list for confirmed or proposed Superfund sites, and for sites that have been delisted from the NPL, which occur within 1 mile of the project site. The project site does not appear on the NPL. There are no other facilities on the NPL within 1 mile of the project site.

Superfund Enterprise Management System

The Superfund Enterprise Management System (SEMS, formerly CERCLIS) is a compilation of sites that EPA has investigated or is currently investigating for a release or threatened release of hazardous substances. The Phase I ESA reviews current and archived SEMS sites within 0.5-mile distance of the project site.

The project site does not appear on the SEMS or SEMS-ARCHIVE list. There are three facilities on the SEMS-ARCHIVE list within 0.5 miles of the project site located at 217 N Las Posas Road (735 feet south of the project site) with no gradient due to a hydrologic barrier (Appendix F).

Due to the listings, distance, locations downgradient from the project site, and/or facility status as an archive facility (SEMS-ARCHIVE), these facilities are considered unlikely to represent an environmental concern to the project site.

Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act (RCRA) compiles selective information on facilities that generate, transport, store, treat, and/or dispose of hazardous waste. RCRA facilities can be listed on one of the three databases:

- **Corrective Action Facilities** are facilities undergoing corrective action. A corrective action order is issued pursuant to RCRA Section 3008(h) when there has been a release of hazardous waste or constituents into the environment from a RCRA facility.
- **Treatment, Storage, and Disposal Facilities (TSD)** includes facilities that transport, store, or dispose of hazardous waste and are not listed on the RCRA Generators list. The TSD is searched for a 0.5-mile distance.
- **Generators List** identifies and tracks hazardous waste from the point of generation to the point of disposal. The RCRA Generators database is a compilation by EPA of reporting facilities that generate hazardous waste. The RCRA generators list is searched for the project site and adjacent properties.

The project site does not appear on the Corrective Action Facilities list. There is one facility on the list within 1 mile of the project site. The facility is Signet Armorlite, located at 1001 Armorlite Drive. The site has been listed on the federal CORRACTS list but has not had any violations listed. Therefore, this facility is considered unlikely to represent an environmental concern to the project site.

The project site does not appear on the RCRA TSD list. There is one facility on the list within 0.5 miles of the project site: Signet Armorlite, located at 1001 Armorlite Drive. The site has been listed on the RCRA-NonGEN/NLR lists but has not had any violations listed. Therefore, this facility is considered unlikely to represent an environmental concern to the project site.

The project site does not appear on the RCRA Generators list. There is one facility listed as a RCRA Generator within 0.25 miles of the project site. The facility is CVS Pharmacy, located at 1302 W Mission Road, which is adjacent and south-southeast of the project site and lower in elevation relative to the project site. The CERZ HAZ WASTE database listed administrative violations, but the facility has since achieved compliance. No other environmental databases identified violations from this facility and this facility is considered unlikely to represent an environmental concern to the project site.

Federal Institutional Control/Engineering Control Registries

EPA maintains institutional and engineering control databases or registries, which list sites with engineering or institutional controls in place. Institutional controls include administrative measures intended to prevent exposure to contaminants remaining on site. Engineering controls include various forms of caps, treatment methods, etc. The project site does not appear on the federal institutional control/engineering control registries.

Emergency Response Notification System

The Emergency Response Notification System is a national database used to collect information on reported releases of oil or hazardous substances. The project site does not appear on this list.

Solid Waste Fill/Landfill Database

The Solid Waste Fill/Landfill (SWF/LF) database includes information pertaining to closed and open solid waste facilities operating in the state of California. The SWF/LF database is searched for a 0.5-mile distance. The project site does not appear on the SWF/LF lists. There is one facility within 0.5 miles of the project site. The one facility is Benchmark Landscape Inc. located at 145 N Pacific Street is listed as being located 0.15 miles southwest of the project site at an elevation below the project site. Despite the facility having multiple administrative violations, the facility returned to compliance in 2014 and does not represent an environmental concern to the site.

Leaking Underground Storage Tanks List

The California Leaking Underground Storage Tanks (LUST) list is a compilation of petroleum storage tank sites that have reported a release. The LUST list is searched for a 0.5-mile distance. The project site does not appear on the LUST list. There are 20 facilities on the LUST list within 0.5 miles of the project site. Appendix F provides a detailed table with the facility name, address, location in relation to the project site, and the facility status. Due to their status listings and location, these facilities do not represent an environmental concern to the project site.

Underground Storage Tanks List

The California UST list is a compilation of petroleum storage tank sites that are registered with the state of California. The UST list is searched for the project site and adjacent properties. The project site did not appear on the UST list or historic UST list.

Dry Cleaners

Environmental Data Resources Inc. compiled and provided the dry cleaners list. The dry cleaner database is searched for a 0.25-mile distance. The project site does not appear on the dry cleaners list. There are no dry cleaner facilities listed within 0.25 miles of the project site.

Unmappable Facilities

Hillmann Consulting reviewed the list of “orphan” or unmappable facilities in the database report. There are no unmapped facilities in the report.

Vapor Encroachment Screening

The purpose of a vapor encroachment screen is to identify, to the extent feasible, if a vapor encroachment condition exists at the project site. According to Appendix F, a vapor encroachment condition is not likely to exist at the project site given that no recognized environmental conditions were identified.

Site Reconnaissance

A representative of Hillmann Consulting conducted a project site reconnaissance on June 8, 2021. The triangular-shaped project site currently comprises two parcels of land (Assessor's Parcel Numbers 219-121-15-00 and 219 121-16-00) and encompasses a total of approximately 7.6 acres. The project site can generally be accessed from either N Las Posas Road or W Mission Road. The project site is currently vacant and undeveloped land. No visual evidence of hazardous substances and wastes was observed during the project site reconnaissance. No visual indication of spills or leaks was observed. No other pungent or acrid odors were observed emanating from the project site.

Wildland Fire

The project site is not designated as a high fire severity zone (CAL FIRE 2022; City of San Marcos 2012). The San Marcos Fire Department (SMFD) prepared a Community Wildfire Protection Plan and Hazard Risk Assessment for the San Marcos community and unincorporated areas in the San Marcos Fire Protection District to reduce the risk of wildland fires (SMFD 2007). Fire protection services and wildfire risk for the project site are discussed in Section 3.13, Public Services, and Chapter 5, Environmental Effects Found Not to Be Significant.

3.8.2 Regulatory Setting

This section details the federal, state, and local regulations governing hazards and hazardous materials.

Federal

Chemical Accident Prevention Provision

Title 40 Part 68 of the Code of Federal Regulations sets forth a list of regulated substances and thresholds, the petition process for adding or deleting substances to the list of regulated substances, the requirements for owners or operators of stationary sources concerning the prevention of accident releases, and the state accidental release prevention programs approved under Section 112(r) of the Clean Air Act.

Federal Aviation Regulations—Notice of Proposed Construction or Alteration

The Federal Aviation Administration (FAA), which has primary responsibility for the safety of civil aviation, imposes height restrictions in order to prevent obstructions to navigable airspace to protect flights and surrounding structures. In certain cases, the FAA should be notified of proposed development pursuant to Section 77.11 of the Federal Aviation Regulations. The notification of proposed development enables the FAA to:

- Evaluate the effect of the construction or alteration on operational procedures and proposed operational procedures
- Determine the possible hazardous effect of the proposed construction or alteration of air navigation

- Provide recommendations for identifying the construction or alteration in accordance with current FAA Advisory Circular AC 70/7460-1K, Obstruction Marking and Lighting, dated August 1, 2000
- Determine other appropriate measures to be applied for continued safety of air navigation
- Provide charting and other notification to airmen of the construction or alteration

Certain jurisdictions can request an FAA evaluation of proposed development when certain features appear to be potentially hazardous.

Federal Disaster Mitigation Act of 2000

The Disaster Mitigation Act of 2000 provided a new set of mitigation plan requirements for state and local jurisdictions to coordinate disaster mitigation planning and implementation. States are encouraged to complete a "standard" or an "enhanced" natural mitigation plan. "Enhanced" plans demonstrate increased coordination of mitigation activities at the state level, and, if completed and approved, increase the amount of funding through the Hazard Mitigation Grant Program. California's updated State Hazard Mitigation Plan was adopted in October 2010 and approved by the Federal Emergency Management Agency Region IX. The City is one of the communities covered by the County of San Diego (County) Multi-Jurisdictional Hazard Mitigation Plan, described below, which is a Countywide plan that identifies risks posed by natural and human-made disasters.

Hazardous Materials Transport

The U.S. Department of Transportation regulates transportation of hazardous materials between states. State agencies with primary responsibility for enforcing federal and state regulations and responding to hazardous materials transportation emergencies are the California Highway Patrol and the California Department of Transportation. Together, these agencies determine container types used and license hazardous waste haulers for transportation of hazardous waste on public roads, including explosives that may be used for blasting.

International Fire Code

The International Fire Code (IFC), created by the International Code Council, is the primary means for authorizing and enforcing procedures and mechanisms to ensure the safe handling and storage of any substance that may pose a threat to public health and safety. The IFC regulates the use, handling, and storage requirements for hazardous materials at fixed facilities. The IFC and the International Building Code use a hazard classification system to determine what protective measures are required for fire and life safety. These measures may include construction standards, separations from property lines, and specialized equipment. To ensure that these safety measures are met, the IFC employs a permit system based on hazard classification. The IFC is updated every 3 years.

Resource Conservation and Recovery Act

RCRA gives EPA the authority to control hazardous waste during the generation, transportation, treatment, storage, and disposal of the waste. RCRA also sets forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances.

Hazardous and Solid Waste Amendments of 1984

The Hazardous and Solid Waste Amendments of 1984 amends the Solid Waste Disposal Act (as amended by the RCRA of 1976) to authorize appropriations for fiscal years 1985 through 1988 for:

1. General administration by the Administrator of EPA to carry out such act (including funds for resource recovery and conservation panels, hazardous waste management, and support for state, regional, local, and interstate agency solid waste plans
2. Grants to state hazardous waste programs
3. The hazardous waste site inventory
4. Development and implementation of plans by state, local, regional, and interstate authorities
5. Implementation of state, local, and intermunicipal programs for solid waste management, resource recovery, resource conservation, and hazardous waste management
6. Special communities assistance
7. Assistance to states for recycled oil programs
8. The Secretary of Commerce to carry out resource and recovery duties
9. Additional EPA officers or employees to conduct criminal investigations under such act and for support costs for such additional criminal investigators
10. UST regulation
11. Grants to states for state UST release detection, prevention, and correction programs
12. Small quantity generator waste education programs
13. State and other programs requiring compliance with open dumping/sanitary landfill criteria by solid waste management facilities within 36 months after enactment of this act
14. The National Ground Water Commission

In general, both the scope and requirements of the amendments, as amended by RCRA, were significantly expanded and reinforced.

State

The state regulations that govern hazardous materials are equal to or more stringent than federal regulations. California has been granted primary oversight responsibility by EPA to administer and enforce hazardous waste management programs. State regulations have detailed planning and management requirements to ensure that hazardous wastes are handled, stored, and disposed of properly to reduce risks to human health and the environment. Several key state laws pertaining to hazardous wastes are discussed below. In addition, the Department of Toxic Substances Control, the State Water Resources Control Board, and the Integrated Waste Management Act also regulate the generation of hazardous materials, as described below.

California Emergency Services Act

The California Emergency Services Act provides the basic authority for conducting emergency operations following a proclamation of emergency by the governor and/or appropriate local authorities. Local government and district emergency plans are considered to be extensions of the California Emergency Plan, established in accordance with the Emergency Services Act.

California Fire Code

The California Fire Code (CFC) is Chapter 9 of Title 24 of the California Code of Regulations. The California Code of Regulations is the primary means for authorizing and enforcing procedures and mechanisms to ensure the safe handling and storage of any substance that may pose a threat to public health and safety. The CFC regulates the use, handling, and storage requirements for hazardous materials at fixed facilities. The CFC and the California Building Code use a hazard classification system to determine what protective measures are required to ensure fire and life safety. These measures may include construction standards, separations from property lines, and specialized equipment. To ensure these safety measures are met, the CFC employs a permit system based on hazard classification. The CFC is updated every 3 years. SMFD has adopted the CFC by reference in its own fire code.

California Health and Safety Code—Hazardous Materials Release Response Plans and Inventory

Pursuant to California Health and Safety Code, Chapter 6.95, the California Department of Environmental Health implements the Hazardous Materials Business Plan (HMBP) program and the California Accidental Release Prevention Program (CalARP) in the County. The HMBP and CalARP programs provide threshold quantities for regulated hazardous substances. When the indicated quantities are exceeded, an HMBP or risk management plan is required pursuant to the regulation. Congress requires EPA Region 9 to make risk management plan information available to the public through EPA's Envirofacts Data Warehouse.

California Integrated Waste Management Act

This act requires the development and implementation of household hazardous waste disposal plans. The California Department of Resources Recycling and Recovery, formerly the California Integrated Waste Management Board, oversees compliance with this act and enforces operational plans for solid waste facilities.

Emergency Response to Hazardous Materials Incidents

California has developed an emergency response plan to coordinate emergency services provided by federal, state, and local governments and private agencies. Response to hazardous material incidents is one part of this plan. The plan is managed by the California Emergency Management Agency, which coordinates the responses of other agencies, including the California Environmental Protection Agency (CalEPA), California Highway Patrol, California Department of Fish and Wildlife, and Regional Water Quality Control Board.

Emergency Services Act

Under the Emergency Services Act (California Government Code Section 8850 et seq.), the state developed an emergency response plan to coordinate emergency services provided by federal, state, and local agencies. Quick response to incidents involving hazardous materials or hazardous waste is a key element of this plan. The Governor's Office of Emergency Services administers the plan, coordinating the responses of other agencies, including EPA, California Highway Patrol, Regional Water Quality Control Boards, air quality management districts, and county disaster response offices.

Government Code Section 65962.5 (Cortese List)

The provisions of Government Code Section 65962.5 are commonly referred to as the Cortese List. The Cortese List is a planning document used by the state and local agencies to provide information about hazardous materials release sites. Government Code Section 65962.5 requires CalEPA to develop an updated Cortese List annually, at

minimum. The Department of Toxic Substances Control is responsible for a portion of the information contained in the Cortese List. Other California state and local government agencies are required to provide additional hazardous material release information for the Cortese List.

Hazardous Waste Control Act

The Hazardous Waste Control Act is implemented by regulations contained in California Code of Regulations Title 26 that describe requirements for the proper management of hazardous wastes. The act created the state hazardous waste management program, which is similar to but more stringent than the federal RCRA program. The Hazardous Waste Control Act and Title 26 regulations list more than 800 potentially hazardous materials and establish criteria for identifying, packaging, transporting, and disposing of such wastes. Under these regulations, the generator of hazardous waste material must complete a manifest that accompanies the material from the point of generation to transportation to the ultimate disposal location, with copies of the manifest filed with the Department of Toxic Substances Control.

Unified Program

CalEPA delegates to qualifying local agencies oversight and permitting responsibility for certain state programs pertaining to hazardous waste and hazardous materials. This is achieved through the Unified Program, created by state legislation in 1993 to consolidate, coordinate, and make consistent the administrative requirements, permits, inspections, and enforcement activities for the following emergency and management programs:

- Hazardous materials release response plans and inventories (business plans)
- CalARP
- UST Program
- Aboveground Petroleum Storage Act Requirements for Spill Prevention, Control and Countermeasure plans
- Hazardous Waste Generator and On-site Hazardous Waste Treatment (tiered permitting) Programs
- CFC: Hazardous material management plans and hazardous material inventory statements

The County is the designated certified Unified Program agency for all local jurisdictions within the San Diego region, including San Marcos.

State Responsibility Area Fire Safe Regulations (California Code of Regulations, Title 14 Natural Resources, Department of Forestry Fire Protection)

These regulations constitute the basic wildland fire protection standards of the California Board of Forestry. They have been prepared and adopted for the purpose of establishing minimum wildfire protection standards in conjunction with building, construction, and development in State Responsibility Areas. Title 14 regulates that the future design and construction of structures, subdivisions, and developments in State Responsibility Areas shall provide for basic emergency access and perimeter wildfire protection measures.

Local

Airport Land Use Commission and Airport Land Use Compatibility Plans

Airport Land Use Commissions assist local agencies in ensuring compatible land uses in the vicinity of existing or proposed airports; coordinate planning at state, regional, and local levels; prepare and adopt airport land use

policies; review plans or regulations submitted by local agencies; and review and make recommendations regarding the land use, building heights, and other issues related to air navigation safety. The San Diego County Regional Airport Authority is the Airport Land Use Commission for the San Diego region.

The closest airport to the project site is the McClellan-Palomar Airport, which operates under its own Airport Land Use Compatibility Plan. The project site is not located within any of the McClellan-Palomar Airport Influence Areas (San Diego County Regional Airport Authority 2011).

County of San Diego Multi-Jurisdictional Hazard Mitigation Plan

To comply with the Disaster Mitigation Act of 2000, the County prepared the Multi-Jurisdictional Hazard Mitigation Plan. The plan serves as both a Countywide plan and a plan for local jurisdictions that identifies risks posed by natural and human-made disasters before a hazard event occurs. The plan includes overall goals and objectives shared by many jurisdictions, as well as specific goals, objectives, and mitigation action items for each of the participating jurisdictions to help minimize the effects of the specified hazards that could potentially affect their jurisdiction. Goals, objectives, and action items for the City are included in this plan (County of San Diego 2017).

San Marcos Fire Department Hazard Risk Analysis and Wildland Urban Interface Community Wildfire Protection Plan

The Community Wildfire Protection Plan, adopted in December 2007 (San Marcos Fire Department 2007), was developed by the SMFD with guidance from the County, California Department of Forestry and Fire Protection, and the U.S. Forest Service. The Community Wildfire Protection Plan supplements County Department of Planning and Land Use documents. The SMFD also published the Hazard Risk Analysis for internal City use, incorporating new and existing information relating to wildfire risk within the City to better quantify true risk and management needs. The Hazard Risk Analysis quantifies, clarifies, and manages the wildland urban interface responsibility and meets the requirements of the federal Healthy Forests Restoration Act of 2003 for community fire planning.

City of San Marcos, Ordinance 2003-1216

The City Ordinance 2003-1216 amends Chapter 17.64 of the San Marcos Municipal Code to adopt the most recent version of the CFC. This ordinance also requires all buildings or structures to provide and maintain an effective fuel modification zone of 150 feet.

City of San Marcos General Plan

Safety Element

The Safety Element of the San Marcos General Plan (City of San Marcos 2012) contains the following goals and policies pertaining to hazards and hazardous materials that apply to the project:

Goals S-3: Minimize injury, loss of life, and damage to property resulting from structure or wildland fire hazards.

> Policy S-3.1: Require development to be located, designed and constructed to provide adequate defensibility and reduce the risk of structural loss and life resulting from wildland fires. Development will consider hazards relative to terrain, topography, accessibility and proximity to vegetation. One such provision for development to minimize the risk of structural loss and life shall be the inclusion of overhead fire sprinklers.

Policy S-3.2: Provide sufficient level of fire protection service to reduce risk from urban and wildland fire. Advocate and support regional coordination among fire protection and emergency service providers.

Policy S-3.3: Require development to provide additional access roads when necessary to provide for safe access of emergency equipment and civilian evacuation concurrently.

Policy S-3.4: Coordinate with fire protection and emergency service providers to assess fire hazards before and after wildfire events to adjust fire prevention and suppression needs, as necessary, commensurate with both short- and long-term fire prevention needs.

Goal S-4: Protect life, structures, and the environment from the harmful effects of hazardous materials and waste.

Policy S-4.1: Promote and support the proper disposal, handling, transport, delivery, treatment, recovery, recycling, and storage of hazardous materials in accordance with applicable federal, State, and local regulations.

Policy S-4.2: Require areas of known or suspected contamination to be assessed prior to reuse or redevelopment. Plan for reuse of contaminated areas in a manner that is compatible with the nature of the contamination and subsequent remediation efforts.

Policy S-4.3: Require areas of known or suspected contamination to be assessed prior to reuse or redevelopment. Plan for reuse of contaminated areas in a manner that is compatible with the nature of the contamination and subsequent remediation efforts.

Policy S-4.4: Avoid locating sensitive uses near established hazardous materials users or industrial areas where incompatibilities would result, except in cases where appropriate safeguards have been developed and implemented.

Goal S-5: Establish and maintain an effective emergency response program to respond to disasters and maintain continuity-of-life support functions during an emergency.

Policy S-5.3: Develop, implement, and maintain an effective evacuation program for areas of risk in the event of a disaster.

Goal S-7: Comply with the McClellan-Palomar Airport Land Use Compatibility Plan.

Policy S-7.1: Record an overflight notification document in association with the approval of any new residential land use within the AIA [Airport Influence Area] overflight notification area consistent with the ALUCP.

3.8.3 Thresholds of Significance

The significance criteria used to evaluate the project impacts related to hazards and hazardous materials are based on Appendix G of the CEQA Guidelines. According to Appendix G of the CEQA Guidelines, a significant impact related to hazards and hazardous material would occur if the project would:

- **Threshold No. 1:** Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

- **Threshold No. 2:** Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.
- **Threshold No. 3:** Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.
- **Threshold No. 4:** Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment.
- **Threshold No. 5:** For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area.
- **Threshold No. 6:** Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.
- **Threshold No. 7:** Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires.

3.8.4 Project Impact Analysis

Impacts related to hazards and hazardous materials as a result of development of the project are analyzed below.

Threshold No. 1. Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Construction of the project would entail transport, use, or disposal of potentially hazardous materials including, but not limited to, diesel fuel, gasoline, equipment fluids, concrete, cleaning solutions and solvents, lubricant oils, adhesives, human waste, and chemical toilets. Direct impacts to human health and biological resources from accidental spills of small amounts of hazardous materials from construction equipment could occur with the transport, use, or disposal of these materials. However, existing federal and state standards related to the handling, storage, and transport of these materials would be implemented during construction of the project. These regulations include the Federal Chemical Accident Prevention Provisions (Part 68 of the Code of Federal Regulations); California Highway Patrol and California Department of Transportation container and licensing requirements for transportation of hazardous waste on public roads; IFC; RCRA of 1976 as amended by the Hazardous and Solid Waste Amendments of 1984; California's Hazardous Waste Control Law; CFC; California Health and Safety Code Hazardous Materials Release Response Plans and Inventory; California Integrated Waste Management Act; regulations developed by California Occupations Safety and Health Administration; and the state Hazardous Waste Control Act.

During operation of the project, the only hazardous materials anticipated for transport, use, or disposal would be routinely used household products such as cleaners, paint, solvents, motor oil/automotive products, batteries, and garden maintenance products, which are typical of residential uses. The use, handling, and disposal of these products is addressed by household hazardous waste programs that are part of the Integrated Waste Management Plan of the County. The Household Hazardous Waste Element of the Integrated Waste Management Plan specifies the means by which hazardous wastes generated by households shall be collected, recycled, treated, and disposed of safely (County of San Diego 2005).

The project's compliance with all standards required through federal, state, County, and municipal regulations, in addition to project-specific plans reviewed by the City, would ensure potential impacts to the public or the environment through routine transport, use, or disposal of hazardous materials would not be substantial. Therefore, impacts related to transport of hazardous materials would be **less than significant**.

Threshold No. 2. Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

As discussed under Threshold No. 1, above, construction of the project would entail transport, use, or disposal of potentially hazardous materials including, but not limited to, diesel fuel, gasoline, equipment fluids, concrete, cleaning solutions and solvents, lubricant oils, adhesives, human waste, and chemical toilets. As described above, the project would be required to comply with all standards required through federal, state, County, and municipal regulations, in addition to project-specific plans review by the City, which would ensure potential impacts related to hazardous materials would not be significant.

The project would be limited to townhome residences, residential amenities, and some recreational uses, which are not typically characteristic of generating, releasing, or using large amounts of hazardous materials. During operations of the project, the only hazardous materials anticipated for transport, use, or disposal are routinely used household products such as cleaners, paint, solvents, motor oil/automotive products, batteries, and garden maintenance products. The use, handling, and disposal of these products are addressed by household hazardous waste programs that are part of the Integrated Waste Management Plan of the County, and therefore the project is not expected to create a significant hazard to the public or environment through hazardous upsets or accidents. For these reasons, the project is not expected to result in potential upset and accident conditions involving release of hazardous materials in the environment; and impacts from a foreseeable upset would be **less than significant**.

Threshold No. 3: Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

The project site is located within 0.25 miles of an existing or proposed school. The closest school to the project site is Palomar College, located approximately 0.2 miles east of the project site. However, the project is not expected to emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste beyond routinely used household products such as cleaners, paint, solvents, motor oil/automotive products, batteries, and garden maintenance products. Uses of these materials are typical of such residential land uses. Considering the project is surrounded by existing development, including industrial and commercial uses between the project site and Palomar College, project impacts related to exposing an existing or proposed school to hazardous materials would be **less than significant.**

Threshold No. 4. Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

As part of the Phase I ESA prepared for the project site (Appendix F), a database search report was completed, which documents various federal, state, and local regulatory database searches regarding properties with known or suspected releases of hazardous materials, chemical handlers, and/or polluters. As outlined above in Section 3.8.1, Existing Conditions, the project site is not located on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5. Therefore, this impact would be **less than significant**.

Threshold No. 5: For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

The closest airport to the project site is the McClellan-Palomar Airport, which is located approximately 5.5 miles west of the project site. The project site is located within Review Area 2 of the McClellan-Palomar Airport, which limits the height of structures in areas of high terrain. Given that that project site is not located within an area with high terrain, no height limit restrictions apply to the project within the Airport Influence Area (San Diego County Regional Airport Authority 2011). Therefore, this impact would be **less than significant**.

Threshold No. 6: Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

According to the General Plan Safety Element, the San Marcos Emergency Operations Plan (EOP) governs the operations of the City during a disaster. This plan addresses response to moderate evacuation scenarios, including the identification of evacuation points and general routes (City of San Marcos 2012).

Additionally, the City is a participating jurisdiction in the County Operational Area EOP, which provides a planned response to disasters within the operational area. The project would conform with the standards set forth in the Operational Area EOP and would be required to abide by the standards set forth in the San Marcos EOP. Implementation of the project is not expected to impact any roadway or staging areas that are identified in any emergency planning documents and would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. As required under the CFC, the project would be required to present development plans that afford fire and emergency responders suitable fire access roads' dimensions and surfaces (Chapter 5, Sections 503.1 through 503.4 of the CFC), and an adequate number of emergency-rated entrances to the community (Appendix D, Section D106 of the CFC). The proposed points of entry and private driveways will be reviewed by SMFD and would be required to meet the qualifications for emergency access to and from the project site. Furthermore, as described in Chapter 3.13, Public Services, of this EIR, the Preliminary Fire Emergency Response Analysis prepared for the project (Appendix J to this EIR) determined that SMFD could provide emergency response to the project site within its internal 7-minute response time from Fire Station 1. Therefore, it is determined that impacts related to emergency response or emergency evacuation as a result of the project would be **less than significant**.

Threshold No. 7: Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

As described in Chapter 5 of this EIR, wildfire was an environmental topic area found not to be significant as it relates to the project site. The project site is not located in any fire hazard severity zones (CAL FIRE 2022). The project site is an undeveloped infill lot that is relatively flat and shows signs of previous disturbance. The project would not include associated infrastructure that may exacerbate fire risk. Additionally, the project would be required to comply with all applicable state and local fire codes, including compliance with the CFC and SMFD, which require a design that affords fire and emergency responders suitable fire access roads' dimensions and surfaces (Chapter 5, Sections 503.1 through 503.4 of the CFC), and an adequate number of emergency-rated entrances to the community (Appendix D, Section D106 of the CFC). Furthermore, as determined in the Fire Response Summary Letter prepared for the project (Appendix J to this EIR), SMFD's existing Station 1 would adequately serve the project site while maintaining SMFD's response goals.

For the reasons stated above and considering the project site is located in an urbanized area surrounded on all sides by existing development, implementation of the project would not expose people or structures to risk of loss, injury, or death involving wildfires, and impacts would be **less than significant**.

3.8.5 Cumulative Impact Analysis

Hazardous materials impacts are generally site specific and thus handled on a site-by-site basis. Identified cumulative projects are located more than 0.25 miles from the project site and thus would be unlikely to result in cumulative impacts to hazardous and hazardous materials together with the project. In addition, any cumulative project would be required to identify existing hazardous materials on site and comply with existing regulations related to use, transport, and disposal of hazardous materials. Similarly, all cumulative projects would be required to analyze and properly mitigate any impacts to the existing evacuation plan if impacts are identified.

With regard to wildfire hazards, any of the cumulative projects proposed within the wildland urban interface would be required to meet minimum fire fuel modification and/or clearing requirements in addition to meeting whatever standards of the various fire codes in effect at the time of building permit issuance. For projects within the City, these requirements are implemented through preparation of and compliance with a Fire Protection Plan, which is reviewed and approved by the Fire Marshal.

Therefore, the project's and cumulative projects' compliance with applicable regulations related to hazards and wildfire would ensure impacts related to hazards and hazardous materials would be **less than significant**.

3.8.6 Mitigation Measures

No impacts to hazards and hazardous materials were identified; thus, no mitigation measures are required.

3.8.7 Conclusion

As discussed above in Section 3.8.4, the project site is currently undeveloped and is not listed on any hazardous materials sites or databases. Construction and operation of the project is not expected to result in the transport, release, or disposal of any significant hazardous materials. Development of the project would not interfere with an adopted emergency response plan or emergency evacuation plan. Lastly, the project site is not designated as located within a high fire severity zone and proposed residential development on site would be constructed in accordance with all applicable fire codes and regulations. As such, project-level and cumulative-level impacts related to hazards and hazardous materials would be **less than significant**.

3.9 Hydrology and Water Quality

This section describes the existing hydrology and water quality of the proposed Gran Vista Specific Plan Project (project), identifies associated regulatory requirements, and evaluates potential impacts related to implementation of the project.

The analysis in this chapter relies on the following reports prepared for the project:

- Geotechnical Evaluation for the Proposed "Las Posas" Residential Development, prepared by LGC Geotechical Inc., July 15, 2021 (included as Appendix E to this environmental impact report [EIR]).
- Preliminary Drainage Study for Gran Vista, prepared by Hunsaker & Associates, May 20, 2022 (included as Appendix G to this EIR).
- Storm Water Quality Management Plan for Gran Vista, prepared by prepared by Hunsaker & Associates, May 20, 2022 (included as Appendix H to this EIR).

Table 3.9-1 summarizes the project- and cumulative-level hydrology and water quality impact analysis by threshold.

Table 3.9-1. Hydrology and Water Quality Summary of Impacts

Threshold of Significance	Project-Level Impact	Cumulative-Level Impact	Significance Determination
No. 1: Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality.	Less than Significant	Less than Significant	Less than Significant
No. 2: Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.	Less than Significant	Less than Significant	Less than Significant
No. 3: Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site.	Less than Significant	Less than Significant	Less than Significant
No. 4: Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite.	Less than Significant	Less than Significant	Less than Significant
No. 5: Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.	Less than Significant	Less than Significant	Less than Significant
No. 6: Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would impede or redirect flood flows	Less than Significant	Less than Significant	Less than Significant

Table 3.9-1. Hydrology and Water Quality Summary of Impacts

Threshold of Significance	Project-Level Impact	Cumulative-Level Impact	Significance Determination
No. 7: In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation.	Less than Significant	Less than Significant	Less than Significant
No. 8: Conflict with or obstruct implementation of water quality control plan or sustainable groundwater management plan?	Less than Significant	Less than Significant	Less than Significant

3.9.1 Existing Conditions

This section details the existing hydrology, water quality and groundwater conditions on the project site.

Hydrologic Setting

The project site is located at the northeastern corner of W Mission Road and N Las Posas Road in the City of San Marcos (City), San Diego County, California. The site is bounded to the southwest by W Mission Road and to the east by N Las Posas Road. The project site is primarily flat with two mass graded pads. Site surface conditions generally consist of rolling unimproved earthen terrain, with low-growing vegetation. Surface drainage is directed toward the southwestern corner of the property toward W Mission Road. Elevation on the project site is approximately 575 feet above mean sea level.

Water arrives on site via natural rainfall only. Rainfall runoff from the site typically only occurs during a significant wet weather event. Water that does accumulate on site generally drains in a southwestern direction to an existing 12-inch corrugated metal pipe riser to a 12-inch corrugated metal pipe to meet up with the commercial site to the south of the project site. Water is then conveyed west through a storm channel and eventually downstream to Las Posas Creek south. The project site is mostly located outside of the Federal Emergency Management Agency (FEMA) 100-year floodplain zone, with the exception of a small portion of the southwestern portion of the site, which is located in Zone X, and the northeastern edge of the project site, which is located in Zone AE, of the Flood Insurance Rate Map Panel 06073C0789H. Zone X is defined as areas determined to be outside the 0.2% chance of flooding each year and Zone AE is defined as having a 1% chance of flooding every year.

Water Quality

The project is located within the jurisdiction of the San Diego Regional Water Quality Control Board (RWQCB). The San Diego Region is divided into 11 hydrologic units. The project site is located in Richland Hydrologic Subarea (HSA) (HSA 904.52), within the San Marcos Hydrologic Area (HA) (HA 904.52) which is part of the Carlsbad Watershed Hydrologic Unit (HU) (HU 904.00) (RWQCB 2021a). The Carlsbad HU is a triangular area covering approximately 210 square miles (SWRCB 2002). This hydrologic unit is bordered by San Luis Rey HU to the north and San Dieguito HU to the east and south. The Carlsbad HU includes one small coastal lagoon (Loma Alta Slough) and four major coastal lagoons, including Buena Vista, Agua Hedionda, Batiquitos, and San Elijo (SWRCB 2002). The Carlsbad HU is separated into four primary subwatersheds based on topographical drainage areas to creek systems, including 904.1, San Luis Rey River; 904.3, Agua Hedionda Creek; 904.5, San Marcos Creek; and 904.6, Escondido Creek. Each of these subwatershed areas is further refined by eight creek system branches divided into hydrographic subareas (City of San Marcos 2012a).

The protection of watersheds and water quality is a prominent concern for the City since all of the major creeks and their tributaries (San Marcos, Agua Hedionda, and Escondido) are listed by the State Water Resources Control Board (SWRCB) as impaired for a variety of pollutants that ultimately affect the water quality of surface and groundwater supplies and biological resources. The City has partnered with other jurisdictions in the watersheds to implement water quality management plans for nutrients and bacteria in coordination with the San Diego RWQCB to protect the watersheds and address the water body impairments. The City is the lead agency for the nutrient management plan in the Upper San Marcos Creek Watershed (City of San Marcos 2012a).

The San Diego RWQCB has adopted the Water Quality Control Plan for the San Diego Basin (Basin Plan) (RWQCB 2021b) that outlines beneficial uses and water quality objectives that are protective of the beneficial uses for each of the HSAs in the City of San Marcos General Plan (General Plan) area. In addition, the San Diego RWQCB has adopted Order R9-2007-0001, Waste Discharge Requirements for Discharges of Urban Runoff From the Municipal Separate Storm Sewer Systems (MS4s) (RWQCB 2007). The City regionally and locally implements the requirements of Order R9-2007-0001. This includes best management practice (BMP) inspection programs for businesses, municipal facilities, and treatment control facilities; preventative programs such as street sweeping and storm drain facility cleaning; monitoring water quality within the City; and integrating site design, source control, low impact development (LID), treatment controls, and hydromodification design for City projects and private development and redevelopment to reduce the amount of polluted stormwater entering the City's storm drain system (City of San Marcos 2012a).

Due to the undeveloped condition of the project site and relatively flat terrain, the project site in current conditions does not contribute to water quality issues in the City.

Groundwater

As described in the Preliminary Geotechnical Evaluation prepared for the project (Appendix E), shallow groundwater was not encountered during drilling operations, which included excavations up to a depth of 15.5 feet below existing ground surfaces. Localized perched groundwater may be present but is also not anticipated to be a factor in site development, with the exception that seasonal water levels are likely to impact stormwater management.

The Basin Plan identifies beneficial uses for groundwater in the four primary subwatersheds as municipal, agricultural, and industrial uses. The City is located in the California Department of Water Resources (DWR) South Coast Hydrologic Region. DWR Bulletin 118 identifies the San Marcos Area as Basin 9-32 (DWR 2020). The DWR San Marcos Area is 2,129 acres. This groundwater basin is located entirely within San Marcos Creek HAS 904.52, which is designated as impaired and has a hydrologic connection to Lake San Marcos. Other minor groundwater basins and wells are located throughout the General Plan area outside of Basin 9-32; however, Basin 9-32 is the only groundwater basin formally designated in the General Plan area.

The implementation of watershed protection programs in the City to protection the beneficial uses identified in the Basin Plan is critical to protecting the City's ability to use these resources. Due to the undeveloped condition of the project site, the project site in current conditions does not contribute to groundwater contamination, nor is groundwater used in current conditions. The project would connect to existing City infrastructure for water use and would not use groundwater for construction or operation.

3.9.2 Regulatory Setting

This section details the applicable federal, state, and local regulations pertaining to hydrology and water quality.

Federal

Federal Emergency Management Agency

FEMA administers the National Flood Insurance Program to provide subsidized flood insurance to communities that comply with FEMA regulations limiting development in floodplains. FEMA also issues Flood Insurance Rate Maps that identify which land areas are subject to flooding. These maps provide flood information and identify flood hazard zones in the community. The standard for flood protection is established by FEMA, with the minimum level of flood protection for new development determined to be the 1% annual exceedance probability (i.e., the 100-year flood event). A small portion of the project site is located within a 100-year flood zone.

Federal Clean Water Act

The Clean Water Act (CWA) establishes the basic structure for regulating discharges of pollutants into the waters of the United States and regulating quality standards for surface waters. The basis of the CWA, the Federal Water Pollution Control Act, was enacted in 1948; the act was significantly reorganized and expanded in 1972. The Clean Water Act became the act's common name with amendments in 1977.

Under the CWA, the U.S. Environmental Protection Agency (EPA) has implemented pollution control programs such as setting wastewater discharge standards for industry. The EPA has also set water quality standards for contaminants in surface waters. The CWA made it unlawful to discharge any pollutant from a point source into navigable waters unless a permit was obtained.

Under Section 303(d) of the CWA, states are required to develop lists of water bodies that would not attain water quality objectives after implementation of required levels of treatment by point-source dischargers (municipalities and industries). Section 303(d) requires that the state develop a TMDL for each of the listed pollutants. The TMDL is the amount of loading that the water body can receive and still be in compliance with water quality objectives. The TMDL can also act as a plan to reduce loading of a specific pollutant from various sources to achieve compliance with water quality objectives. The TMDL prepared by the state must include an allocation of allowable loadings to point and nonpoint sources, with consideration of background loadings and a margin of safety. The TMDL must also include an analysis that shows the linkage between loading reductions and the attainment of water quality objectives. EPA must either approve a TMDL prepared by the state or, if it disapproves the state's TMDL, issue its own. National Pollutant Discharge Elimination System (NPDES) permit limits for listed pollutants must be consistent with the waste load allocation prescribed in the TMDLs. After implementation of a TMDL, it is anticipated that the problems that led to placement of a given pollutant on the Section 303(d) list would be remediated.

National Pollutant Discharge Elimination System

The NPDES permit system was established in the federal CWA to regulate municipal and industrial discharges to surface waters of the United States. Sections 401 and 402 of the CWA contain general requirements regarding NPDES permits. Section 307 of the CWA describes the factors that EPA must consider in setting effluent limits for priority pollutants.

Nonpoint sources are diffuse and originate from a wide area rather than from a definable point. Nonpoint pollution often enters receiving waters in the form of surface runoff, but is not conveyed by way of pipelines or discrete conveyances. As defined in the federal regulations, such nonpoint sources are generally exempt from federal NPDES permit program requirements. However, three types of nonpoint source discharges are controlled

by the NPDES program: nonpoint source discharge caused by general construction activities, the general quality of stormwater in municipal stormwater systems, and discharges associated with industrial operations. The 1987 amendments to the CWA directed EPA to implement the stormwater program in two phases. Phase I addressed discharges from large (population 250,000 or above) and medium (population 100,000 to 250,000) municipalities and certain industrial activities. Phase II addresses all other discharges defined by EPA that are not included in Phase I.

In accordance with NPDES regulations, in order to minimize the potential effects of construction runoff on receiving water quality, the state requires that any construction activity that disturbs 1 acre or more must obtain a General Construction Activity Stormwater Permit. Permit applicants are required to prepare a stormwater pollution prevention plan (SWPPP) and implement BMPs, such as erosion and sediment control and non-stormwater management measures, to reduce construction effects on receiving water quality.

Examples of typical BMPs implemented in SWPPPs include using temporary mulching, seeding, or other suitable stabilization measures to protect uncovered soils; storing materials and equipment to ensure that spills or leaks cannot enter the storm drain system or surface water; developing and implementing a spill prevention and cleanup plan; installing traps, filters, or other devices at drop inlets to prevent contaminants from entering storm drains; and using barriers, such as straw bales or plastic, to minimize the amount of uncontrolled runoff that could enter drains or surface water.

The project would be subject to permit requirements and would develop and implement a project-specific SWPPP to minimize construction activity impacts.

State

California Water Code Division 7 (Porter-Cologne Act)

The California Water Code contains provisions regulating water and its use. Division 7 establishes a program to protect water quality and beneficial uses of state water resources including groundwater and surface water. The SWRCB and RWQCB administer the program and are responsible for control and water quality. They establish waste discharge requirements, oversee water quality control planning and monitoring, enforce discharge permits, and establish groundwater and surface water quality objectives.

State Water Resources Control Board

In California, the SWRCB has broad authority over water-quality control issues for the state. The SWRCB is responsible for developing statewide water quality policy and exercises the powers delegated to the state by the federal government under the CWA. Other state agencies with jurisdiction over water quality regulation in California include California Department of Public Health (for drinking water regulations), the California Department of Pesticide Regulation, the California Department of Fish and Wildlife, and the Office of Environmental Health and Hazard Assessment.

Construction General Permit

Owners and operators of construction activities who disturb 1 or more acres of soil, or who disturb less than 1 acre but are part of a larger common plan of development that in total disturbs 1 or more acres, are required to obtain coverage under the SWRCB's Order 2009-0009-DWQ (as amended by 2010-0014-DWQ and 2012-0006-DWQ), the Construction General Permit. Construction and demolition activities subject to this permit include clearing, grading,

grubbing, and excavation or any other activity that results in a land disturbance equal to or greater than 1 acre. Applicants are required to submit a notice of intent to the SWRCB and prepare a SWPPP. The SWPPP must identify BMPs that are to be implemented to reduce construction impacts on receiving water quality based on potential pollutants. The SWPPP also must include descriptions of the BMPs to be implemented to reduce pollutants in stormwater discharges after construction phases are completed at a site (post-construction BMPs).

Regional Water Quality Control Board

The project site is situated within the jurisdiction of the San Diego RWQCB (Region 9). The San Diego RWQCB has the authority to implement water quality protection standards through the issuance of permits for discharges to waters at locations within its jurisdiction.

The project site is located in the Richland HSA within the San Marcos HA, which is part of the Carlsbad HU. The Basin Plan was prepared by the RWQCB in compliance with the federal CWA and the Porter-Cologne Act and establishes water quality objectives and implementation programs to meet stated objectives and to protect the beneficial uses of water bodies in the area. Because the City is located within the RWQCB's jurisdiction, all discharges to surface water or groundwater are subject to the Basin Plan requirements.

In May 2013, the San Diego RWQCB adopted Order R9-2013-0001, the new municipal NPDES permit for 39 municipal, county government, and special district entities located in southern Orange County, southwestern Riverside County, and San Diego County that own and operate large municipal separate storm sewer systems (MS4s) that discharge stormwater runoff and non-stormwater runoff to surface waters throughout the San Diego region. This permit requires development projects to minimize or eliminate the impacts of such development on water quality. The project is subject to the requirements of the MS4 Permit as it is implemented via the Carlsbad Watershed Urban Runoff Management Program. The specific requirements include the selection of appropriate BMPs to avoid, prevent, or reduce the pollutant loads entering the storm drain system and receiving waters. The permit was amended in February 2015 by Order R9-2015-0001 and in November 2015 by Order R9-2015-0100.

Provision D.1.a of Order R9-2013-0001 requires the San Diego Stormwater Co-Permittees to continue water monitoring programs established within previous orders and pursuant to the approved Hydromodification Management Plan (2011). The City is one of the co-permittees.

To comply with Order R9-2013-0001, as amended, the September 2020 Model BMP Design Manual – San Diego Region (BMP Design Manual) was developed to provide county-specific project design and post-construction stormwater requirements for development projects and to replace the prior San Diego Regional Model Standard Urban Stormwater Mitigation Plan (County of San Diego 2020). The BMP Design Manual was used to recommend BMPs and LID features for this project. LID is an approach to land development that uses multiple small-scale natural detention and filtration features to manage stormwater as close to its source as possible. LID employs principles such as preserving and re-creating natural landscape features, minimizing effective imperviousness to create functional and appealing site drainage that treats stormwater as a resource rather than a waste product.

Local

Carlsbad Watershed Management Area Water Quality Improvement Plan

On May 8, 2013, the San Diego RWQCB adopted Order R9-2013-0001, an NPDES MS4 Permit, regulating discharges from Phase I MS4s in the San Diego region (SWRCB 2015). Provision B of the permit requires Responsible Agencies in each of the region's Watershed Management Areas to develop water quality

improvement plans (WQIPs) that identify water quality conditions and strategies to improve water quality within the watershed. Through the WQIP approach, Highest Priority Water Quality Conditions within the Watershed Management Areas are identified and strategies are implemented through the Responsible Agencies' jurisdictional runoff management plan to progressively improve water quality. The plans contain an adaptive planning and management process and a public participation component. The Carlsbad Watershed Management Area WQIP was prepared in May 2018 for the Carlsbad Watershed Management Area Responsible Agencies, which include the Cities of Carlsbad, Encinitas, Escondido, Oceanside, San Marcos, Solana Beach, and Vista and the County of San Diego (Carlsbad WMA Responsible Agencies 2016).

San Marcos Storm Water Standards

The City has adopted the use of the BMP Design Manual for the San Diego region as the City's Stormwater Standards Manual, and the project must comply with the standards and regulations contained therein (County of San Diego 2020).

City of San Marcos General Plan

Conservation and Open Space Element

The following are applicable goals and policies from the Conservation and Open Space Element of the General Plan related to hydrology and water quality (City of San Marcos 2012a):

Goal COS-6: Protect and restore appropriate surface water and groundwater beneficial uses through prioritizing the improvement of locally impaired water bodies within the City of San Marcos sub watersheds.

Policy COS-6.2: Promote watershed stewardship as the community norm.

Goal COS-7: Achieve sustainable watershed protection for surface and ground water quality that balances social, economical, and environmental needs.

Policy COS-8.4: Require new development and redevelopment to protect the quality of water bodies and natural drainage systems through site design, source controls, storm water treatment, runoff reduction measures, BMPs, LID, hydromodification strategies consistent with the Current San Diego RWQCB Municipal Stormwater NPDES Permit, and all future municipal stormwater permits.

Safety Element

The following goal and policy in the Safety Element of the General Plan are applicable to flooding and flood control (City of San Marcos 2012b):

Goal S-2: Minimize the risk to people, property, and the environment due to flooding hazards.

Policy S-2.2: Require existing private development to take responsibility for maintenance and repair of structures to resist flood damage.

Land Use and Community Design Element

The following goal and policies in the Land Use and Community Design Element of the General Plan are applicable to stormwater drainage facilities (City of San Marcos 2012c):

Goal LU-15: Flood control and storm water drainage facilities: ensure adequate flood control and storm water drainage is provided by the community.

Policy LU-15.1: Implement activities, practices, procedures, or facilities that avoid, prevent, or reduce pollution of the San Marcos Storm Water Conveyance System and receiving waters.

Policy LU-15.2: Improve inadequate or undersized drainage/flood control facilities to solve both small neighborhood and large regional drainage and flood control problems.

Policy LU-15.3: Avoid, to the extent possible, development in floodplain and flood prone areas.

Policy LU-15.4: Retain drainage courses in their natural condition, to the extent possible. Consider smaller-scale drainage improvements to protect the environment and avoid disturbing natural drainage courses; consider detention areas and raised building pads.

The project's consistency with applicable General Plan goals and policies is discussed in Section 3.10, Land Use and Planning. As detailed in Section 3.10, the project is consistent with the applicable goals and policies pertaining to hydrology and water quality.

City of San Marcos Ordinances

The Storm Water Management and Discharge Control Ordinance (San Marcos Municipal Code Chapter 14.15) requires that all new development and redevelopment activities comply with the stormwater pollution prevention requirements. These stormwater pollution prevention requirements, which are described in detail in Section 14.15.050 of the Municipal Code, Reduction of Pollutants in Storm Water, include construction, development and redevelopment, and residential BMPs.

3.9.3 Thresholds of Significance

The significance criteria used to evaluate the project impacts to hydrology and water quality are based on Appendix G of the CEQA Guidelines. According to Appendix G of the CEQA Guidelines, a significant impact related to hydrology and water quality would occur if the project would:

- **Threshold No. 1:** Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality.
- **Threshold No. 2:** Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.
- **Threshold No. 3:** Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on or off site.

- **Threshold No. 4:** Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite.
- **Threshold No. 5:** Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.
- **Threshold No. 6:** Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would impede or redirect flood flows.
- **Threshold No. 7:** In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation.
- **Threshold No. 8:** Conflict with or obstruct implementation of a water quality control or sustainable groundwater management plan.

3.9.4 Project Impact Analysis

This section considers the impacts to hydrology and water quality that would result from implementation of the project.

Threshold No. 1: Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Construction activities associated with the project could result in potential impacts to water quality. In addition to sediment erosion from ground-disturbing activities on the project site, fuels, oils, lubricants, and other hazardous substances used during construction could be released and potentially impact water quality.

The project would be required to comply with the SWRCB NPDES Construction General Permit Order No. 2009-0009-DWQ for stormwater discharges and general construction activities, and would incorporate standard BMPs, such as regular cleaning or sweeping of construction areas and impervious areas, as well as various stormwater BMPs, such as filtration media screens. In compliance with the Construction General Permit, a SWPPP will be prepared for the project that would specify BMPs that would be implemented during construction to minimize impacts to water quality. Lastly, project implementation of biofiltration, source control, and site design BMPs would effectively treat post-construction stormwater runoff prior to discharge from the site in compliance with the requirements of the BMP Design Manual and BMPs outlined in the Storm Water Quality Management Plan (SWQMP) (Appendix H).

The proposed biofiltration features on site would be subject to regular inspection and maintenance. The property owner is required, pursuant to San Marcos Municipal Code Section 14.15 and the BMP Design Manual, to enter into a stormwater management and discharge control maintenance agreement for the installation and maintenance of permanent BMPs prior to issuance of permits.

As described in Section 3.8, Hazards and Hazardous Materials, of this EIR, proposed residential uses do not typically generate, release, or use large amounts of hazardous materials. The only hazardous materials anticipated would be for transport, use, or disposal of routinely used household products such as cleaners, paint, solvents, motor oil/automotive products, batteries, and garden maintenance products, typical of residential land uses. Operation of the project is not expected to include uses that would violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface water or groundwater quality.

Furthermore, uses associated with construction and operation of the project would likely be less of a detriment to water quality than those uses associated with commercial uses, which is the current designated land use for the project site.

The implementation of biofiltration, source control, and site design BMPs and a SWPPP would effectively treat runoff prior to discharge from the site in compliance with the requirements of the BMP Design Manual and BMPs outlined in the SWQMP. Therefore, with implementation of all required BMPs as conditions of project approval, the project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface water or groundwater quality. Impacts to water quality would be **less than significant**.

Threshold No. 2: Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

As discussed above, localized perched groundwater may be present on the project site; however, no static groundwater was encountered that would be indicative of an aquifer occurring below the site. As described in the response to Threshold No. 1, the project would treat stormwater runoff through the use of biofiltration basins. All stormwater would be adequately treated by the biofiltration basins prior to being discharged to natural/undisturbed areas that could allow the runoff to infiltrate into the ground and eventually reach groundwater. As the project would use biofiltration and BMPs that would effectively treat stormwater runoff, it is not expected that project implementation would have a potentially significant adverse impact on groundwater quality or cause or contribute to an exceedance of applicable groundwater water quality objectives or degradation of beneficial uses.

Further, as discussed in Section 3.17, Utilities and Service Systems, the project would receive water from the Vallecitos Water District, which receives its water from the Metropolitan Water District of Southern California. The Metropolitan Water District obtains water from local sources and the Colorado River, via the Colorado River Aqueduct, and the Sacramento-San Joaquin Delta, via the State Water Project (MWD 2016). No groundwater would be used for project construction. During operation, irrigation for the site would tie into the proposed looping water system on site. Irrigation of landscaping throughout the project site would be required to comply with the City's Water Efficient Landscape Ordinance and the City's Landscape Manual. No groundwater would be used for operation of the project, and implementation of the project would not interfere with infiltration and groundwater recharge. Additionally, implementation of the project would not decrease groundwater basins through increasing water demand on site or impede sustainable groundwater management of any groundwater basin. Therefore, impacts to groundwater supplies would be **less than significant**.

Threshold No. 3. Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site?

There are no existing streams or rivers on site that would be substantially altered as a result of project implementation. As discussed above, the project site drainage is collected in a corrugated metal pipe riser that drains to a 12-inch corrugated metal pipe to meet up with the commercial site to the south of the project site. The remainder of the project site surface drains to the surrounding streets. The project site is currently a vacant lot and has no existing impervious areas. Project implementation would introduce new impervious areas and include on-site drainage systems that would alter the existing drainage pattern on the project site.

As described in response to Threshold No. 1, the project would be required to implement BMPs during construction and incorporate storm drain and biofiltration basins into development design. With implementation of the proposed biofiltration basins, the project would not generate runoff volumes that would significantly alter the overall drainage on site. Additionally, project-related runoff would be adequately treated prior to discharge into planned drainage systems via biofiltration and BMPs such that the project would not provide substantial additional sources of polluted runoff.

The project would be required to demonstrate adequate drainage on site and connections off site to existing facilities in project-specific plans to be reviewed and approved by the City. Further, implementation of BMPs and a SWPPP would ensure construction of the project would not result in substantial erosion or siltation on or off site. A SWQMP was prepared for the project and is included as Appendix H of this EIR. The SWQMP recommends storm drains, such as biofiltration basins, for the project site. Recommendations outlined in the SWQMP would be conditions of approval for the project. These components would properly handle runoff to meet regulatory requirements and to ensure post-development runoff quantities and rates that are similar to, or less than, pre-development conditions. Therefore, impacts to existing drainage on site would be **less than significant**.

Threshold No. 4. Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

Please refer to response to Threshold No. 3. Implementation of the project would increase the area of impervious surface on the project site, which could increase runoff flow rates and volumes. However, the project would include implementation of BMPs during construction and proposed storm drain and biofiltration basins during operation as recommended by the SWQMP (Appendix H). Drainage facilities such as curb inlets, storm drains, flow control, and detention vaults would assist in reducing runoff from the project site. This would ensure that the runoff quantities generated by the project do not significantly alter the existing drainage pattern of the site resulting in flooding. As concluded in the Drainage Study (Appendix G), development of the project would result in a 0.8% increase of peak discharge, which is considered negligible, and would not impact downstream properties or facilities. Impacts would be **less than significant**.

Threshold No. 5. Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

Please refer to response to Threshold No. 3 and Threshold No. 4. As described above, implementation of the project would increase impervious areas on-site. However, the project would include implementation of BMPs during construction and proposed storm drain and biofiltration basins during operation as recommended by the SWQMP (Appendix H). Drainage facilities such as curb inlets, storm drains, flow control, and detention vaults would assist in reducing runoff from the project site. These components would properly handle runoff to meet regulatory requirements and to ensure that post-development runoff would occur at rates that are similar to, or less than, pre-development conditions. Further, preparation and implementation of a SWPPP and implementation of project specific BMPs would ensure construction of the project would not result in substantial additional sources of polluted runoff. For these reasons, implementation of the project would not alter the course of a stream or river, and development of the project is not expected to exceed the capacity of existing or planned stormwater drainage systems or result in substantial sources of polluted runoff. Therefore, impacts related to stormwater drainage would be **less than significant**.

Threshold No. 6: Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would impede or redirect flood flows?

Please refer to the responses to Threshold Nos. 3, 4 and 5. The project would increase the impervious surface area on site in comparison to existing conditions, which could increase runoff flow rates or volumes. However, the project site and the immediate area are relatively flat and do not currently result in flooding during storms. As concluded in the Drainage Study (Appendix G), development of the project would result in a 0.8% increase of peak discharge, which is considered negligible, and would not impact downstream propertied or facilities. On-site drainage facilities and off-site drainage connections would be designed to collect and convey runoff from 100-year storm events. Implementation of the project is not expected to impede or redirect flood flows and impacts to stormwater drainage would be **less than significant**.

Threshold No. 7: In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation?

The project site is approximately 8.5 miles inland from the Pacific Ocean and would not be subject to inundation by tsunami. A small southwest portion of the site is located within a 100-year flood hazard area (Zone AE). Despite a small portion of the project site being located within a 100-year flood hazard area, the base flood elevation at the portion of the site that is within the 100-year flood hazard area would not reach to top of the slope. The project is not located in a tsunami or seiche zones. Given that the project site is not located near a large standing body of water, inundation by seiche (or standing wave) is considered negligible. The project site is generally flat with no steep slopes and does not contain slopes subject to mudflows; therefore, potential impacts related to inundation would be **less than significant**.

Threshold No. 8: Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

The Carlsbad Watershed Management Area WQIP was updated in May 2018 for the Carlsbad Watershed Management Area Responsible Agencies, which include the Cities of Carlsbad, Encinitas, Escondido, Oceanside, San Marcos, Solana Beach, and Vista and the County of San Diego. The purpose of the Carlsbad WQIP is to guide the Responsible Agencies' jurisdictional runoff management plans towards achieving improved water quality in MS4 discharges (or stormwater discharges) and receiving water bodies. The Responsible Agencies' jurisdictional runoff management plans contain the strategies, standards, and protocols by which each agency will implement their individual program in response to the priorities and goals established in the WQIP (Carlsbad WMA Responsible Agencies 2018).

The project is located within the San Marcos HA, which is the second largest within the Carlsbad Watershed Management Area. The Carlsbad Watershed Management Area Water WQIP outlines areas of priority water quality conditions and highest-priority water quality conditions. As discussed in Section 3.3, Biological Resources, no potential wetland or non-wetland water features are present within the project site. As such, the project would not conflict with or obstruct implementation of the Carlsbad Watershed Management Area Water WQIP or any other water quality plan. Further, the site is not located within a sustainable groundwater management plan area. Therefore, impacts relating to a conflict with a water quality control plan or sustainable groundwater management plan would be **less than significant**.

3.9.5 Cumulative Impact Analysis

The project and cumulative projects would result in an increase of impervious surfaces in the area. More specifically, other large development projects nearby would result in conversion of large pervious areas to impervious areas. This would potentially result in increased surface runoff, alteration of the regional drainage pattern, and flooding. However, like the project applicant, each individual project applicant would be required to hydrologically engineer the respective cumulative project sites to ensure that post-development surface runoff flows can be accommodated by the regional drainage system.

The project, in conjunction with cumulative projects that drain to the San Marcos HA, have the potential to increase the concentration of pollutants in surface runoff and downstream water quality. However, all cumulative projects would be subject to the same federal water quality standards and state waste discharge requirements as the project. This includes preparation of project-specific SWPPPs per the NPDES permit program and implementation of associated BMPs to prevent construction-related runoff from polluting receiving waters.

As discussed above, the project would incorporate biofiltration and BMPs into the project site design to limit the potential for water quality impacts to the greatest extent feasible. By incorporating these features into the project design, the project would not substantially contribute to a significant cumulative impact to water quality. Impacts would be **less than significant.**

3.9.6 Mitigation Measures

Based upon the analysis presented in Section 3.9.4 and 3.9.5, no impacts were identified, and no mitigation is required.

3.9.7 Conclusion

As described above, storm drainage components recommended by the Preliminary Drainage Study (Appendix G) would properly handle runoff to meet regulatory requirements and to ensure that post-development runoff would occur at rates that are similar to, or less than, pre-development conditions. Appropriate design of on- and off-site drainage facilities; implementation of a SWPPP, SWQMP, and BMPs; and implementation of all recommendations from the Preliminary Drainage Study and development-specific drainage plans would ensure the project would not substantially alter the drainage patterns on or off site or result in substantial polluted runoff. Therefore, impacts to hydrology and water quality as a result of the project would be less than significant.

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3.10 Land Use and Planning

This section analyzes the potential for the proposed Gran Vista Specific Plan Project (project) to have impacts related to land use and planning. This section considers consistency with applicable land use plans and habitat conservation plans.

Table 3.10-1 summarizes the project- and cumulative-level land use impact analysis for the project.

Table 3.10-1. Land Use Summary of Impacts

Threshold of Significance	Project-Level Impact	Cumulative-Level Impact	Significance Determination
No. 1: Physically divide an established community.	Less than Significant	Less than Significant	Less than Significant
No. 2: Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.	Less than Significant	Less than Significant	Less than Significant

3.10.1 Existing Conditions

This section describes the existing planning context for the project site, including the General Plan and Zoning designations that currently apply to the site.

Project Site

As shown in Figures 2-2 and 2-3, the project is located in north San Diego County within the northwestern portion of the City of San Marcos (City). The undeveloped project site is an approximately 7.6-acre site located at the northwest corner of N Las Posas Road and W Mission Road. The project site is located in an urban area of the City and surrounded by existing development, located in the College Area Neighborhood (City of San Marcos 2012a). The project site is undeveloped and reflects a history of disturbance.

Existing General Plan Designation

The City of San Marcos General Plan (General Plan) designates the 7.6-acre project site as Commercial (C) (City of San Marcos 2012a). Development allowed under this land use designation must be consistent with those uses outlined in the San Marcos Municipal Code and zoning ordinance, as well as the Commercial land use designation of the General Plan. The Commercial (C) designation generally allows for a wide range of retail activities, services, and offices. Please refer to Figure 2-4, Existing General Plan Land Use.

Existing Zoning Designation

Existing zoning of the project site is Commercial (C). The purpose of the Commercial land use designation is to "provide a business district for the full range of retail goods, services, and commercial centers that stabilize, maintain, and enhance the vitality of San Marcos in a supportive commercial setting adjacent to thoroughfares. Appropriate C Zone commercial uses will contribute to the range of service and destination retail, shopping centers, entertainment, and restaurant uses that generate a strong tax base" (City of San Marcos 2022). The Commercial zone is intended to implement and be consistent with the Commercial land use designation of the General Plan (City of San Marcos 2022). Please refer to Figure 2-6, Existing Zoning.

Surrounding Land Uses

The project site is immediately bordered by N Las Posas Road to the east and W Mission Road to the southwest. Beyond these adjacent roads, the project site is surrounded by residential uses to the north, west, and east; industrial uses to the south; and commercial uses to the south and east. A CVS Pharmacy is located directly south of the project site. Undeveloped lots are also located adjacent to the site to the west on W Mission Road and to the east across N Las Posas Road. Surrounding land uses outside of the immediately adjacent residential and commercial uses include designated industrial, commercial, single-family and multifamily residential, and schools/educational facilities. The closest freeway is State Route 78 located approximately 0.4 mile south of the project site.

3.10.2 Regulatory Setting

This section provides an overview of the regulatory setting related to planning and land use that applies to the project, including federal, state, regional, and local regulation and planning documents.

Federal

There are no federal codes, policies, or regulations regarding land use and planning that would apply to the proposed project.

State

California Planning and Zoning Law

The legal framework in which California cities and counties exercise local planning and land use functions is provided in the California Planning and Zoning Law, Government Code Sections 65000 et seq. Under state planning law, each city and county is required to adopt a general plan "for the physical development of the county or city, and any land outside its boundaries which bears relation to its planning" (Section 65300). The general plan expresses the community's development goals and embodies public policy relative to the distribution of future land uses, both public and private. A general plan consists of several elements, including land use, circulation, housing, conservation, open space, noise, and safety; other elements may be included at the discretion of the jurisdiction that relate to the physical development of the county or city.

Local

San Diego Association of Governments' San Diego Forward: The Regional Plan

The San Diego Association of Governments (SANDAG) is the federally designated metropolitan planning organization for the San Diego region. SANDAG serves as a forum for public decision making on regional issues such as growth, transportation, and land use in San Diego County and consists of representatives from each of the county's local jurisdictions. SANDAG builds consensus, develops strategic plans, obtains and allocates resources, and provides information on a broad range of topics pertinent to the region's quality of life.

The Regional Comprehensive Plan, adopted in 2004 by SANDAG, laid out key principles for managing the region's growth while preserving natural resources and limiting urban sprawl. The plan covered eight policy areas, including urban form, transportation, housing, healthy environment, economic prosperity, public facilities, our borders, and social equity (SANDAG 2004).

In 2011, SANDAG approved the 2050 Regional Transportation Plan (RTP) and Sustainable Communities Strategy (SCS). This approval marked the first time SANDAG's RTP included an SCS, consistent with the Sustainable Communities and Climate Protection Act of 2008, also known as Senate Bill 375. This RTP/SCS provided a blueprint to improve mobility, preserve open space, and create communities, all with transportation choices to reduce greenhouse gas emissions and meet specific targets set by the California Air Resources Board as required by Senate Bill 375 (SANDAG 2011). In 2010, the California Air Resources Board established targets for each region in California governed by a metropolitan planning organization.

On December 10, 2021, the SANDAG Board of Directors adopted San Diego Forward: The Regional Plan (Regional Plan) (SANDAG 2021). The Regional Plan combines the two previously described existing regional planning documents: the Regional Comprehensive Plan and the RTP/SCS. The Regional Plan updates growth forecasts and is based on the most recent planning assumptions from currently adopted land use plans, including the City's General Plan and other factors from the cities in the region and the county. SANDAG's Regional Plan will change in response to the ongoing land use planning of the City and other jurisdictions. For example, the City's General Plan, and other local cities' general plans, may change based on General Plan Amendments (GPAs) initiated by jurisdictions or landowner applicants. The GPAs may result in increases in development densities due to amendments of the regional category designations or zoning classifications. Accordingly, SANDAG's RTP/SCS forecasts of future development in the San Diego region, including location, must be coordinated closely with each jurisdiction's ongoing land use planning because that planning is not static, as recognized by the need for updates to SANDAG's RTP/SCS every 4 years.

San Diego Association of Governments' North County Multiple Habitat Conservation Program

The North County Multiple Habitat Conservation Program (MHCP) is a comprehensive conservation planning process that addresses the needs of multiple plant and animal species in northwestern San Diego County (SANDAG 2003). The MHCP encompasses the Cities of Carlsbad, Encinitas, Escondido, Oceanside, San Marcos, Solana Beach, and Vista. Its goal is to conserve approximately 19,000 acres of habitat, of which roughly 8,800 acres (46%) are already in public ownership and contribute toward the habitat preserve system for the protection of more than 80 rare, threatened, or endangered species.

The City began preparing the City of San Marcos Subarea Habitat Conservation Plan/Natural Community Conservation Plan (Draft San Marcos Subarea Plan) in May 2001. Although the Draft San Marcos Subarea Plan has not yet been approved by the U.S. Fish and Wildlife Service and California Department of Fish and Wildlife, the plan is a component of the adopted MHCP and is currently being used as a guide for open space design and preservation within the City (SANDAG 2001). The intent of the Draft San Marcos Subarea Plan is to identify a citywide preserve system that meets local and regional biological goals while minimizing fiscal and economic impacts to the City and adverse impacts on private property owners. To help achieve this goal, Focused Planning Areas have been designated with parcel-level preserve goals that would contribute to achieving local and regional conservation goals while minimizing adverse effects on property rights and property values. The project site is located within the northern Focused Planning Area within the MHCP planning area.

San Diego County Regional Airport Authority Land Use Compatibility Plan

The nearest public airport is the McClellan-Palomar Airport, which is approximately 55 miles southwest of the project site. The McClellan-Palomar Airport Land Use Compatibility Plan contains policies to promote land use compatibility between the McClellan-Palomar Airport and adjacent and proximate land uses, to the extent these areas are not already developed with existing uses, and to protect the public health, safety, and welfare. Using airport-related

forecasts and background data approved by the California Department of Transportation, Division of Aeronautics, the plan reflects anticipated growth of the airport over a 20-year horizon. The plan includes land use compatibility criteria and identifies policies applicable to the airport and surrounding land uses. The project site is not located within any of the McClellan-Palomar Airport Influence Areas (San Diego County Regional Airport Authority 2011).

City of San Marcos General Plan

The General Plan consists of the following elements:

- **Land Use and Community Design Element** – Describes the desired future physical composition of the planning area in terms of location, type, and intensity of new development and open space to ensure balanced development that maximizes the long-term livability of the San Marcos community.
- **Mobility Element** – Describes the mobility strategy for the City, which identifies a network of options including streets, sidewalks, trails, and transit that connect people with the City.
- **Conservation and Open Space Element** – Recognizes the habitat and scenic value of natural and cultural open spaces within the City and lists goals and policies that ensure long-term stewardship of these resources. This element also addresses climate change, water conservation, energy conservation, air quality, watersheds, and water quality.
- **Parks, Recreation and Community Health Element** – Identifies the recreational amenities and community service programs offered within the City and outlines goals for increased access to parks, trails, recreational facilities, and community service programs for all community members.
- **Safety Element** – Establishes policies and programs to protect public health, safety, and welfare of all residents and property. This element identifies and describes plans for response to natural and human-caused safety issues, including geologic, seismic, flood, and fire hazards.
- **Noise Element** – Identifies problematic noise sources within the City and outlines strategies to reduce overall ambient noise levels. This element also includes measures to strategically distribute land uses throughout the City.
- **Housing Element** – Describes the strategy for developing a variety of housing opportunities to accommodate all residents and preserve the quality of existing housing in order to promote safe, decent, and affordable housing within the 2021–2029 planning period.
- **Environmental Justice Element** – Highlights existing policies contained in other General Plan elements as they relate to environmental justice. This element is designed to promote a more equitable, safe, and healthy lifestyle for all residents and support the long-term needs of the community's most vulnerable populations.

The following goals and policies from the City's Land Use and Community Design Element pertain to planning and are applicable to the project (City of San Marcos 2012a):

Goal LU-1: Achieve a balanced distribution and compatible mix of land uses to meet the present and future needs of all residents and the business community.

Policy LU-1.1: Ensure that adjacent land uses complement one another by considering compatibility of activities, development patterns and architectural character elements, and access to various mobility choices.

Policy LU-1.3: Diversify land uses by providing mixed use land uses in strategic locations within the City that place housing adjacent to employment.

Goal LU-2: Promote development standards and land use patterns that encourage long-term environmental sustainability.

Policy LU-2.1: Promote compact development patterns that reduce air pollution and automobile dependence and facilitate walking, bicycling, and transit use.

Policy LU-2.2: Encourage new development to be sited to respond to climatic conditions, such as solar orientation, wind, and shading patterns.

Policy LU-2.3: Require the incorporation of green building practices, technologies, and strategies into development projects per code standards.

Policy LU-2.5: Promote landscaping (e.g., native, drought-tolerant plants) that minimizes demands on water supply.

Policy LU-2.7: Promote the installation of trees to reduce the urban heat island effect and green infrastructure to reduce storm water runoff.

Goal LU-3: Develop land use patterns that are compatible with and support a variety of mobility opportunities and choices.

Policy LU-3.1: Require that new development and redevelopment incorporate connections and reduce barriers between neighborhoods, transit corridors, and activity centers within the City.

Policy LU-3.7: Require new development to prepare traffic demand management programs.

Policy LU-3.8: Require new development and discretionary actions to annex into a Congestion Management Community Facilities District.

Goal LU-5: Promote community design that produces a distinctive, high-quality built environment with forms and character that create memorable places and enrich community life.

Policy LU-5.3: Use public landscaping, banners, and signage along streets, sidewalks, property frontages, and in public spaces to strengthen the City's identity and create a unique sense of place.

Policy LU-5.4: Require building and site design that respects the natural topography and iconic ridgelines that serve as the visual backdrop for San Marcos.

Policy LU-5.5: Encourage development of public spaces and plazas within commercial, mixed-use, and residential projects that include fire and water features that can accommodate civic events and function as community gathering areas.

Policy LU-5.6: Require a specific plan for strategic areas/properties that require high-quality design, orientation and development due to their location or visibility within the community.

Policy LU-5.7: Architecture shall be enhanced with high-end building materials, varied roof lines, and decorative details.

Goal LU-7: Direct and sustain growth and expansion in areas of San Marcos that can support a concentration of a variety of uses and are particularly suitable for multimodal transportation and infrastructure expansion and improvements.

Policy LU-7.2: Coordinate pedestrian, transit and infrastructure upgrades with infill and redevelopment opportunities.

Goal LU-8: Ensure that existing and future development is adequately serviced by infrastructure and public services.

Policy LU-8.1: New development shall pay its fair share of required improvements to public facilities and services.

Policy LU-8.2: Promote development timing that is guided by the adequacy of existing and/or expandable infrastructure, services, and facilities.

Goal LU- 11.: Schools: Ensure all residents have access to high-quality education.

Policy LU 11.2: Work with San Marcos Unified School District and developers to ensure adequate school facilities are funded as required by State law and through developer mitigation agreements between the school district and the developer. The City shall require a "will serve" letter substantiating that the developer has paid fees to the satisfaction of the school district prior to issuance of building permits.

Goal LU-14: Wastewater: Ensure an adequate wastewater system for existing and future development.

Policy LU-14.2: Ensure development approval is directly tied to commitments for the construction or improvement of primary water, wastewater, and circulation systems.

Goal LU-17: Utilities and Communications: Encourage provision of power and communication systems that provide reliable, effective and efficient service for San Marcos.

Policy LU-17.2: Require all new development and redevelopment to provide the technology to support multiple telecommunications facilities and providers such as multi-media products, wireless technologies, and satellite communications.

Policy LU-17.4: Require utility location to be shown on all site development plans at the time of development/project application

The General Plan includes goals and policies applicable to other areas, such as mobility, safety, noise, and conservation. The project's consistency with applicable General Plan goals and policies is presented in Section 3.10.4.

San Marcos Municipal Code and Zoning Ordinance, Title 20

The provisions of Title 20 of the San Marcos Municipal Code are referred to as the Zoning Ordinance. The Zoning Ordinance is based on the official Zoning Map of the City of San Marcos. The purpose of this Zoning Ordinance is to protect and promote the public health, safety, comfort, convenience, and general welfare of the San Marcos community; to implement the policies of the General Plan; and to provide the physical, environmental, economic, and social advantages that result from the orderly planned use of land resources.

3.10.3 Thresholds of Significance

The significance criteria used to evaluate the project impacts to land use and planning are based on Appendix G of the CEQA Guidelines. According to Appendix G of the CEQA Guidelines, a significant impact related to land use and planning would occur if the project would:

- **Threshold No. 1**: Physically divide an established community.
- **Threshold No. 2:** Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

3.10.4 Project Impact Analysis

This section considers the impacts to land use and planning that would result from the project.

Threshold No. 1: Would the project physically divide an established community?

The project site is currently undeveloped and surrounded by residential uses to the north, west, and east; industrial uses to the south; and commercial uses to the south and east. As described in Chapter 2, Project Description, of this EIR, the project proposes development of 120 townhomes on approximately 7.6 acres. The project would also include 92,645 square feet of common recreation area, landscaping, bio-retention areas, and circulation improvements. The project would have a density of approximately 15.8 dwelling units per acre.

The adjacent CVS parcel includes 99 existing spaces that would remain for the exclusive and ongoing use of CVS, which only requires 53 spaces to meet the City's Parking Ordinance for commercial uses. The project site currently contains an additional 38 existing parking spaces on the project site that would be shared between the project site and CVS. The City's Parking Ordinance requires the project to introduce an additional 20 guest spaces to meet the City's requirement for multifamily dwelling guest parking requirement of 1 space per 3 units. The project also includes 240 garage spaces, which would provide 2 garage spaces per unit, and therefore would comply with the City's Parking Ordinance.

Additionally, the project proposes a GPA and Rezone to change the General Plan designation and Zoning from Commercial (C) to Specific Plan Area (SPA), to allow for the proposed townhome dwelling unit development and associated amenities.

Although development of the proposed residential land uses would be inconsistent with the neighboring commercial uses, the project site is located in an urban part of the City within close proximity to existing residential development. Because the project site is surrounded on all sides by existing infrastructure, the project would not divide an established community, and therefore this impact would be **less than significant**.

Threshold No. 2: Would the project cause a significant environmental impact due to a conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

The project would conflict with the current General Plan and zoning designations for the site. However, as described above and in Chapter 2 of this EIR, the project proposes a GPA and Rezone to change the General Plan designation and Zoning from Commercial (C) to Specific Plan Area (SPA) to allow for the proposed townhome

dwelling unit development and associated amenities. These requested project entitlements/discretionary actions by the City are further outlined below:

- **Specific Plan** - A Specific Plan would be required to provide a comprehensive plan to ensure the efficient development of a new residential community. The Specific Plan serves as both a policy document and a regulatory document for the systematic implementation of the policies and goals of the General Plan.
- **General Plan Amendment** – A GPA would be required to re-designate the project site from Commercial to Specific Plan Area.
- **Rezone** - A Rezone would be required to re-designate parcels 219-121-15-00 and 219-121-16-00 from Commercial (C) to Specific Plan Area (SPA).
- **Tentative Map** – A Tentative Map will present specific lot configurations for the site.
- **Multifamily Site Development Plan** – A Site Development Plan will configure the site for townhome dwelling units, street configuration, infrastructure, and recreational open space.

Upon approval of the GPA/Rezone from Commercial (C) to Specific Plan Area (SPA), the project would be required to comply with the allowable residential uses outlined in the Specific Plan prepared for the project site (Appendix M).

Although the project would amend the land use designation, the concurrent process of amending the General Plan designation does not necessarily equate to consistency with the document. As such, a consistency analysis with the City's General Plan goals are included in Table 3.10-2 below.

Table 3.10-2. General Plan Consistency

Applicable General Plan Goals	Project Consistency with Policy
Conservation and Open Space Element	
Goal COS-1: Identify, protect, and enhance significant ecological and biological resources within San Marcos and its adaptive Sphere of Influence.	**Consistent.** Implementation of the project would result in potentially significant impacts to biological resources. However, compliance with existing regulations and implementation of **MM-BIO-1** and **MM-BIO-2** outlined in Section 3.3, Biological Resources, would ensure that the project would not conflict with the MHCP or draft San Marcos Subarea Plan, or other applicable regulations related to biological resources.
Goal COS-2: The City is committed to conserving, protecting, and maintaining open space, agricultural, and limited resources for future generations. By working with property owners, local organizations, and state and federal agencies, the City can limit the conversion of resource lands to urban uses.	**Consistent**. The project site is currently vacant and zoned for Commercial uses. The project site is surrounded by existing development and infrastructure and would not be considered open space. Implementation of the project would not convert any designated open space or agricultural uses.
Goal COS-3: Protect natural topography to preserve and enhance the natural beauty of San Marcos.	**Consistent**. The project site is currently vacant and zoned for Commercial uses. The project site is surrounded by existing development and infrastructure. Development of the project site would not destroy the existing characteristics of the surrounding area as described in Section 3.1, Aesthetics, of this EIR.

Table 3.10-2. General Plan Consistency

Applicable General Plan Goals	Project Consistency with Policy
Goal COS-4: Improve regional air quality and reduce greenhouse gas emissions that contribute to climate change.	**Consistent.** The project would result in fewer greenhouse gas emissions than the existing zoning, and the project would be required to implement all applicable checklist items within the City's 2020 Climate Action Plan.
Goal COS-6: Protect and restore appropriate surface water and groundwater beneficial uses through prioritizing the improvement of locally impaired water bodies within the City of San Marcos subwatersheds.	**Consistent.** The project would be required to comply with the NPDES State Water Resources Control Board Construction General Permit Order No. 2009-0009-DWQ for stormwater discharges and general construction activities, and would incorporate standard BMPs, such as regular cleaning or sweeping of construction areas and impervious areas, and various stormwater BMPs, such as filtration media screens. In compliance with the Construction General Permit, a SWPPP will be prepared for the project that would specify BMPs that would be implemented during construction to minimize impacts to water quality. Lastly, project implementation of biofiltration, source control, and site design BMPs would effectively treat post-construction stormwater runoff prior to discharge from the site in compliance with the requirements of the BMP Design Manual and BMPs outlined in the SWQMP.
Goal COS-7: Achieve sustainable watershed protection for surface and ground water quality that balances social, economical, and environmental needs.	**Consistent.** Please refer to the consistency response to Goal COS-6. Implementation of the project would not conflict with the goal to achieve sustainable watershed protection for surface and ground water quality.
Goal COS-8: Focus watershed protection, surface and groundwater quality management on sources and practices that the City has the ability to affect.	**Consistent.** Storm drainage components recommended by the Preliminary Drainage Study (Appendix G) would properly handle runoff from the project site to meet regulatory requirements and to ensure that post-development runoff would occur at rates that are similar to, or less than, pre-development conditions. Appropriate design of on- and off-site drainage facilities, implementation of a SWPPP, SWQMP, and BMPs, and implementation of all recommendations from the Preliminary Drainage Study and development-specific drainage plans would ensure the project would not substantially alter the drainage patterns on or off site or result in substantial polluted runoff.
Goal COS-11: Continue to identify and evaluate cultural, historic, archeological, paleontological, and architectural resources for protection from demolition and inappropriate actions.	**Consistent.** A Cultural Resources Report was prepared for the project site to ensure existing resources are protected (Appendix D). Implementation of the project would not impact any identified archaeological resources, historical resources, or any known human remains interred outside a formal cemetery. However, based upon the analysis presented in Section 3.4, Cultural Resources, the potential exists for impacts to unknown cultural resources resulting from project construction. These potentially significant impacts to archaeological resources and human remains would be mitigated to below

Table 3.10-2. General Plan Consistency

Applicable General Plan Goals	Project Consistency with Policy
	a level of significance through implementation of **MM-CR-1** through **MM-CR-4**. Specifically, implementation of **MM-CR-1** through **MM-CR-4** provide for the presence of archaeological and Native American monitors during ground disturbing activities that would be able to identify any previously unidentified cultural resources and to prevent inadvertent disturbance of any intact cultural deposits that may be present. Should any resources be identified, implementation of **MM-CR-1** through **MM-CR-4** would ensure proper handling and treatment of such resources by providing for a proper evaluation to determine whether additional archaeological work is necessary.
Land Use and Community Design Element	
Goal LU-1: Achieve a balanced distribution and compatible mix of land uses to meet the present and future needs of all residents and the business community.	**Consistent.** The project is a previously graded and disturbed site surrounded by existing development. While the project land use designation would not mirror immediately adjacent industrial and commercial land uses to the south, it would be consistent with the residential uses located directly to the north of the project site. The project would include the development of townhomes, which would provide a transition between the high-density residential development south of the project site and the low-density single-family residences to the north. The project would be consistent with the goal to achieve a balanced distribution and compatible mix of land uses to meet the present and future needs of the City.
Goal LU-2: Promote development standards and land use patterns that encourage long-term environmental sustainability.	**Consistent.** Implementation of the project would implement the overarching goals of the City's General Plan, through various proposed features and components such as providing housing near transit and existing commercial and industrial uses; providing diverse and higher-density housing; designating opportunities for recreational and open space areas; and supporting vehicular, bicycle, and pedestrian modes of travel.
Goal LU-3: Develop land use patterns that are compatible with and support a variety of mobility opportunities and choices.	**Consistent.** NCTD operates the Palomar College SPRINTER Station located approximately 0.35 miles from the project's W Mission Road entrance. Additionally, multiple Breeze transit stations are located within close proximity to the project site; the closest is approximately 150 feet from the project entrance. The project would also be located within walking and biking distance from retail, school, park and other facilities. The project would therefore support a variety of mobility opportunities and would promote multimodal transportation, consistent with General Plan Land Use Element Goals LU-2, LU-3, and LU-7. The project would be designed to ensure aesthetic consistency with the surrounding area and compliance with General Plan Land Use Element Goal LU-5. Consistent with Goal LU-8, the project would be required to pay its fair share public facility

Table 3.10-2. General Plan Consistency

Applicable General Plan Goals	Project Consistency with Policy
	fees and other development impact fees consistent with the City's Municipal Code (refer to Sections 3.13, 3.14, 3.15, and 3.17 for a discussion of potential impacts to public infrastructure and facilities and required development fees).
Goal LU-5: Promote community design that produces a distinctive, high-quality built environment with forms and character that create memorable places and enrich community life.	**Consistent**. All final project plans, including project elevations as shown in Figures 3.1-1A through 3.1-1D, would be reviewed by the City and would be expected to create a cohesive character with the surrounding environment. The project would follow the architectural and landscape design guidelines to create memorable places within the City.
Goal LU-6: Maintain a supportive business climate and a healthy, sustainable economy to retain and attract high quality businesses and create additional employment opportunities.	**Inconsistent.** The project would develop residential uses at a site that is currently undeveloped and zoned for commercial uses. The residential development as part of the project would take away the opportunity for commercial development in proximity to existing industrial and commercial development.
Goal LU-7: Direct and sustain growth and expansion in areas of San Marcos that can support a concentration of a variety of uses and are particularly suitable for multimodal transportation and infrastructure expansion and improvements.	**Consistent**. The project would promote sustainability through locating residential uses on an underutilized vacant site proximate to existing schools, markets, parks, transit, and shopping centers. Vehicle miles traveled would be reduced by sustainably locating residential uses in this vacant area. Infrastructure and services plans are provided with the Gran Vista Specific Plan (Appendix M). As discussed in Section 3.17 of this EIR, Public Utilities and Service Systems, impacts to utility and service systems were determined to be less than significant.
Goal LU-8: Ensure that existing and future development is adequately serviced by infrastructure and public services.	**Consistent.** As discussed in Section 3.13, Public Services, of this EIR, the project would be adequately served by San Marcos Fire Department, San Marcos Sheriff's Department, and SMUSD. Additionally, as discussed in Section 3.17, impacts to utility and service systems were determined to be less than significant.
Goal LU-11: Schools: Ensure all residents have access to high-quality education.	**Consistent.** As discussed in Section 3.13 of this EIR, the project would generate approximately 28 elementary school students, 12 middle school students, and 15 high school students. Prior to project approval, the project would be required to obtain will-serve letters from SMUSD or servicing schools to confirm such schools have adequate capacity. Furthermore, the project would be required to contribute development fees to SMUSD pursuant to California Education Code Section 17620 et. seq. and Government Code Sections 65995(h) and 65996(b), as well as the City's Municipal Code Section 17.52.050. As concluded in Section 3.13, the project would have less than significant impacts on schools.

Table 3.10-2. General Plan Consistency

Applicable General Plan Goals	Project Consistency with Policy
Goal LU-14: Wastewater: Ensure an adequate wastewater system for existing and future development.	**Consistent**. Implementation of the project would require the construction of private on-site sewer lines connecting to the public system at two locations. The connections to the existing system will depend on on-site grading and utility design. The City requires that VWD provide a letter of Sewer Availability for proposed developments within VWD. Prior to issuing such a letter, VWD will conduct a sewer study for the project to determine whether the current infrastructure is sufficient to accommodate the development project, and/or to provide recommendations for capital improvements to provide service. A Water and Sewer Study was prepared in March 2022 (Appendix L) and is further discussed in Section 3.17. As concluded in Section 3.17, impacts to wastewater facilities would be less than significant.
Goal LU-17: Utilities and Communications: Encourage provision of power and communication systems that provide reliable, effective and efficient service for San Marcos.	**Consistent.** Communications systems for telephones, computers, and cable television are serviced by utility providers such as AT&T, Cox, Spectrum, and other independent cable companies. No specific systems upgrades are proposed.
Mobility Element	
Goal M-1: Provide a comprehensive multimodal circulation system that serves the City land uses and provides for the safe and effective movement of people and goods.	**Consistent.** The project would promote sustainability through locating residential uses on an underutilized vacant site proximate to existing schools, markets, parks, transit, and shopping centers. Vehicle miles traveled would be reduced by sustainably locating residential uses on a vacant site within this developed area. As discussed in Section 3.15, Transportation, roadways and intersection with the project study area would operate at LOS D or better. In addition, the project would be required to comply with Title 24 requirements and would include amenities such as electric vehicle charging stations, electric or solar water heaters, reduced landscaping water use, and trees.
Goal M-2: Protect neighborhoods by improving safety for all modes of travel and calming traffic where appropriate.	**Consistent**. The project would be required to provide a proposed circulation plan outlining safe movement within the project site, including emergency access, subject to review by the City and the San Marcos Fire Department. The conceptual site plan for the project is provided as Figure 2-1. All final project plans would be subject to review and approval by the City. Under existing conditions, on-street parking is prohibited on N Las Posas Road and W Mission Road. The internal circulation network for the project would not include any hazardous design features or incompatible uses. The project would include circulation amenities and improvements such as an interconnected mobility system for bicycles, pedestrians, and vehicles in order to provide residents with safe movement within the project site; connections to existing roadways within the within the vicinity of the project site; and access to regional arterial and highway networks and SPRINTER/Breeze transit services.

Table 3.10-2. General Plan Consistency

Applicable General Plan Goals	Project Consistency with Policy
Goal M-3: Promote and encourage use of alternative transportation modes, including transit, bicycles, neighborhood electric vehicles (NEVs), and walking, within the City.	**Consistent.** NCTD provides public transportation within the City and the County of San Diego for Coaster rail service, SPRINTER light rail service, and Breeze bus service. The NCTD operates the Palomar College Station SPRINTER and Breeze transit station located approximately 0.3 miles from the project's W Mission Road entrance. The project would be required to comply with Title 24 requirements, would include amenities such as electric vehicle charging stations, and would implement a Transportation Demand Management Plan.
Parks, Recreation, and Community Health Element	
Goal PR-1: Plan for, acquire, develop, and maintain a system of local parks connected through an integrated network of trails and high quality recreational facilities.	**Consistent.** As shown in Figure 2-1, the project proposes 137,193 square feet of recreation area on site for residents, which would provide for private open space/passive recreational use for residents on site. Additionally, the project applicant/developer would be required to pay the City's Public Facilities Fees. Developer payment towards the City's Public Facilities Fees would go towards the acquisition and development of local and community park facilities throughout the City to offset the demand on public park space.
Safety Element	
Goal S-1: Reduce risks to the community from earthquakes by regulating new development and redevelopment to prevent the creation of new geologic and seismic hazards.	**Consistent.** There are no known active faults that run through the project site. The project would be designed in accordance with applicable California Building Code requirements, including for resistance to seismic shaking. Furthermore, the project would be constructed in accordance with other applicable regulations, the current seismic design specifications of the Structural Engineers Association of California, and all applicable requirements of the California Occupational Safety and Health Administration. These required seismic design considerations are used to minimize structural damage in the event of ground shaking. Additionally, the project would implement all recommendations per the Preliminary Geotechnical Evaluation (Appendix E), as well as any project-specific recommendations with any potential supplemental geotechnical evaluations, in compliance with Section 17.32.040(f) of the City's Municipal Code.
Goal S-2: Minimize the risk to people, property, and the environment due to flooding hazards.	**Consistent.** Despite a small portion of the project site being located in a 100-year flood hazard area, the base flood elevation at the portion of the site that is within the 100-year flood hazard area would not reach to the top of the slope. As determined in Section 3.9, Hydrology and Water Quality, risk related to flooding hazards would be less than significant.

Table 3.10-2. General Plan Consistency

Applicable General Plan Goals	Project Consistency with Policy
Goal S-3: Minimize injury, loss of life, and damage to property results from structure or wildland fire hazards.	**Consistent.** The project site is not located in any fire hazard severity zone (CAL FIRE 2021, but the project is located approximately 0.25 miles from a VHFHSZ in a local responsibility area. The existing project site is an undeveloped lot that is relatively flat and shows signs of previous disturbance. The proposed redesignation of the project site from commercial uses to residential uses under the proposed Specific Plan would likely reduce the potential for wildfire hazards on site through the replacement of flammable vegetation currently on site with structures that are up to current fire code. The project would not include associated infrastructure that may exacerbate fire risk. Additionally, the project would be required to comply with all applicable state and local fire codes, including the California Fire Code and the San Marcos Fire Department, which require a design that affords fire and emergency responders suitable fire access roads dimensions and surfaces (Chapter 5, Sections 503.1 through 503.4 of the California Fire Code), as well as an adequate number of emergency rated entrances to the community (Appendix D, Section D106 of the California Fire Code).
Goal S-4: Protect life, structures, and the environment from the harmful effects of hazardous materials and waste.	**Consistent.** Construction of the project would entail transport, use, or disposal of potentially hazardous materials including, but not limited to diesel fuel, gasoline, equipment fluids, concrete, cleaning solutions and solvents, lubricant oils, adhesives, human waste, and chemical toilets. The project would be required to comply with all standards required through federal, state, county, and municipal regulations, in addition to project-specific plan review by the City, which would ensure potential impacts related to hazardous materials would not be significant. Furthermore, hazards associated with development and operation of residential developments would likely be less than that associated with commercial development, which is the current designated land use for the project site. Proposed uses would be limited to multifamily residences and residential amenities, which do not typically generate, release, or use large amounts of hazardous materials. During operations of the project, the only hazardous materials anticipated for transport, use, or disposal are routinely used household products such as cleaners, paint, solvents, motor oil/automotive products, batteries, and garden maintenance products. The use, handling, and disposal of these products are addressed by household hazardous waste programs that are part of the Integrated Watershed Monitoring Program of the County of San Diego, and therefore the project is not expected to create a significant hazard to the public or environment through hazardous upsets or accidents.

Table 3.10-2. General Plan Consistency

Applicable General Plan Goals	Project Consistency with Policy
Goal S-5: Establish and maintain an effective emergency response program to respond to disasters and maintain continuity-of-life support functions during an emergency.	**Consistent.** According to the General Plan Safety Element, the San Marcos Emergency Operations Plan governs the operations of the City during a disaster. This plan addresses response to moderate evacuation scenarios, including the identification of evacuation points and general routes (City of San Marcos 2012b). The project would be required to abide by standards as set forth in the San Marcos Emergency Operations Plan. The project would not impact any roadway or staging areas that are identified in any emergency planning documents and would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.
Goal S-6: Provide neighborhood safety through effective law enforcement.	**Consistent**. Implementation of the project would be expected to increase the frequency of emergency and non-emergency calls to the Sherriff's Department. However, over 100 deputies, volunteers, and professional staff serve the residents of the City. Law enforcement services include general patrol, criminal investigation, crime prevention, juvenile services, narcotics and gang investigations, communications and dispatch, and various management support services. Police units are continuously mobile and service calls are responded to by the nearest available mobile unit. At the San Marcos Station, patrol deputies are assigned to a geographical "beat" area, allowing deputies to become familiar with citizens and problems within their "beats" (SDCSD 2022). Accordingly, service ratios and response times are anticipated to remain adequate with development of the project. As such, the project is not expected to affect police protection such that new or physically altered governmental facilities are needed.
Goal S-7: Comply with the McClellan-Palomar Airport Land Use Compatibility Plan.	**Consistent.** The project site is not located within any of the McClellan-Palomar Airport Influence Areas and would not conflict with the McClellan-Palomar Airport Land Use Compatibility Plan.
Noise Element	
Goal N-1: Promote a pattern of land uses compatible with current and future noise levels.	**Consistent.** The project site is surrounded by commercial and industrial uses to the south and residential uses to the east and west. The project site is located in an urban setting and is surrounded by existing development. Surrounding land uses outside of the immediately adjacent industrial and commercial land uses include industrial uses, commercial uses, mixed-use development, single-family residential, and schools/educational facilities. Noise generated by the project would be similar to that of existing land uses in the vicinity.

Table 3.10-2. General Plan Consistency

Applicable General Plan Goals	Project Consistency with Policy
Goal N-2: Control transportation-related noise from traffic, rail, and aviation sources near noise sensitive land uses.	**Consistent.** As described in Section 3.11, Noise, of this EIR, the addition of traffic to the roadway network as a result of the project would result in a CNEL increase of less than 3 dB, which is below the discernible level of change for the average healthy human ear. Therefore, a less than significant impact would occur related to operational traffic noise. Furthermore, the project would meet the City's and California Building Code's requirement to reduce interior ambient noise levels to 45 dB CNEL within habitable rooms of new residential development. The project would not conflict with this City regulation or General Plan policy for purposes of evaluating the project's land use/planning impacts.
Goal N-3: Control non-transportation-related noise from commercial, industrial, construction, and other sources on noise sensitive land uses.	**Consistent.** Potential noise impacts during construction would be less than significant with implementation of recommended design features. Noise impacts due to operation of the project would be less than significant and no further mitigation is required. Further, the project would comply with the General Plan's 45 dBA interior noise standard.
Housing Element	
Goal H-1: Provide a broad range of housing opportunities with emphasis on providing housing which meets the special needs of the community.	**Consistent.** Implementation of the project would change the site's land use designation and zoning from Commercial to Specific Plan Area, allowing for development of the proposed 120 residential units and associated amenities on a vacant site with existing roads, alternative transportation and utilities in the immediate area. Additionally, the project proposes a townhome development, which is a housing type that is limited in proximity to the project site.
Goal H-2: Protect, encourage, and provide housing opportunities for persons of lower and moderate incomes.	**Consistent.** The project would change the land use and zoning designations at the project site to allow for townhome residential development under the proposed Specific Plan. Approval of the proposed GPA/Rezone could help the City address the substantial population growth within the City, and the need for housing. The project would provide above moderate income housing opportunities through project implementation. The project would not include any extremely low, very low, low, or moderate income households, but would pay the in-lieu fee that contributes to providing housing opportunities for target households in the City.

Note: MM = Mitigation Measure; MHCP = multiple habitat conservation program; EIR = environmental impact report; NPDES = National Pollution Discharge Elimination System; BMP = best management practice; SWPPP = stormwater pollution prevention plan; SWQMP = stormwater quality management plan; NCTD = North County Transit District; SMUSD = San Marcos Unified School District; VWD = Vallecitos Water District; LOS = level of service; VHFHSZ = very high fire hazard severity zone; CNEL = community noise equivalent level; dB = decibels; dBA = A-weighted decibels; GPA = General Plan Amendment.

As shown in Table 3.10-2, the project would not result in a significant environmental impact due to a conflict with the City's General Plan Land Use Element goals. Land Use Element goals not referenced above, including LU-4, LU-5, LU-6, LU-9 through LU-13, LU-15, and LU-16 are not relevant to this discussion as they do not apply to individual projects or mitigating environmental effects. Instead, these goals pertain to overall goals of the City related to education, business, and provision of community facilities and infrastructure. Project implementation would not impede the City's ability to achieve these goals.

2050 Regional Transportation Plan/Sustainable Communities Strategy

SANDAG's 2050 RTP/SCS outlines projects for rail and bus services, highways, local streets, bicycling and walking, movement of goods, and systems and demand management. The 2050 RTP/SCS presents a transportation system designed to maximize transit enhancements, integrate biking and walking elements, and promote programs to reduce demand and increase efficiency. As described in Section 3.15, Transportation, of this EIR, the project would provide for residential land uses in an area that is surrounded by existing development, taking advantage of the site's location near transit, retail, employment, schools, parks, and other uses. The project would be consistent with programs, plans, ordinances, and policies addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. However, for the CEQA transportation vehicle miles traveled (VMT) analysis, the SANDAG Series 14 Base Year 2016 regional travel demand model was used to calculate the project's VMT per resident. Based on the results, the project's VMT per resident is more than 85% of the regional average, at 90% of the regional average.

Although the project would not be consistent with the existing zoning and land use designations and the project would exceed the VMT threshold, the project would generate fewer greenhouse gas emissions at buildout than potential development permitted under the existing land use designation. Thus, the project would not increase land use intensities as provided in the RTP/SCS and would therefore not result in environmental impacts due to inconsistency with this plan.

North County Multiple Habitat Conservation Program

As described under Section 3.10.2, the MHCP is a comprehensive conservation planning process that addresses the needs of multiple plant and animal species in northwestern San Diego County (SANDAG 2003). The project site is generally located within the boundaries of the MHCP Plan (Appendix C), and specifically within the Draft San Marcos Subarea Plan area. The Draft San Marcos Subarea Plan has not been completed, approved, or adopted (SANDAG 2001). However, it is the City's General Plan policy to comply with the conservation policies identified in the MHCP through use of the Draft San Marcos Subarea Plan as an implementation tool.

As described throughout Section 3.3, Biological Resources, of this EIR, project implementation would result in potentially significant impacts to biological resources. However, compliance with existing regulations and implementation of **Mitigation Measure (MM) BIO-1** and **MM-BIO-2** outlined in Section 3.3.7 would ensure that the project would not conflict with the MHCP, draft San Marcos Subarea Plan, or other applicable regulations related to biological resources. Implementation of proposed mitigation and City review of development plans for the project site would ensure impacts to biological resources would be less than significant. Furthermore, the project would be consistent with the Conservation and Open Space Element goals of the City's General Plan.

San Marcos Municipal Code Zoning Ordinance, Title 20

As described above, a rezone would be required to re-designate the project site from Commercial (C) to Specific Plan Area (SPA). Approval of the proposed GPA/Rezone would allow for development of the project site with the proposed residential land uses and associated amenities and improvements. Although the project would amend the land use designation to Specific Plan Area (SPA), the concurrent process of amending the Zoning designation does not necessarily equate to consistency with the Zoning Ordinance. However, as shown in Table 3.10-2, the project would be consistent with majority of the City's General Plan goals that guide development within the City. Therefore, the proposed rezoning of the site would be consistent with the City's Zoning Ordinance.

Based on the considerations outlined above, the project would not conflict with an applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. Therefore, project impacts related to land use and planning would be **less than significant**.

3.10.5 Cumulative Impact Analysis

As described in Section 3.10.4, while the project seeks approval of a GPA and Rezone of the project site, the project would be consistent with the overarching goals of the City's General Plan. In addition to the City's General Plan, the project would also be consistent with the City's Municipal Code, SANDAG's 2050 RTP/SCS, and applicable plans and policies described in the regulatory setting sections throughout Chapter 3. Furthermore, as analyzed throughout Chapter 3, implementation of the project would not result in any significant unavoidable impacts that could further impact land use.

All cumulative projects would be subject to similar criteria as the project, which would ensure compliance with existing applicable land use plans with jurisdiction over the project area. Any cumulative projects that propose amendments to the General Plan or Zoning Ordinance would be required to show that proposed uses would not result in significant environmental impacts due to a conflict with applicable policies in a similar way as the project. Since all current and future projects would be analyzed for compatibility and compliance with land use regulations prior to approval, cumulative impacts related to land use and planning would be **less than significant**.

3.10.6 Mitigation Measures

No mitigation specific to land use and planning would be required as a result of the project. However, the project would be required to incorporate mitigation measures proposed throughout Chapter 3 of this EIR to ensure project implementation would not result in significant land use impacts.

3.10.7 Conclusion

Based upon the analysis presented in Sections 3.10.4 and 3.10.5, development of the proposed 120 residential units, upon approval of the proposed GPA/Rezone of the project site from Commercial (C) to Specific Plan Area (SPA), would not result in significant impacts to land use and planning. The project would be required to incorporate technical report recommendations, design features, and mitigation measures identified throughout Chapter 3 of this EIR to ensure project implementation would not result in significant impacts or inconsistency with applicable land use plans and policies. The project would be consistent with the applicable goals and policies of the City's General Plan. As analyzed throughout Chapter 3 of this EIR, implementation of the project would not result in any significant unavoidable impacts, and all potentially significant impacts to biological resources, cultural resources, geology and soils, and tribal cultural resources would be reduced to a level of less-than-significant with mitigation incorporated. Furthermore, final project plans would be subject to City review and approval. For these reasons, impacts related to land use and planning would be less than significant.

3.11 Noise

This section discusses the existing noise and vibration setting of the proposed Gran Vista Specific Plan Project (project), identifies associated regulatory requirements, and evaluates potential impacts related to implementation of the proposed project. This section is based on the Noise Technical Report prepared for the proposed project by Dudek in February 2023, which is included as Appendix I to this environmental impact report (EIR).

Table 3.11-1 summarizes the project- and cumulative-level noise impact analysis for the proposed project.

Table 3.11-1. Noise Summary of Impacts

Threshold of Significance	Project Direct Impact	Project Cumulative Impact	Significance Determination
No. 1: Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.	Less Than Significant	Less than Significant	Less Than Significant
No. 2: Generation of excessive groundborne vibration or groundborne noise levels.	Less Than Significant	Less than Significant	Less Than Significant
No. 3: Exposure of people residing or working in the project area to excessive noise levels, for a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport.	Less Than Significant	Less Than Significant	Less Than Significant

3.11.1 Existing Conditions

This section provides background on noise characteristics and vibration fundamentals, as well as a description of the existing noise environment associated with the project site and the surrounding area.

Noise Characteristics

Sound is mechanical energy transmitted by pressure waves in a compressible medium, such as air. Noise is defined as sound that is loud, unpleasant, unexpected, or undesired. Sound pressure level (SPL) has become the most common descriptor used to characterize the loudness of an ambient sound level. The unit of measurement of sound pressure is a decibel (dB). The average healthy ear can barely perceive noise level changes of 3 dB, a change of 5 dB is readily perceptible, and a change of 10 dB is perceived as twice or half as loud (Caltrans 2013). A doubling of sound energy results in a 3 dB increase in sound, which means that a doubling of sound energy (e.g., doubling the number of daily trips along a given road) would result in a barely perceptible change in sound level.

Sound may be described in terms of level or amplitude (measured in dB), frequency or pitch (measured in hertz or cycles per second), and duration (measured in seconds or minutes). Because the human ear is not equally sensitive to sound at all frequencies, a special frequency-dependent rating scale is used to relate noise to human sensitivity. The A-weighted decibel (dBA) scale performs this compensation by discriminating against low and very high frequencies in a manner approximating the sensitivity of the human ear.

Several descriptors of noise (i.e., noise metrics) exist to help predict average community reactions to the adverse effects of environmental noise, including traffic-generated noise. These descriptors include the equivalent noise level over a given period (L_{eq}), the day–night average noise level (L_{dn}), and the community noise equivalent level (CNEL). Each of these descriptors uses units of dBA.

L_{eq} is a decibel quantity that represents the constant or energy-averaged value equivalent to the amount of variable sound energy received by a receptor during a time interval. For example, a 1-hour L_{eq} measurement of 60 dBA would represent the average amount of energy contained in all the noise that occurred in that hour. L_{eq} is an effective noise descriptor because of its ability to assess the total time-varying effects of noise on sensitive receptors, which can then be compared to an established L_{eq} standard or threshold of the same duration. Another descriptor is maximum sound level, which is the greatest sound level measured during a designated time interval or event. The minimum sound level is often called the "floor" of a measurement period.

L_{dn} and CNEL descriptors represent 24-hour periods and differ from a 24-hour L_{eq} value because they apply a time-weighted factor designed to emphasize noise events that occur during the non-daytime hours (when speech and sleep disturbance is of more concern). "Time weighted" refers to the fact that L_{dn} and CNEL penalize noise that occurs during certain sensitive periods. In the case of CNEL, noise occurring during the daytime (7:00 a.m. to 7:00 p.m.) receives no penalty, but noise during the evening (7:00 p.m. to 10:00 p.m.) is penalized by adding 5 dB to the actual levels, and nighttime (10:00 p.m. to 7:00 a.m.) noise is penalized by adding 10 dB to the actual levels. L_{dn} differs from CNEL in that the daytime period is longer (defined instead as 7:00 a.m. to 10:00 p.m.), thus eliminating the dB adjustment for the evening period. L_{dn} and CNEL are the predominant criteria used to measure roadway noise affecting residential receptors. These two metrics generally differ from one another by no more than 0.5–1.0 dB and are often considered or actually defined as being essentially equivalent by many jurisdictions (Appendix I).

Vibration Fundamentals

Groundborne vibration is fluctuating or oscillatory motion transmitted through the ground mass (i.e., soils, clays, and rock strata). The strength of groundborne vibration attenuates rapidly over distance. Some soil types transmit vibration quite efficiently; other types (primarily sandy soils) do not. Several basic measurement units are commonly used to describe the intensity of ground vibration. The descriptors used by the Federal Transit Administration (FTA) are peak particle velocity (PPV), in units of inches per second (ips), and velocity decibel, which is based on the root-mean square of the vibration signal magnitude (Appendix I).

Existing Noise Environment

The project site is currently vacant and does not currently contain any sources of noise or vibration generation. However, the project site is located in an urbanized area surrounded by development, bordered by existing roadways and industrial and commercial uses. Sources of noise in the surrounding area primarily include traffic from the local roadways, including W Mission Road and N Las Posas Road.

SPL measurements were conducted near the project site on April 26, 2022, to quantify and characterize the existing outdoor ambient sound levels. Table 3.11-2 provides the location, date, and time period at which these baseline noise level measurements were performed by an attending Dudek field investigator using a Rion-branded Model NL-52 sound level meter equipped with a 0.5-inch, pre-polarized condenser microphone with pre-amplifier. The sound level meter meets the current American National Standards Institute standard for a Type 1 (Precision Grade) sound level meter. The accuracy of the sound level meter was verified using a field calibrator before and after the measurements, and the measurements were conducted with the microphone positioned approximately 5 feet above the ground.

Four short-term noise level measurement locations (ST1–ST4) that represent existing noise-sensitive receivers were selected on and near the project site. These locations are depicted as receivers ST1–ST4 on Figure 3.11-1, Noise Measurement Locations. The measured L_{eq} and maximum noise levels are provided in Table 3.11-2. The primary noise sources at the site consisted of traffic along adjacent roadways, the sounds of leaves rustling, and birdsong. As shown in Table 3.11-2, the measured SPL ranged from approximately 47.3 dBA L_{eq} at ST4 to 64.2 Dba L_{eq} at ST1. Detailed noise measurement data are included as part of Appendix I to this EIR.

Table 3.11-2. Measured Baseline Outdoor Ambient Noise Levels

Site	Location/Address	Date/Time	L^{eq}	L^{max}
ST1	Southwest in CVS parking lot	2022-04-26, 04:00 p.m. to 04:10 p.m.	64.2	73.6
ST2	Northern boundary of CVS parking lot	2022-04-26, 04:20 p.m. to 04:30 p.m.	63.5	74.5
ST3	In dirt lot west of project site at 1333 Granite Road, San Marcos CA, 92069, east of N Las Posas Road	2022-04-26, 04:40 p.m. to 04:50 p.m.	60.2	68.5
ST4	Front yard of 389 Palmac Street, San Marcos, CA 92069	2022-04-26, 05:00 p.m. to 05:10 p.m.	47.3	74.9

Source: Appendix A of Appendix I.
Notes: L_{eq} = equivalent continuous sound level (time-averaged sound level); L_{max} = maximum sound level during the measurement interval; dBA = A-weighted decibels.

Generally, the measured samples of daytime L_{eq} agree with expectations: ST1, ST2, and ST3 L_{eq} values are above 60 dBA, due largely to proximity to W Mission Boulevard and/or N Las Posas Road, which are major roadways; ST4 however, is behind residential walls west of the western boundary of the project site and more distant from these sources of roadway traffic noise, which results in a substantially lower sampled L_{eq} value.

Sensitive Receptors

Sensitive receptors are uses that are typically considered noise sensitive and include residences, schools, hospitals, parks, and wildlife habitats. The nearest sensitive receptors to the project site would be the residential uses located along Palmac Street located adjacent to the project site to the west and single-family residential uses located across from the site on the eastern side of N Las Posas Road.

3.11.2 Regulatory Setting

Federal

Federal Transit Administration

In its Transit Noise and Vibration Impact Assessment guidance manual, FTA recommends a daytime construction noise level threshold of 80 dBA L_{eq} over an 8-hour period (FTA 2018) when detailed construction noise assessments are performed to evaluate potential impacts to community residences surrounding a project. Although this FTA guidance is not a regulation, it can serve as a quantified standard in the absence of such limits at the state and local jurisdictional levels.

State

California Code of Regulations, Title 24

Title 24 of the California Code of Regulations sets standards that new development in California must meet. According to Title 24, interior noise levels are not to exceed 45 dBA CNEL in any habitable room, as demonstrated by a project-specific acoustical analysis.

California Department of Health Services Guidelines

The California Department of Health Services has developed guidelines of community noise acceptability for use by local agencies (OPR 2017). Selected relevant levels are listed here:

- **Below 60 dBA CNEL:** normally acceptable for low-density residential use
- **50 to 70 dBA:** conditionally acceptable for low-density residential use
- **Below 65 dBA CNEL:** normally acceptable for high-density residential use and transient lodging
- **60 to 70 dBA CNEL:** conditionally acceptable for high-density residential, transient lodging, places of worship, educational facilities, and medical facilities

California Department of Transportation

In its Transportation and Construction Vibration Guidance Manual (Caltrans 2020), the California Department of Transportation (Caltrans) recommends 0.5 ips PPV as a threshold for the avoidance of structural damage risk to typical newer residential buildings exposed to continuous or frequent intermittent sources of groundborne vibration. For transient vibration events, such as blasting, the damage risk threshold would be 1.0 ips PPV (Caltrans 2020) at the same type of newer residential structures. For older structures, these guidance thresholds would be more stringent: 0.3 ips PPV for continuous/intermittent vibration sources, and 0.5 ips PPV for transient vibration events. With respect to human annoyance, Caltrans guidance indicates that building occupants exposed to groundborne vibration of 0.2 ips PPV from continuous or frequently intermittent sources may find it "annoying" (Caltrans 2020) and on such basis this would be considered a significant groundborne vibration impact for purposes of this assessment. Although these Caltrans guidance thresholds are not regulations, they can serve as quantified standards in the absence of such limits at the local jurisdictional level.

Local

City of San Marcos Municipal Code

San Marcos Municipal Code Chapter 10.24.020.b.9 addresses construction activity, with exemption from chapter provisions between 7:00 a.m. and 6:00 p.m. Monday through Friday and on Saturdays from 8:00 a.m. to 5:00 p.m. The Municipal Codes does not set noise limits on construction activities; however, on occasion the City of San Marcos (City) has adopted the County of San Diego's Noise Ordinance noise limit of 75 dBA L_{eq} (8-hour average) attributed to construction activities as received by an occupied property.

Chapter 20.300, Site Planning and General Development Standards, of the Municipal Code includes noise regulations in the form of noise standards by zone (Section 20.300.070, Performance Standards). Municipal Code noise standards typically pertain to stationary (i.e., non-transportation-related) noise sources. The relevant portions of these noise standards are outlined in Table 3.11-3.

Table 3.11-3. Exterior Noise Standards by Zone

Zone	Allowable Noise Level (dBA L_{eq}) Measured from the Property Line
Single-Family Residential (A, R-1, R-2)[1,2]	
7:00 a.m. to 10:00 p.m. (daytime)	60
10:00 p.m. to 7:00 a.m. (overnight)	50
Multifamily Residential (R-3)[1,2]	
7:00 a.m. to 10:00 p.m. (daytime)	65
10:00 p.m. to 7:00 a.m. (overnight)	55
Commercial (C, O-P, SR)[3]	
7:00 a.m. to 10:00 p.m. (daytime)	65
10:00 p.m. to 7:00 a.m. (overnight)	55
Industrial	
7:00 a.m. to 10:00 p.m. (daytime)	65
10:00 p.m. to 7:00 a.m. (overnight)	60

Source: City of San Marcos 2017 (Table 20.300-4)
Notes: dBA = A-weighted decibels; L_{eq} = equivalent noise level over a given period.

1 For single-family detached dwelling units, the "exterior noise level" is defined as the noise level measured at an outdoor living area which adjoins and is on the same lot as the dwelling, and which contains at least the following minimum net lot area: (i) for lots less than 4,000 square feet in area, the exterior area shall include 400 square feet, (ii) for lots between 4,000 square feet to 10 acres in area, the exterior area shall include 10% of the lot area; (iii) for lots over 10 acres in area, the exterior area shall include 1 acre.

2 For all other residential land uses, "exterior noise level" is defined as noise measured at exterior areas which are provided for private or group usable open space purposes. "Private Usable Open Space" is defined as usable open space intended for use of occupants of one dwelling unit, normally including yards, decks, and balconies. When the noise limit for Private Usable Open Space cannot be met, then a Group Usable Open Space that meets the exterior noise level standard shall be provided. "Group Usable Open Space" is defined as usable open space intended for common use by occupants of a development, either privately owned and maintained or dedicated to a public agency, normally including swimming pools, recreation courts, patios, open landscaped areas, and greenbelts with pedestrian walkways and equestrian and bicycle trails, but not including off-street parking and loading areas or driveways.

3 For non-residential noise sensitive land uses, exterior noise level is defined as noise measured at the exterior area provided for public use.

With respect to vibration, Section 20.300.070 of the Performance Standards also indicates that “no person or use shall create, maintain, or cause ground vibration that is discernible without instruments to a person of normal sensitivity at any point on a property that is adjacent to the property of the vibration source. The ground vibration caused by moving vehicles, trains, aircraft, or temporary construction or demolition is exempted.” Due to these exemptions, vibration due to construction of the proposed project, or vibration from nearby roads and rail received by new buildings or its occupants associated with the proposed project, would be compatible with these City standards.

City of San Marcos General Plan

To control transportation-related noise sources such as arterial roads, freeways, airports, and railroads, the City has established guidelines for acceptable community noise levels in the Noise Element of the City of San Marcos General Plan (General Plan) (City of San Marcos 2012a). For noise sensitive rural and single-family residential uses, schools, libraries, parks, and recreational areas, the Noise Element requires exterior noise levels of less than 60 dBA CNEL for outdoor usable areas. For multifamily developments, the standard is 65 dBA CNEL, and a standard of 70 dBA CNEL is typically applied to commercial uses. The City has also established an interior noise limit of 45 dBA CNEL for all residential uses.

The following are applicable goals and policies from the General Plan Noise Element (City of San Marcos 2012a):

Goal N-1: Promote a pattern of land uses compatible with current and future noise levels.

Policy N-1.1: Address the potential for excessive noise levels when making land use planning decisions in accordance with Table 7-3 Land Use Compatibility Noise Standards.

Policy N-1.2: Ensure that acceptable noise levels are maintained near noise-sensitive uses.

Policy N-1.3: Incorporate design features into residential land use projects that can be used to shield residents from excessive noise. Design features may include, but are not limited to: berms, walls, and sound attenuating architectural design and construction methods.

Policy N-1.4: Require new development projects to provide barriers to reduce noise levels, or provide sufficient spatial buffers to separate excessive noise generating land uses and noise-sensitive land uses.

Policy N-1.5: Require an acoustical study for proposed developments in areas where the existing and projected noise level exceeds or would exceed the Normally Acceptable levels identified in Table 7-3.

Goal N-2: Control transportation-related noise from traffic, rail, and aviation sources near noise sensitive land uses.

Policy N-2.1: Encourage only noise-compatible land uses along existing and future roadways, highways, and freeways.

Policy N-2.2: Promote coordinated site planning and traffic control measures that reduce traffic noise on noise-sensitive land uses.

Policy N-2.3: Advocate the use of alternative transportation modes such as walking, bicycling, mass transit, and non-combustible engine vehicles to reduce traffic noise.

Goal N-3: Control non-transportation-related noise from commercial, industrial, construction, and other sources on noise sensitive land uses.

Policy N-3.1: When adjacent to noise sensitive receptors, require developers and contractors to employ noise reduction techniques during construction and maintenance operations.

Policy N-3.2: Limit the hours of construction and maintenance operations located adjacent to noise-sensitive land uses.

The following are applicable goals and policies from the General Plan Safety Element (City of San Marcos 2012b):

Goal S-7: Comply with the McClellan-Palomar Airport Land Use Compatibility Plan.

Policy S-7.1: Record an overflight notification document in association with the approval of any new residential land use within the AIA overflight notification area consistent with the ALUCP.

The project's consistency with applicable General Plan goals and policies is discussed in Section 3.10, Land Use and Planning. As detailed in Section 3.10.4, the project would be consistent with the applicable goals and policies.

3.11.3 Thresholds of Significance

The significance criteria used to evaluate the project impacts related to noise are based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines. According to Appendix G of the CEQA Guidelines, a significant impact related to noise would occur if the project would:

- **Threshold No. 1:** Result in the generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.
- **Threshold No. 2:** Generation of excessive groundborne vibration or groundborne noise levels.
- **Threshold No. 3:** For a project located within the vicinity of a private airstrip or an airport land use plan, or where such a plan has not been adopted, within 2 miles of a public airport or public use airport, expose people residing or working in the project area to excessive noise levels.

In light of the above significance criteria, this analysis uses the following standards to evaluate potential noise and vibration impacts.

- **Construction noise** – the City has adopted the County of San Diego threshold for construction equipment noise, which must not exceed an 8-hour L_{eq} value of 75 dBA L_{eq} when assessed at an occupied property. Construction shall only occur between the hours of 7:00 a.m. through 6:00 p.m., Monday through Friday, and 8:00 a.m. and 5:00 p.m. on Saturday.
- **Off-site project-attributed transportation noise** – For purposes for this analysis, a direct roadway noise impact would be considered significant if increases in roadway traffic noise levels attributed to the proposed project would be greater than 3 dBA CNEL at an existing noise-sensitive land use.
- **Off-site project-attributed stationary noise** – For purposes for this analysis, a noise impact would be considered significant if noise from typical operation of heating, ventilation, and air conditioning and other electro-mechanical systems associated with the proposed project would exceed the following:
  - 60 dBA hourly L_{eq} at the property line of an off-site single-family residence from 7:00 a.m. to 10:00 p.m., and 50 dBA hourly L_{eq} from 10:00 p.m. to 7:00 a.m.
  - 65 dBA hourly L_{eq} at the property line of an off-site commercial land use from 7:00 a.m. to 10:00 p.m., and 55 dBA hourly L_{eq} from 10:00 p.m. to 7:00 a.m.
- **Construction vibration** – Although exempted by the City, guidance from Caltrans indicates that a vibration velocity level of 0.2 ips PPV received at a structure would be considered annoying by occupants within (Caltrans 2020). As for the receiving structure itself, Caltrans guidance recommends that a vibration level of 0.3 ips PPV would represent the threshold for building damage risk.

Further, while the CEQA noise criteria listed above do not consider project consistency with exterior and interior noise standards, such an analysis is relevant to the assessment of the land use and planning impacts of the proposed project. This analysis therefore also evaluates compatibility of on-site traffic noise exposure levels with the City exterior and interior noise standards of 65 dBA CNEL and 45 dBA CNEL, respectively.

3.11.4 Project Impact Analysis

Threshold No. 1: Would the project result in the generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Short-Term Construction Noise

Construction noise and vibration are temporary phenomena. Construction noise and vibration levels vary from hour to hour and day to day depending on the equipment in use, the operations performed, and the distance between the source and receptor.

Equipment that would be in use during construction would include, in part, graders, backhoes, rubber-tired dozers, loaders, cranes, forklifts, pavers, rollers, and air compressors. The typical maximum noise levels at a distance of 50 feet from various pieces of construction equipment and activities anticipated for use on the project site are presented in Table 3.11-4. The equipment noise levels presented in Table 3.11-4 are maximum noise levels. Usually, construction equipment operates in alternating cycles of full power and low power, producing average noise levels over time that are less than the maximum noise level. The average sound level of construction activity also depends on the amount of time that the equipment operates and the intensity of construction activities during that time.

Table 3.11-4. Typical Construction Equipment

Equipment Type	Typical Equipment (L_{max}, dBA at 50 Feet)
All Other Equipment Greater than 5 HP	85
Backhoe	78
Compressor (Air)	78
Concrete Saw	90
Crane	81
Dozer	82
Excavator	81
Flat Bed Truck	74
Front End Loader	79
Generator	72
Grader	85
Man Lift	75
Paver	77
Roller	80
Scraper	84
Welder/Torch	73

Source: DOT 2006.
Note: L_{max} = maximum sound level; dBA = A-weighted decibels; HP = horsepower

Aggregate noise emissions from proposed project construction activities, broken down by sequential phase, was predicted at two evaluation distances to the nearest existing noise-sensitive receptor: from the nearest position of the construction site boundary and from the geographic center of the construction site, which serves as the time-averaged location or geographic acoustical centroid of active construction equipment for the phase under study.

The intent of the former distance is to help evaluate anticipated construction noise from a limited quantity of equipment or vehicle activity expected to be at the boundary for some period of time, which would be most appropriate for phases such as site preparation, grading, and paving. The latter distance is used in a manner similar to the general assessment technique as described in the FTA guidance for construction noise assessment, when the location of individual equipment for a given construction phase is uncertain over some extent of (or the entirety of) the construction site area. In this studied scenario, because of the equipment location uncertainty, all the equipment for a construction phase is assumed to operate—on average—from the acoustical centroid position. Table 3.11-5 summarizes these two distances to the apparent closest noise-sensitive receptor for each of the seven sequential construction phases. At the site boundary, this analysis assumes that up to only one piece of equipment of each listed type per phase will be involved in the construction activity for a limited portion of the 8-hour period. In other words, at such proximity, the operating equipment cannot "stack" or crowd the vicinity and still operate. For the acoustical centroid case, which intends to be a geographic average position for all equipment during the indicated phase, this analysis assumes that the equipment may be operating up to all 8 hours per day.

Table 3.11-5. Estimated Distances between Construction Activities and the Nearest Noise-Sensitive Receptors

Construction Phase (and Equipment Types Involved)	Distance from Nearest Noise-Sensitive Receptor to Construction Site Boundary (Feet)	Distance from Nearest Noise-Sensitive Receptor to Geographic Center of Site (Feet)
Demolition (concrete saw, backhoe, dozer)	80	160
Site Preparation (grader, scraper, backhoe)	80	160
Grading (grader, dozer, backhoe)	80	160
Building construction (crane, man-lift, generator, backhoe, welder)	80	160
Paving (paver, roller, concrete mixer truck)	80	160
Architectural Coating (compressor)	80	160

Source: Appendix I.

A Microsoft Excel–based noise prediction model emulating and using reference data from the Federal Highway Administration Roadway Construction Noise Model (FHWA 2008) was used to estimate construction noise levels at the nearest occupied noise-sensitive land use. (Although the Roadway Construction Noise Model was funded and promulgated by the Federal Highway Administration, it is often used for non-roadway projects because the same types of construction equipment used for roadway projects are often used for other types of construction.) Input variables for the predictive modeling consist of the equipment type and number of each (e.g., two graders, a loader, a tractor), the duty cycle for each piece of equipment (e.g., percentage of time within a specific time period when the equipment is expected to operate at full power or capacity and thus make noise at a level comparable to what is presented in Table 3.11-4), and the distance from the noise-sensitive receiver. The predictive model also considers how many hours that equipment may be on site and operating (or idling) within an established work shift. Conservatively, no topographical or structural shielding was assumed in the modeling. The Roadway Construction Noise Model has default duty-cycle values for the various pieces of equipment, which were derived from an extensive study of typical construction activity patterns. Those default duty-cycle values were used for this noise analysis, and the predicted results displayed in Table 3.11-6.

Table 3.11-6. Predicted Construction Noise Levels per Activity Phase

Construction Phase (and Equipment Types Involved)	8-Hour L_{eq} at Nearest Noise-Sensitive Receptor to Construction Site Boundary (dBA)	8-Hour L_{eq} at Nearest Noise-Sensitive Receptor to Geographic Center of Site (dBA)
Demolition (concrete saw, backhoe, dozer)	74.8	71.6
Site Preparation (grader, scraper, backhoe)	74.2	70.3
Grading (grader, dozer, backhoe)	73.5	70.0
Building construction (crane, man-lift, generator, backhoe, welder)	68.5	67.1
Paving (paver, roller, concrete mixer truck)	70.3	67.1
Architectural Coating (compressor)	62.6	59.1

Notes: L_{eq} = equivalent noise level; dBA = A-weighted decibels.

As presented in Table 3.11-6, the highest estimated construction noise levels are predicted to stay below 75 dBA Leq over an 8-hour period at the nearest existing residences (as close as 80 feet away) when demolition activities take place near the western project boundaries. These estimated noise levels at a source-to-receiver distance of 80 feet would only occur when noted pieces of heavy equipment would each operate for a cumulative period of up to 2 hours a day. For example, a grader might make multiple passes this close to a receiver, but for the remaining time during the day, the grader is performing work at a more distant location or simply not operating.

Should operation of construction equipment and processes be sufficiently proximate to the project's western boundary for greater than 2 hours a day, construction activity noise levels might exceed an 8-hour L_{eq} value of 75 dBA L_{eq} and thereby exceed the City's adopted daytime threshold for construction noise exposure at an occupied property. Therefore, the following suggested practices would be incorporated into the project's construction program as project design features:

- Administrative controls (e.g., reduce operating time of equipment and/or prohibit usage of equipment types within certain distances)
- Engineering controls (upgrade noise controls, such as install better engine exhaust mufflers)
- Install noise abatement on the site boundary fencing (or within the site, as practical and appropriate) in the form of sound blankets or comparable temporary barriers to occlude construction noise emissions between the site (or specific equipment operation as the situation may define) and off-site noise-sensitive receptors of concern
- At the outset of a project construction activity, an unattended noise level monitor might be deployed on site to measure and document that noise exposure levels attributed to project construction activity at adjacent off-site sensitive receptors are in conformance with the 75 dBA 8-hour L_{eq} threshold

The above design features would be implemented as site conditions may warrant. Proper application of temporary noise barriers or comparable sound abatement can feasibly reduce noise levels by at least 5 dB due to direct path occlusion between the noise source and receptor.

In summary, daytime construction noise would not exceed the City's 75 dBA threshold and, thus, temporary construction-related noise impacts would be considered **less than significant**.

Long-Term Operational Noise

Off-Site Traffic Noise Exposure

Implementation of the proposed project would generate additional vehicle trips on local arterial roadways (i.e., W Mission Boulevard and N Las Posas Road), which could result in increased traffic noise levels at adjacent offsite existing noise-sensitive land uses. Appendix K-2 to this EIR contains a spreadsheet with traffic volume data (average daily traffic) for surrounding arterial roadways. Implementation of the proposed project is estimated to add 960 average daily trips to adjacent street segments.

Potential noise effects from vehicular traffic were assessed using the Federal Highway Administration's Traffic Noise Model version 2.5 (FHWA 2004). Information used in the model included the roadway geometry, existing (year 2022), existing plus project, near-term (opening day) and near-term (opening day) plus project traffic volumes and posted traffic speeds. Noise levels were modeled at representative noise-sensitive receivers ST1 through ST4, as shown in Figure 3.11-1. The receivers were modeled to be 5 feet above the local ground elevation. The noise model results are summarized in Table 3.11-7.

Table 3.11-7. Roadway Traffic Noise Modeling Results

Modeled Receiver No.	Existing (2022) Noise Level (dBA CNEL)	Existing (2022) Plus Project Noise Level (dBA CNEL)	Near-Term (Opening Day) Noise Level (dBA CNEL)	Near-Term (Opening Day) Plus Project Noise Level (dBA CNEL)	Horizon Year (2050) Noise Level (dBA CNEL)	Horizon Year (2050) Plus Project Noise Level (dBA CNEL	Maximum Project-Related Noise Level Increase (dB)
ST1	68.3	68.3	68.6	68.6	69.4	69.4	0.0
ST2	69.0	69.6	69.6	69.8	70.2	70.4	0.2
ST3	66.5	66.7	67.1	67.2	67.7	67.9	0.2
ST4	52.7	51.2	53.2	51.7	53.9	52.4	< 0.0*

Notes: dBA = A-weighted decibel; CNEL = Community Noise Equivalent Level; dB = decibel.
* Noise level change is negative.

Based on results of the model, implementation of the proposed project would not result in readily perceptible increases in traffic noise. Table 3.11-7 shows that at all four listed representative receivers, the addition of proposed project traffic to the roadway network would result in an increase in the CNEL of less than 3 dB, which is below the discernible level of change for the average healthy human ear. Therefore, a **less-than-significant impact** would occur related to operational traffic noise.

On-Site Interior Noise Exposure

Aside from exposure to aviation traffic noise, current CEQA noise-related guidelines at the state level do not require an assessment of exterior-to-interior noise intrusion, environmental noise exposure to occupants of newly created project residences, or environmental noise exposure to exterior non-residential uses attributed to the development of the proposed project. Nevertheless, the City's General Plan and the California Building Code require that interior background noise levels not exceed a CNEL of 45 dB within habitable rooms. Hence, the following predictive analysis of traffic noise exposure at the exteriors of occupied residences and outdoor living areas is provided below.

In addition to the prediction results presented in Table 3.11-7, the Federal Highway Administration Traffic Noise Model software was also used to predict the Horizon-Year-Plus-Project scenario traffic noise levels at multiple on-site exterior areas, as listed in Table 3.11-8. These on-site modeled receptor locations, which appear in Figure 3.11-1, include representative positions for the exteriors of multiple floors and positions of six of the proposed project building facades. Predicted exterior sound levels presented in Table 3.11-8 that are higher than 65 dBA CNEL indicate locations where an exterior-to-interior noise analysis should be performed for the proximate occupied residential unit. Individual modeling locations are provided in Appendix I.

Table 3.11-8. Future Ambient Noise Levels at Residential Facades

Modeled Receptor	Noise Level (A-weighted CNEL)		
	1st Floor	2nd Floor	3rd Floor
M1–1	65	65	65
M1–2	64	64.0	64
M2–1	58	60	60
M2–2	62	63	63
M3–1	56	59	59
M3–2	58	60	61
M4–1	64	65	65
M5–1	61	62	62
M5–2	65	65	65
M6–1	68	69	68
M6–2	68	68	68
OS–1	65		
OS–2	65		

Note: CNEL = community noise equivalent level.

The prediction results from Table 3.11-8 indicate that future traffic noise levels would not exceed 69 dBA CNEL. With the 45 dBA CNEL interior background sound level limit, this means the minimum composite sound transmission class (STC) rating for the exterior shell separating the habitable interior space from the outdoor sound level should be at least 24. The composite STC rating for the portion of a building shell that separates an interior space from the outdoors is calculated from the area-dependent contributions of its elements: windows, wall assemblies, and doors.

Many of the residential units feature porches or balconies on the 1st or 2nd floor, for which access would likely be provided by single-panel, out-swing fiberglass French doors with hinges comparable to a Milgard Essence series model (or similar from another manufacturer). Alternately, they could be a sliding door type. For purposes of this analysis, either of these patio/balcony door design styles are assumed to feature a dual-pane glazing system similar to a standard residential window assembly (i.e., two 1/8-inch-thick glass panes separated by a 3/8-inch-wide airgap) in narrow-perimeter frames compatible with modern thermal insulation (and thus energy conserving) design. The analysis also assumes that these door products feature good seals and related hardware, so that when closed, the effective sound insulating performance is represented by the glass. Viracon data indicate that such glazing should demonstrate an STC rating of 31 (Viracon 2019; Appendix I).

The Noise Report prepared for this project assumes an exterior wall assembly that includes one layer of 5/8-inch gypsum wallboard on the interior-facing side, 2-inch × 4-inch wood studs, glass fiber batt insulation in the stud cavities, and a dual-layer of 5/8-inch gypsum wallboard on the exterior-facing side. Acoustical transmission loss

data are available on this representative assembly and are used as part of estimating the composite STC ratings reported herein (Appendix I). For purposes of this analysis, the dual-layer gypsum wallboard on the exterior surface approximates the mass and solidity of what may be other approved material options as determined by the project architect, such as cement fiber siding panels, brick masonry veneer, or cement plaster attached to layers of fiberglass mat sheathing and plywood sheathing.

Table 3.11-9 summarizes the calculated noise levels after applying the STC ratings for a set of studied occupied room facades that are anticipated to be exposed to predicted exterior noise levels greater than 65 dBA CNEL. Details of these calculations that account for the façade surface area and its composite areas of exterior wall assembly and windows are provided in Appendix I.

Table 3.11-9. Predicted Net Sound Transmission Class of Occupied Room façade

Occupied Room Facade	Predicted Net Sound Transmission Class for Proposed Project	
	Closed Windows and Door*	Open Windows and Closed Door*
1st floor living room w/porch, eastern facade	35	6
2nd floor living room w/balcony, eastern façade	35	6
3rd floor bedroom, eastern façade	38	15

Source: Appendix I.
Notes: n/a = not applicable
* Doors are only modeled for scenarios that contain the balcony door.

An open window or open door to an adjoining patio or balcony greatly compromises the sound insulation performance of the façade wall assembly, as presented for the sample units appearing in Table 3.11-9. However, when such windows and doors are closed, all facades are anticipated to exhibit a predicted STC rating of at least 35, and thus would provide sufficient exterior-to-interior sound insulation from outdoor traffic noise to yield interior background sound levels that are less than 45 dBA CNEL and compliant with the City and state standards. None of the predicted exterior traffic noise levels at the studied receptor locations exceeded 69 dBA CNEL; thus, the STC rating value (for closed windows and doors) subtracted from these exterior noise values would result in interior noise levels of less than 45 dBA CNEL (e.g., 69 − 35 = 34 dBA CNEL, which is less than 45). This apparent requirement for closed windows and doors means that the design of these habitable rooms should feature mechanical ventilation or an air-conditioning system to provide interior comfort for the occupants. Detailed transmission loss data are included in Appendix I. Thus, the City's threshold of 45 dB CNEL within habitable rooms would not be exceeded and the project would be expected to comply with this standard.

Where predicted exterior noise levels exceed 65 dBA CNEL near common useable outdoor space (as shown on Table 3.11-8) and such space would count towards the outdoor usable space associated with the project, according to the City's General Plan, feasible noise reduction techniques should be analyzed and incorporated to make outdoor activities acceptable at locations that are currently above the City's 65 dBA CNEL standard. With the implementation of Project Design Feature (PDF) NOI-1, the resultant exterior noise levels would meet the City's exterior noise standard of 65 dBA CNEL.

For proposed project residential units that feature patios or balconies as outdoor useable areas, predicted future traffic noise exposure levels presented in Table 3.11-8 suggest that up to 4 dBA of noise reduction would be needed to keep sound on such balconies at levels below the 65 dBA CNEL compatibility standard. With the implementation of PDF-NOI-2, the resultant exterior noise levels would meet the City's exterior noise standard of 65 dBA CNEL.

With implementation of PDF-NOI-1 and PDF-NOI-2, the City's thresholds would not be exceeded and on-site noise impacts would be **less than significant**.

PDF-NOI-1: Where exterior noise levels are predicted to exceed 65 A-weighted decibels community noise equivalent level at useable open space areas, the project shall install noise-reducing features external to or upon the useable open space areas (or within, as practical and appropriate) in the form of sound walls, fencing, landscape berms, or similarly performing barriers to occlude incoming roadway traffic noise.

PDF-NOI-2: Residential unit patios or balconies with roadway-facing building facades predicted to be exposed to external noise levels in excess of 65 A-weighted decibels community noise equivalent level shall feature railings or other partial-height barriers comprising sufficiently solid and dense materials (e.g., acrylic, glass, wood that exhibits a sound transmission class rating of at least 20) and of a 42-inch minimum height (from floor or deck of the balcony surface) that occludes direct sound path from the noise-producing roadway of concern and a seated patio or balcony occupant.

Stationary Operational Noise

The proposed project would add a variety of noise-producing mechanical equipment and other stationary sources, including facility unit heating, ventilation, and air conditioning equipment. The incorporation of new multifamily homes and a mix of open space uses attributed to development of the proposed project will add a variety of noise-producing electro-mechanical equipment. Most of these noise-producing equipment or sound sources would be considered stationary or limited in mobility to a defined area.

For purposes of this analysis, each of the new occupied residential units would be expected to feature a split-system type air-conditioning unit, with an air-cooled refrigeration (2-ton capacity) condenser unit in the patio area as currently depicted by the site plan (dated June 24, 2020). Assuming each condenser unit has an SPL of 68 dBA at 3 feet based on available data from a likely manufacturer (Carrier 2012), the site plan suggests that these condenser units would generally be installed near the patio (i.e., apparent "front porch"). Therefore, the closest existing noise-sensitive residential receptor to the west of the proposed project's westernmost unit would be as close as 90 horizontal feet to the nearest of these condenser units. However, due to the 6-foot-tall property line wall proposed along the western property boundary, the predicted sound emission level from the combination of all eight operating condenser units as received by this off-site single-family home would be 46 dBA L_{eq} and would thus be compliant with the City's nighttime threshold of 50 dBA hourly L_{eq}. The operation of residential air-conditioning units would result in a **less-than-significant** noise impact.

Threshold No. 2: Would the project result in the generation of excessive groundborne vibration or groundborne noise levels?

Construction activities may expose people to excessive groundborne vibration or groundborne noise. On-site construction that would cause the most groundborne vibration and noise is associated with equipment used for grading, specifically large bulldozers for earthmoving. Caltrans has collected groundborne vibration information related to construction activities (Caltrans 2020). Information from Caltrans indicates that continuous vibrations with a PPV of approximately 0.2 ips is considered "annoying."

Groundborne vibration attenuates rapidly—even over short distances. And when groundborne vibration encounters a building foundation, a coupling loss occurs depending on the mass and design. For typical wood-framed houses, like those near the proposed project, this coupling loss is 5 vibration velocity decibels according to FTA guidance

(FTA 2018). The attenuation of groundborne vibration as it propagates from source to receptor through intervening soils and rock strata can be estimated with expressions found in FTA and Caltrans guidance. For a bulldozer operating on site as close as the western project boundary (80 feet from the nearest receiving sensitive land use), the estimated vibration velocity level would be 0.024 ips, less than the annoyance threshold recommended by Caltrans. Therefore, vibration-induced annoyance to occupants of nearby existing homes would be less than significant.

Construction vibration at sufficiently high levels can also present a building damage risk. However, anticipated construction vibration from conventional heavy equipment associated with this proposed project would not yield levels that surpass this risk. Per Caltrans, the recommended PPV threshold for newer residential structures is 0.5 ips and for older residential structures it is 0.3 ips—both of which are less stringent that the threshold to annoy occupants of such structures; thus, vibration damage risk to nearby structures is considered less than significant.

During project operation, the proposed project would feature mechanical systems like heating, ventilation, and air-conditioning units. These systems are designed and manufactured to feature rotating (fans, motors) and reciprocating (compressors) components that are well-balanced with isolated vibration within or external to the equipment casings. On this basis, vibration due to proposed project operation would be less than significant.

Overall, impacts related to generation of excessive groundborne vibration or groundborne noise levels as a result of project construction and operation would be **less than significant**.

Threshold No. 3: For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

There are no private airstrips within the vicinity of the project site. The closest airport to the project site is the McClellen Palomar Airport approximately 5 miles west southwest of the site. **No impact** would occur.

3.11.5 Cumulative Impact Analysis

Noise levels tend to diminish quickly with distance from a source. Therefore, the geographic scope of the analysis of cumulative impacts related to noise is limited to locations immediately surrounding and in close proximity to the project site. As described in Section 3.11.4, project implementation would result in less-than-significant noise impacts. No mitigation is required with implementation of the project design features.

Cumulative traffic noise impact could occur in combination with the project and cumulative projects during construction if traffic noise exceeded City standards. However, it is likely that any construction traffic, as related to export/import haul trucks associated with cumulative projects, would be distributed among different roadways based on the locations of cumulative projects. Similar to the proposed project, cumulative projects would include construction and operation noise reduction measures to reduce any potentially significant noise impacts to a level below significance, where feasible. Development plans for cumulative projects would be required to outline mitigation measures, design features, and required regulatory compliance. Implementation of project-specific mitigation and design features would ensure cumulative noise impacts would remain at a **less-than-significant** level.

3.11.6 Mitigation Measures

As analyzed in Section 3.11.4, potential noise impacts during construction and operation of the project would be less than significant. No mitigation is required.

3.11.7 Conclusion

As discussed above, potential noise impacts during construction would be less than significant. Noise impacts due to operation of the proposed project (including traffic noise) would be less than significant with implementation of PDF-NOI-1 and PDF-NOI-2. No further mitigation is required. Further, the proposed project would comply with the General Plan's 45 dBA interior noise standard. Proposed project impacts related to noise would be **less than significant.**



SOURCE: SANGIS 2020, 2021

DUDEK

0 75 150 Feet

FIGURE 3.11-1

Noise Measurement Locations

Gran Vista Specific Plan Project EIR

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3.12 Population and Housing

This section describes the existing setting of the proposed Gran Vista Specific Plan Project (project), identifies associated regulatory requirements, and evaluates potential impacts related to population and housing resulting from the project. This section considers population and housing characteristics in the area and discusses project consistency with regional growth projections.

Table 3.12-1 provides a summary of the project- and cumulative-level population and housing impacts by threshold.

Table 3.12-1. Population and Housing Summary of Impacts

Threshold of Significance	Project Direct Impact	Project Cumulative Impact	Significance Determination
No. 1: Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure).	Less than Significant	Less than Significant	Less than Significant
No. 2: Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere.	No Impact	No Impact	No Impact

3.12.1 Existing Conditions

This section provides background information regarding population and housing forecasts for the City of San Marcos (City) based on demographic information from the San Diego Association of Governments (SANDAG) and the City of San Marcos General Plan (General Plan) Housing Element (2021–2029).

Currently, the project site is vacant and undeveloped and does not support residential uses as it is zoned for Commercial land use.

Population

According to the General Plan Housing Element, San Marcos has been one of the fastest growing cities in the San Diego region (City of San Marcos 2021). The City doubled its population in the 1980s and again between 1990 and 2010. The San Diego region grew by 8% from 2010 to 2020 and the City grew by 16% during this same timeframe (City of San Marcos 2021). As of 2020, the City had an estimated population of 96,302 (DOF 2021). Based on growth projections provided by the Series 13: 2050 Regional Growth Forecast prepared by SANDAG, it is estimated that the City's population will reach 109,095 people by 2035, and 113,015 people by 2050 (SANDAG 2013a).

The City's growth has outpaced countywide growth, and the City's population is anticipated to increase upon buildout of lands within the City limits, particularly in areas around transit facilities and near California State University San Marcos.

Housing

As of 2021, the City had 32,700 housing units. The housing stock is comprised of approximately 58.40% single-family detached and attached units and approximately 31.37% multifamily units (DOF 2021). Approximately 10.18% of the housing stock as of 2020 consisted of mobile homes (DOF 2021). Based on the Series 13: 2050 Regional Growth Forecast, the City is expected to have 35,795 housing units by 2035 and 37,337 housing units by 2050 (SANDAG 2013a).

The General Plan Housing Element identifies overcrowding and overpayment (cost burden) as two housing problems within the City (City of San Marcos 2021). Overcrowded households usually reflect the lack of affordable housing available and suitable for the size of those families, which may result in poor physical condition of the dwelling units. Of the total number of occupied units in the City in 2019, 1,959 (6.6%) housing units were overcrowded, which represents 2.6% of owner units and 13.2% of renter units. The average household size in the City was 3.17 persons in 2019, which is a slight increase from the average household size of 3.05 persons in 2010. The average household size was higher for renters (3.37 persons) than it was for owner households (3.05 persons) (City of San Marcos 2021).

Home sales in the City have generally trended upward, with median housing prices in the City rising from approximately $500,000 in 2015 to a high of $725,000 in March 2019. According to the 2015–2019 U.S. Census American Community Survey data, the median rent in the City was $1,704 per month in 2019 and very few rentals were available in December 2019. Median rents ranged from $1,449 for one-bedroom homes to $2,419–$3,067 for four-bedroom or larger homes (City of San Marcos 2021). Despite the trend of increasing housing prices, compared to the rest of the state, housing in San Marcos is considered relatively affordable. While San Marcos may be relatively affordable for some, housing is not affordable for all income levels, particularly very low- and low-income households, and many households in the City end up spending more than 30% of their income on housing, leading to overpayment (City of San Marcos 2021).

Actual or potential constraints on the provision of housing affect the development of new housing and the maintenance of existing units for all income levels. Governmental and non-governmental constraints in the City are similar to those in other jurisdictions in the region. One of the most significant and difficult constraints to housing in the City and elsewhere in the San Diego region is the high cost of land (City of San Marcos 2021).

The State of California mandated the preparation of a Regional Housing Needs Plan (RHNP) (Government Code, Section 65584) for regions to address housing issues and needs based on future growth projections for the area. SANDAG is responsible for the development of the RHNP for San Diego County and allocates a fair share of regional housing needs to individual cities and unincorporated county lands. The RHNP ensures that local jurisdictions address the needs of their jurisdiction and ensures that the needs for the entire region are fairly distributed to all communities. A major goal of the RHNP is to ensure that every community provides a mix of affordable housing to all economic segments of its population.

The City's 2021–2029 Housing Element addresses SANDAG's Regional Housing Need Allocation (RHNA) schedule for the 6th Cycle, from 2021 through 2029. The California Department of Housing and Community Development, in collaboration with SANDAG, allocated 171,685 housing units that the San Diego region must plan for between 2021 and 2029. The housing units are divided into four income categories, extremely low income, low income, moderate income, and above moderate income. The RHNA allocation for the City includes 3,116 new units, of which 364 must be extremely low income units, 364 very low, 530 low, 542 moderate, and 1,316 above moderate income units. The Housing Element has identified that 7 extremely low/very low/low, 5 low, 489 moderate, and 45 above

moderate income units have been constructed, are under construction, or have been issued permits since June 30, 2020. An additional 81 extremely low/very low income units, 50 low income units, 409 moderate income units, and 499 above moderate income units are approved/entitled within the City. The City has exceeded its Cycle 6th RHNA for the moderate income category between the units that have been constructed, are under construction, or have been issued permits since June 30, 2020, and those units that are approved, entitled, or in process; as such, the remaining units that must be accommodated for the 6th Cycle are those for extremely low/very low, low, and above moderate income households (City of San Marcos 2021).

3.12.2 Regulatory Setting

This section describes the regulatory setting as it relates to population and housing for the project.

Federal

There are no federal codes, policies, or regulations regarding population and housing that would apply to the proposed project.

State

California Planning and Zoning Law

The legal framework within which California counties and cities exercise local planning and land use functions is provided in the California Planning and Zoning Law (Sections 65000 through 66499.58 of the California Government Code). Under that law, each county and city must adopt a comprehensive, long-term general plan. The law gives counties and cities wide latitude in how a jurisdiction may create a general plan, but there are fundamental requirements that must be met. The requirements include seven mandatory elements described in the Government Code. Each element must contain text and descriptions setting forth objectives, principles, standards, policies, and plan proposals; diagrams and maps that incorporate data and analysis; and implementation measures.

Once the general plan of a county or city is adopted, it should be construed as a dynamic document, for which adaptability is a key component. Each jurisdiction should frequently review its general plan for consistency and to ensure it addresses growth-related issues in a comprehensive manner. State law allows up to four general plan amendments per general plan element per year, so each jurisdiction can make changes as justified.

California Building Standards Code

In 2001, California consolidated the Uniform Building, Plumbing, Electrical, and Mechanical codes into the California Building Standards Code, which is contained in Title 24 of the California Code of Regulations. The California Building Standards Code contains 11 parts: Electrical Code, Plumbing Code, Administrative Code, Mechanical Code, Energy Code, Residential Building Code, Historical Building Code, Fire Code, Existing Building Code, Green Building Standards Code, and the Reference Standards Code. These codes promote public health and safety and ensure that safe and decent housing is constructed in San Diego County's unincorporated areas.

Senate Bill 375

Senate Bill 375 (codified in the Government Code and California Public Resources Code) took effect in 2008 and provides a new planning process to coordinate land use planning, regional transportation plans, and funding priorities in order to help California meet the greenhouse gas reduction goals established in Assembly Bill 32.

Senate Bill 375 requires metropolitan planning organizations to incorporate Sustainable Communities Strategies (SCSs) in their Regional Transportation Plans (RTPs) that will achieve greenhouse gas emissions reduction targets by reducing vehicle miles traveled from light-duty vehicles through the development of more compact, complete, and efficient communities.

Regional Housing Needs Assessment

As discussed above, an RHNA is mandated by state housing law as part of the periodic process of updating local general plan housing elements. The RHNA quantifies the need for housing within each jurisdiction during specified planning periods.

Communities use the RHNA in land use planning, prioritizing local resource allocation, and deciding how to address identified existing and future housing needs resulting from population, employment, and household growth. The RHNA does not necessarily encourage or promote growth, but rather allows communities to anticipate growth, so that collectively the region and subregion can grow in ways that enhance quality of life, improve access to jobs, promote transportation mobility, and address social equity and fair share housing needs.

Local

San Diego Association of Governments

SANDAG is a public agency composed of 18 cities and the County of San Diego that builds strategic plans guiding the San Diego region in land use, growth, economics, and the environment. SANDAG also provides population and housing estimates for the region, which are based in part on local jurisdictional planning data and inform regional planning.

The SANDAG Regional Comprehensive Plan, adopted in 2004, provides a long-term planning framework for the San Diego region (SANDAG 2004). The Regional Comprehensive Plan identified smart growth and sustainable development as important strategies to direct the region's future growth toward compact, mixed-use development in urbanized communities that already have existing and planned infrastructure. The plan also emphasized connecting those communities with a variety of transportation choices.

In 2011, SANDAG approved the 2050 RTP/SCS (SANDAG 2011). This approval marked the first time SANDAG's RTP included an SCS, consistent with the Sustainable Communities and Climate Protection Act of 2008, also known as Senate Bill 375. This RTP/SCS provided a blueprint to improve mobility, preserve open space, and create communities, all with transportation choices to reduce greenhouse gas emissions and meet specific targets set by the California Air Resources Board (CARB) as required by Senate Bill 375. In 2010, CARB established targets for each region in California governed by a metropolitan planning organization. SANDAG is the metropolitan planning organization for the San Diego region.

The SANDAG target, as set by CARB, is to reduce the region's per capita emissions of greenhouse gas emissions from cars and light-duty trucks by 7% by 2020, compared with a 2005 baseline. By 2035, the target is a 13% per capita reduction. There is no target set beyond 2035. To achieve the 2020 and 2035 targets, SANDAG and other metropolitan planning organizations were required to develop SCSs as an element of their RTPs. The SANDAG SCS integrates land use and transportation plans to achieve reductions in greenhouse gas emissions and meet the CARB-required targets.

San Diego Forward: The Regional Plan

SANDAG is required by law to update its RTP every 4 years. In December 2021, SANDAG adopted the latest update to its RTP/SCS. SANDAG's 2021 RTP/SCS, known as San Diego Forward: The Regional Plan (Regional Plan), integrates the elements of the prior Regional Comprehensive Plan and combines those elements with the Regional Plan (SANDAG 2021).

The Regional Plan contains updated growth forecasts and is based on the most recent planning assumptions considering currently adopted land use plans, including the City's General Plan and other factors from the cities in the region and the County of San Diego. SANDAG's Regional Plan will change in response to the ongoing land use planning of the City and other jurisdictions. For example, the City's General Plan, as well as other local general plans, may change based on general plan amendments initiated by the jurisdiction or landowner applicants. The general plan amendments may result in increases in development densities due to amendments of the regional category designations or zoning classifications. Accordingly, the latest forecasts from the SANDAG RTP/SCS of future development in the San Diego region, including location, must be coordinated closely with each jurisdiction's ongoing land use planning because that planning is not static, as recognized by the need for updates to SANDAG's RTP/SCS every 4 years.

Regional Growth Forecast

SANDAG estimates future population, housing, land use, and economic growth throughout San Diego County and its comprising cities, including the City of San Marcos. On October 13, 2013, SANDAG accepted the Series 13: 2050 Regional Growth Forecast (SANDAG 2013a). This forecast serves as the foundation for the Regional Plan and other planning documents across the region. SANDAG growth projections for the region and for the City are outlined in Table 3.12-2. The City is expected to experience a higher growth rate for population, housing, and employment when compared to the entire region of San Diego. It should also be noted that the 2050 Regional Growth Forecast is not intended to be an exact formula to determine growth in the region and comprising jurisdictions; rather, it should be utilized as a starting point for regional planning.

Table 3.12-2. Forecasted Growth for the San Diego Region and the City of San Marcos

Jurisdiction	Year				Change 2012–2050	
	2012	2020	2035	2050	Numeric	Percent
Population						
San Diego Regional	3,143,429	3,435,713	3,853,698	4,068,759	925,330	29%
City of San Marcos	85,560	98,915	109,095	113,015	27,455	32%
Housing						
San Diego Regional	1,165,818	1,249,684	1,394,783	1,491,935	326,117	28%
City of San Marcos	28,539	32,625	35,795	37,337	8,798	31%
Employment						
San Diego Regional	1,450,913	1,624,124	1,769,938	1,911,405	460,492	32%
City of San Marcos	37,608	45,783	54,902	64,328	26,720	71%

Source: SANDAG 2013a, 2013b.

Regional Housing Needs Assessment

The Regional Housing Needs Assessment for the 6th Housing Element Cycle, 2021–2029, was approved on July 10, 2020 (SANDAG 2020). Based on a methodology that weighs several factors (i.e., projected population growth, employment, commute patterns, and available sites), SANDAG quantified needs for housing units in the region according to various income categories. In its final Regional Housing Needs Assessment figures, SANDAG allocated 3,116 housing units to the San Marcos area for the 2021–2029 Housing Element Cycle, including 1,258 housing units for very low and low income households (SANDAG 2020).

City of San Marcos General Plan

The City's Housing Element identifies goals and associated policies to provide a basis for housing and growth projections in the City for the 2021–2029 planning period. The following goals and policies from the Housing Element of the General Plan pertain to population and housing (City of San Marcos 2021):

Goal 1: Provide a broad range of housing opportunities with emphasis on providing housing which meets the special needs of the community.

Policy 1.1: Designate land for a variety of residential densities sufficient to meet the housing needs for a variety of household sizes and income levels, with higher densities being focused in the vicinity of transit stops and in proximity to significant concentrations of employment opportunities.

Goal 2: Protect, encourage, and provide housing opportunities for persons of lower and moderate incomes.

At the time of adoption of the City's Housing Element (July 2021), the City had achieved approximately half of its RHNA from the 6th cycle (or approximately 1,531 units) with housing units constructed, under construction, or approved, fulfilling its allocation of moderate income units. Based on a sites inventory assessment, the City has the ability to adequately accommodate the remaining RHNA requirements for all income levels within land that currently permits residential development (comprised of proposed applications, vacant residential sites, and vacant land in Specific Plan Areas). The project site is not identified within the City's Housing Element as a site that could contribute to the RHNA allocation (City of San Marcos 2021).

The project's consistency with applicable General Plan goals and policies is discussed in Section 3.10, Land Use and Planning, of this environmental impact report (EIR). As detailed in Section 3.10.4, the project is consistent with the applicable goals and policies pertaining to population and housing.

3.12.3 Thresholds of Significance

The significance criteria used to evaluate the project impacts to population and housing are based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines. According to Appendix G of the CEQA Guidelines, a significant impact would occur if the project would:

- **Threshold No. 1:** Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure).
- **Threshold No. 2:** Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere.

3.12.4 Project Impact Analysis

Threshold No. 1: Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

As described in Chapter 2, the project proposes development of 120 multifamily residential dwelling units on 7.6 acres for an approximate total density of 15.8 dwelling units per acre. The project would include a total of 260 parking spaces in addition to 37 existing spaces on site, approximately 92,645 square feet of common recreation area, and an average of 146 square feet of private open per unit. Amenities on site would include tot lots and recreational areas, a dog park, a community garden, and a landscaped pedestrian path along the N Las Posas Road frontage. The proposed project also includes landscaping, bio-retention areas, and circulation improvements. The project would include two points of entry; the first entry point is located off N Las Posas Road and the second entry point is located off W Mission Road (please refer to Figure 2-1, Conceptual Site Plan).

The project would include a variety of floorplans for the proposed townhomes. Floorplans include two- and three-bedroom units that vary in size from approximately 1,200 square feet to 1,800 square feet and include differing garage configurations. All townhomes would be three stories high. The number of townhomes per building would vary from 4 to 10. Proposed residential units are designed as entry-level, market-rate housing with a range of unit sizes and price points in order to create opportunities for home ownership that would be attractive to varying income levels. The proposed townhomes would also provide for a transition between single-family homes to the north and high-density apartments to the south. All proposed buildings would be equipped with photovoltaic panels (solar panels) on the rooftops to provide solar energy to the proposed homes, in accordance with current building code.

The project site is currently zoned for Commercial (C) use with an existing General Plan designation of Commercial and is within the City's General Plan Neighborhood College area. The project proposes a General Plan and Zoning Amendment to change the land use designation to Specific Plan Area (SPA) (refer to Figures 2-4 and 2-6). Design of the project would be required to follow the design guidelines outlined in the Gran Vista Specific Plan prepared for the project site (Appendix M). The design guidelines propose architectural styles for the project to be transitional in nature to allow the project to blend in with the surrounding neighborhood. Landscape screening would be provided along the top of the drainage channel slope to preserve the privacy of adjacent neighbors.

The project site is designated as a High Quality Transit Area due to its proximity to transit and other facilities and services that support alternatives to vehicle use. Palomar College, a public community college consisting of a 200-acre campus, is located east of the project site. Palomar College Transit Center, a North County Transit District hub, is located less than 0.25 miles from the project site. Palomar College Transit Center consists of a bus depot on the north side of W Mission Road, near the main entrance to Palomar College, and a train station on the south side of W Mission Road that serves the SPRINTER hybrid rail train. Rail service and bus transit service offered at the Transit Center provide local and regional connections to schools, employment, shopping, and entertainment options within the City, as well as San Diego and Riverside Counties. An existing bus turnout and stop are also located on W Mission Road in front of CVS. The Inland Rail Trail, a proposed 21-mile Class I bikeway, runs along the south side of W Mission Road and connects the Cities of Oceanside, Vista, San Marcos, and Escondido, as well us areas of unincorporated San Diego County.

As of 2021, the City has a person per household ratio of 3.08 (DOF 2021). Using this household ratio of 3.08, development of 120 residential dwelling units at the project site would house approximately 370 people. Although not all residents of the development would be new to the City, residential development on the project

site would still result in unplanned growth within the City because the project site is zoned for Commercial use and the project proposes a residential land use. The residential land use for the project site was not accounted for in the City's General Plan.

The project's generation of housing for approximately 370 people is not expected to substantially induce population growth in the area. This is because the area surrounding the project site is already developed. Further, because the project site is in an infill area with existing roads and utilities, no indirect impacts associated with the extension or construction of roads or expansion of public utilities are expected to occur as a result of the project.

As discussed above, the City is forecasted to grow from 96,302 persons in 2020 to 109,095 persons in 2035, which is a population increase of 12,793 (SANDAG 2013a). Additionally, SANDAG allocated 3,116 housing units to the San Marcos area for the 2021–2029 Housing Element Cycle (SANDAG 2021). Approval of the project could help the City accommodate the substantial population growth projected to occur within the City and the need for housing.

The project would be subject to compliance with the City's General Plan Housing Element goals and policies, housing-related ordinances in the San Marcos Municipal Code, and applicable development fees.

The City's Growth Management Ordinance (Chapter 20.315 of the Municipal Code) was adopted to implement the General Plan and to manage the projected growth of residential, industrial, and commercial development. The ordinance requires that all new development bear the cost of providing the public facilities and services needed to effectively serve the new development. The Growth Management Ordinance does not limit density of development or cap the number of residential building permits that can be issued within the planning period. To the contrary, the ordinance will ensure that public facilities and services are, or will be, provided to serve future residential development anticipated by the RHNA.

The City's Inclusionary Housing Ordinance, established in May 2000, requires housing developers of one or more units to contribute to housing for extremely low, very low, low, and moderate income households as defined by the U.S. Department of Housing and Urban Development. Developers of for-sale single-family projects and rental projects of six or fewer units may pay an in-lieu fee in accordance with Section 20.310.050 of the Municipal Code. In-lieu fees are deposited into an interest-accruing account to provide housing opportunities for target households. The City has the discretion to accept an irrevocable dedication of land or other non-monetary contribution that is not less in value than the otherwise required in-lieu fee if the non-monetary alternative furthers the goals and policies of the Housing Element. The project would not include any designated affordable housing units and has opted to pay the in-lieu fee.

The City charges fees to process plans submitted for residential projects and to finance the provision of important services that are needed to accommodate housing and population growth. Fees and exactions are used to finance public facilities, roadways, water and sewer infrastructure, schools, and other community services. Nearly all of these fees are assessed through a pro rata share system, based on the magnitude of the project's impact or the extent of the benefit that will be derived. Failure to adequately plan for residential development is a key reason why jurisdictions are so financially constrained today. Furthermore, the City's fees have not been found to act as a constraint to the development of housing in San Marcos. For new residential projects, developers in San Marcos may be required to pay one or more of the following fees depending on the location, type, and size of the project: Planning, Building and Environmental Fees; City Impact Fees; and Regional Impact Fees (City of San Marcos 2023).

In summary, implementation of the project would change the site's land use designation and zoning from Commercial to Specific Plan Area in a manner that would accommodate development of 120 residential units and generate housing for approximately 370 people not previously accounted for by the City. However, because the

project area is already developed, the project is not expected to substantially induce unplanned population growth in the vicinity of the site. Further, because the project site is in an area with existing roads and utilities, no indirect impacts associated with the extension or construction of roads or expansion of public utilities are expected to occur as a result of the project. City requirements for funding and pre-planning for implementation of housing projects would also ensure that project growth is adequately planned for prior to development. As the project would be required to comply with City regulations and applicable fees outlined above, impacts associated with unplanned population growth would be **less than significant**.

Threshold No. 2: Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

The project site is currently vacant and undeveloped. Implementation of the project would not displace any existing housing or people or necessitate the construction of replacement housing elsewhere. Therefore, **no impact** would occur.

3.12.5 Cumulative Impact Analysis

Cumulative projects in addition to the project could result in both direct and indirect cumulative impacts to population and housing in the City. Projects outlined in Table 2-2 in Chapter 2, Project Description, of this EIR that include residential development could result in direct impacts to population growth in the City, and non-residential projects located on undeveloped land could result in indirect growth due to the need for new roads and/or utilities or expansion of existing infrastructure.

Cumulative projects outlined in Chapter 2 of this EIR include both residential and mixed-use development projects. The introduction of a new population is not, in and of itself, a significant impact. As with a project-level analysis, the significance of a cumulative population impact is determined by whether the population growth resulting from the combined cumulative projects would be considered to induce substantial unplanned population growth in the area. Similar to the City, the neighboring jurisdictions manage population growth and housing stock to meet their RHNA requirements. All cumulative projects would be required to prepare an environmental document addressing potential impacts to population and housing and would be required to comply with the City's General Plan Housing Element, City Ordinances related to housing, and applicable development fees. Compliance with City regulations and fees would ensure that cumulative impacts related to population and housing would be adequately addressed.

Further, the project and cumulative projects would not result in the removal of a barrier of growth that would reasonably result in the intensification or development of land or any cumulative utility or infrastructure expansion. Additionally, because the project is surrounded by existing development, approval of the project would not lead to substantial intensification of the land use in the area. Similar to the project, a CEQA analysis would be required for all cumulative projects to determine potential environmental impacts. Therefore, cumulative impacts would be **less than significant**.

3.12.6 Mitigation Measures

No significant impacts are identified; therefore, no mitigation measures are required.

3.12.7 Conclusion

Although the project would introduce a residential land use and an increase in population at the project site not previously accounted for by the City, because the surrounding project area is already developed, the project would not serve to induce substantial unplanned population growth in the vicinity of the site. Further, because the project site is in an area surrounded by development with existing roads and utilities, no indirect impacts associated with the extension or construction of roads or expansion of public utilities are expected to occur as a result of the project. As analyzed in Section 3.12.4, approval of the project could help the City accommodate the substantial population growth projected to occur within the City and the need for housing.

City requirements for funding and pre-planning for implementation of housing projects would also ensure that project growth is adequately planned for prior to development. The project would be required to comply with goals and policies outlined in the City's Housing Element and applicable City regulations and fees as outlined above. Approval of the proposed General Plan Amendment and Rezone of the project site from Commercial (C) to Specific Plan Area (SPA) and compliance with applicable City regulations would ensure project impacts related to the increase in population and housing would be less than significant.

Since the project site is located on undeveloped land, implementation of the project would not displace any existing housing or people in a manner that would necessitate the construction of replacement housing elsewhere.

Overall, impacts related to population and housing as a result of project implementation would be less than significant.

3.13 Public Services

This section describes the existing setting of the proposed Gran Vista Specific Plan Project (project) site, identifies associated regulatory requirements, and evaluates potential impacts related to public services, including fire protection services, police protection services, schools, parks, and libraries.

Table 3.13-1 summarizes the project- and cumulative-level public services analysis impact by thresholds of significance.

Table 3.13-1. Public Services Summary of Impacts

Threshold of Significance	Project-Level Impact	Cumulative-Level Impact	Significance Determination
No. 1: Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:			
Fire protection services	Less than Significant	Less than Significant	Less than Significant
Police protection services	Less than Significant	Less than Significant	Less than Significant
Schools	Less than Significant	Less than Significant	Less than Significant
Parks	Less than Significant	Less than Significant	Less than Significant
Other public facilities	Less than Significant	Less than Significant	Less than Significant

3.13.1 Existing Conditions

This section details the existing service providers and resources related to fire protection, police protection, schools, parks, and libraries.

Fire Protection

The project site is located within the San Marcos Fire Protection District (SMFPD) boundary, which covers an area of 33 square miles and serves a population of approximately 95,000 residents (City of San Marcos 2022a). The San Marcos Fire Department (SMFD) would provide fire protection and emergency medical services to the project site.

The SMFD currently operates 4 fire stations, 4 paramedic assessment engine companies, 1 paramedic assessment truck company, 5 paramedic transport ambulances (24-hour units), 1 shift battalion chief, and 1 on-call duty chief. SMFD also cross-staffs three wildland fire engines and a State of California/Office of Emergency Services wildland fire engine (City of San Marcos 2022a). The SMFD Station 1, located at 180 W. Mission Road, San Marcos, California 92069, is the closest station to the project site and would likely serve the project site should fire response or emergency services be needed (City of San Marcos 2023a). SMFD Station 1 is located approximately 1.5 miles southwest of, or 4 minutes away from, the project site. SMFD Station 1 houses an engine, truck, brush engine, ambulance, and battalion chief.

Police Protection

According to the City of San Marcos (City) General Plan, Land Use and Community Design Element, the City contracts their law enforcement services from the San Diego County (County) Sheriff's Department (City of San Marcos 2012a). The project would be served by the Sheriff's San Marcos Station, located at 182 Santar Place in the northeast quadrant of the City (City of San Marcos 2012a). This sheriff station is located approximately 2.5 miles east of, or 8 minutes from, the project site.

The Sheriff's San Marcos Station provides law enforcement services to the City and unincorporated communities of Harmony Grove, Elfin Forest, Lake San Marcos, Hidden Meadows, Ivy Del, Del Dios, Lake Hodges, and the San Pasqual Valley (SDCSD 2022). Law enforcement services include general patrol, criminal investigation, crime prevention, juvenile services, narcotics and gang investigations, communications and dispatch, and various management support services (City of San Marcos 2012a). Services are available 24 hours a day, 7 days a week.

The San Marcos Station serves more than 111,000 residents and staffs more than 100 deputies, volunteers, and professional staff members (SDCSD 2022). Additionally, Community Oriented Police and Problem Solving teams are assigned to investigate community quality-of-life issues (SDCSD 2022). Lastly, the Sheriff's San Marcos Station has the only ASTREA (Sheriff's Aviation) helicopter landing pad in the County, which provides assistance to ground units and extends the range deputies can patrol (SDCSD 2022).

The County Sheriff's Department does not set response time goals. The Sheriff's Department does, however, prioritize different types of calls to better facilitate deputy dispatches. The Sheriff Department's priority categories are as follows: priority level 1 (lifesaving response calls), priority level 2 (expeditious response calls within confines of vehicle codes), priority level 3 (calls responded to as soon as possible), and priority level 4 (calls responses to when clear, still being alerted to violations that require immediate law enforcement action) (City of San Marcos 2012a).

Schools

According to the City's General Plan, Land Use and Community Design Element, primary education throughout the City is served by the San Marcos Unified School District (SMUSD) (City of San Marcos 2012a). The SMUSD is approximately 44 square miles and serves the City, portions of the City of Carlsbad, the City of Escondido, the City of Vista, and unincorporated areas of the County (SMUSD 2021). As of 2021, there were 10 elementary schools, 1 K–8 school, 1 K–8 International Baccalaureate World School, 3 middle schools, 2 comprehensive high schools, 1 continuation high school (which includes an adult transition program), and 1 independent high school program that are a part of the SMUSD. There are approximately 19,767 students enrolled in the SMUSD (SMUSD 2021).

Using the address of a business site immediately adjacent to the southeast of the project site, it was determined through SMUSD's school locator web application (SMUSD 2022a) that the project site falls within the following school boundaries (Appendix M, Gran Vista Specific Plan):

- Paloma Elementary School (serving grades K–5), located at 660 Camino Magnifico, San Marcos, California, 92069—approximately 1 mile north of the project site
- San Marcos Middle School (serving grades 6–8), located at 650 W Mission Road, San Marcos, California, 92069—approximately 1 mile east of the project site
- Mission Hills High School (serving grades 9–12), located at 1 Mission Hills Court, San Marcos, California, 92069—approximately 3 miles from the project site

Parks

The purpose of the City's Parks, Recreation, and Community Health Element of the General Plan is to provide recreational opportunities, which contribute to the health and well-being of the residents of San Marcos, and to provide goals and policies that outline the role recreational amenities plan in achieving the City's vision for the future (City of San Marcos 2012b).

There are 24 community parks, 13 neighborhood parks, and 3 recreation centers located throughout the City (City of San Marcos 2022b). The City residents in the project area are currently served by several nearby parks. Specifically, the closest park to the project site is Innovation Park located at 1151 Armorlite Drive, which is located 0.6 miles southeast of the project site. Innovation Park consists of a dog park, restrooms, picnic tables, play equipment, and pickleball courts (City of San Marcos 2022b). Other nearby parks include Mission Sports Park, located approximately 0.5 miles southeast of the project site, and Creek Park, located approximately 0.4 miles east of the project site.

Libraries

The City is served by the San Diego County Library, San Marcos Branch, which is located at 2 Civic Center Drive, approximately 2 miles east of the project site (City of San Marcos 2023b). The San Marcos Branch is 15,394 square feet (sf) (City of San Marcos 2012a), contains a MakerBot 3D printer and a 28-person capacity meeting room, is Americans with Disabilities Act accessible, and is open 7 days a week (prior to closures resulting from the 2020 COVID-19 pandemic) (San Diego County Library 2022).

3.13.2 Regulatory Setting

This section provides an overview of the applicable federal, state, and local regulations governing public services.

Federal

There are no federal codes, policies, or regulations regarding public services that would apply to the proposed project.

State

Quimby Act

Since the passage of the 1975 Quimby Act (California Government Code Section 66477), cities and counties have been authorized to pass ordinances requiring that developers set aside land, donate conservation easements, or pay fees for park improvements. Revenues generated by the Quimby Act cannot be used for the operation and maintenance of park facilities. The goal of the Quimby Act was to require developers to help mitigate the impacts of property improvements. The act gives authority for passage of land dedication ordinances only to cities and counties.

California Fire Code

The California Fire Code (CFC) and Office of the State Fire Marshal provide regulations and guidance for local agencies in the development and enforcement of fire safety standards. The CFC also establishes minimum requirements that would provide a reasonable degree of safety from fire, panic, and explosion.

Senate Bill 50—Leroy F. Greene Schools Facilities Act of 1998

Senate Bill (SB) 50, or the Leroy F. Greene School Facilities Act of 1998, restricts the ability of local agencies to deny project approvals on the basis that public school facilities (classrooms, auditoriums, etc.) are inadequate. School fees are also collected at the time when building permits are issued. Payment of school fees is required by SB 50 for all new residential development projects and is considered full and complete mitigation of any school impacts (Government Code Section 65996). As required by SB 50, school impact fees are payments to offset capital

cost impacts associated with new developments, which result primarily from costs of additional facilities, related furnishings and equipment, and projected capital maintenance requirements. As such, agencies cannot require additional mitigation for any school impacts. School impact fees and fees collected pursuant to SB 50 are collected at the time when building permits are issued.

Local

San Marcos Municipal Code Chapter 17.36—Park and Recreational Development Construction Unit Fee

San Marcos Municipal Code (SMMC) Chapter 17.36, Park and Recreational Development Construction Unit Fee, describes the need for developers of dwelling units within the City to pay applicable fees toward the City for the planning, acquisition, improvement, expansion, and operation of public parks, playgrounds, and recreational facilities to help mitigate the potential impacts on recreational facilities due to population increases (City of San Marcos 2022c). The payment of fees shall be collected prior to the issuance of building permit by the City.

San Marcos Municipal Code Chapter 17.44—Development Services and Public Facilities Exactions, Fees and/or Costs

SMMC Chapter 17.44, Development Services and Public Facilities Exactions, Fees and/or Costs, describes the payment of fees toward public services, facilities, and infrastructure in the City to mitigate increased demand on these facilities due to development of dwelling units (City of San Marcos 2022d). The developer of new dwelling units in the City would pay development service fees to the City alongside submission of an application for grading, construction, building, and/or development permit or entitlement by any person, or at the time of permit issuance, as specified by the City (City of San Marcos 2021b).

San Marcos Municipal Code Chapter 17.52—School Fees and Land Dedication

SMMC Chapter 17.52, School Fees and Land Dedication, describes the school facility fee dedications needed in the City to alleviate potential overcrowding in schools resulting from increased population from the development of dwelling units (City of San Marcos 2022e).

The City may require, as a condition to the approval of a residential development, the dedication of land, the payment of fees in lieu, or a combination of both, as determined by the decision-making body during the hearings and other proceedings, on specific residential development applications falling within their respective jurisdiction. Prior to imposition of the fees and/or dedications of land, it shall be necessary for the decision-making body acting on the application to make the following findings:

- The City's General Plan provides for the location of public schools.
- The land or fees, of both, transferred to a school district shall be used only for the purpose of providing interim elementary, junior high, or high school classroom and related facilities as defined by the governing body of the district.
- The location and amount of land to be dedicated or the amount of fees to be paid, or both, shall bear a reasonable relationship and would be limited to the needs of the community for interim elementary, junior high, or high school facilities and shall be reasonably related and limited to the need for schools caused by the development.
- The facilities to be constructed, purchased, leased, or rented from such fees or the land to be dedicated or both is consistent with the City's General Plan.

City of San Marcos General Plan

Land Use and Community Design Element

The following are applicable goals and policies from the City's General Plan, Land Use and Community Design Element, related to public services (City of San Marcos 2012a):

Goal LU-8: Ensure that existing and future development is adequately serviced by infrastructure and public services.

Policy LU-8.1: New development shall pay its fair share of required improvements to public facilities and services.

Policy LU-8.2: Promote development timing that is guided by the adequacy of existing and/or expandable infrastructure, services, and facilities.

Goal LU-10: Fire protection, emergency services, and law enforcement. Provide effective, high-quality and responsive services.

Policy LU-10.1: Provide demand-based fire-fighting and emergency medical services infrastructure, equipment, and personnel to provide a high level of fire, emergency medical, and law enforcement service in San Marcos to meet existing and future demands.

Policy LU-10.2: Work closely with the County of San Diego Sheriff's Department to determine and meet the community needs for adequate personnel, equipment and state-of-the-art technology to effectively combat crime, and meet existing and projected service demands.

Policy LU-10.3: Continue to conduct Public Outreach and education regarding fire safety and crime prevention within San Marcos.

Goal LU-11: Schools: Ensure all residents have access to high-quality education.

Policy LU-11.1: Collaborate with the local public school district (SMUSD), private schools, and institutions of higher learning to ensure a range of traditional and distance-learning educational opportunities are provided in superior, accessible facilities that complement the surrounding land uses.

Policy LU-11.2: Work with San Marcos Unified School District and developers to ensure adequate school facilities are funded as required by State law and through developer mitigation agreements between the school district and the developer. The City shall require a "will serve" letter substantiating that the developer has paid fees to the satisfaction of the school district prior to issuance of building permits.

Goal LU-12: Libraries. Provide library resources and services that meet the needs of the community.

Policy LU-12.1: Provide adequate library facilities and technological access that enhance San Marcos's quality of life and create a civic environment with vast opportunities for self-learning and academic enrichment.

Policy LU-12.2: Accommodate technology needs of the community and locate accessible technology in the library.

Safety Element

The following are applicable goals and policies from the City's Marcos General Plan, Safety Element related to public services, including fire protection, police protection, parks, and libraries (City of San Marcos 2012c):

Goal S-3: Minimize injury, loss of life, and damage to property resulting from structural or wildland fire hazards.

Policy S-3.1: Require development to be located, designed and constructed to provide adequate defensibility and reduce the risk of structural loss and life resulting from wildland fires. Development will consider hazards relative to terrain, topography, accessibility and proximity to vegetation. One such provision for development to minimize the risk of structural loss and life shall be the inclusion of overhead fire sprinklers.

Policy S-3.2: Provide sufficient level of fire protection service to reduce risk from urban and wildland fire. Advocate and support regional coordination among fire protection and emergency service providers.

Policy S-3.3: Require development to provide additional access roads when necessary to provide for safe access of emergency equipment and civilian evacuation concurrently.

Policy S-3.4: Coordinate with fire protection and emergency service providers to assess fire hazards before and after wildfire events to adjust fire prevention and suppression needs, as necessary, commensurate with both short- and long-term fire prevention needs.

Goal S-6: Provide neighborhood safety through effective law enforcement.

Policy S-6.1: Continue to maintain demand-based law enforcement service levels to reduce the risk of criminal activity.

Policy S-6.2: Continue public education efforts and community outreach programs to promote community involvement in crime and drug prevention.

Policy S-6.3: Use Crime Prevention through Environmental Design (CPTED) principles in the design or redevelopment of projects and buildings.

Parks, Recreation, and Community Health Element

The following are applicable goals and policies from the City's General Plan, Parks, Recreation and Community Health Element, related to parks (City of San Marcos 2012b):

Goal PR-1: Plan for, acquire, develop, and maintain a system of local parks connected through an integrated network of trails and high-quality recreational facilities.

Policy PR-1.1: Develop and maintain a complete system of public parks and recreational amenities that provide opportunities for passive and active recreation at a minimum standard of 5 acres per 1,000 residents. Parks, trails, and recreational facilities will enhance community livability, public health, and safety; should be equitably distributed throughout the City; and be responsive to the needs and interests of residents, employees, and visitors.

Policy PR-1.3: Ensure that the development of parks, trails, and recreation facilities and services keeps pace with development and growth within the City.

Policy PR-1.4: Promote increased access to parks and open spaces, pedestrian- and bike-oriented routes to parks and open space, greening of public rights-of-way, and a variety of active and passive uses of parks and open space.

Policy PR-1.5: Require new development to be designed and constructed in accordance with the approved Parks Master Plan to meet or exceed the City's parkland standard of 5 acres per 1,000 residents.

Policy PR-1.6: Require new infill development to provide plazas, mini parks, or other civic spaces as part of their parkland requirement.

Policy PR-1.7: Promote park and facility design that discourages vandalism, deters crime, provides natural surveillance, and creates a safe and comfortable environment.

The project's consistency with applicable General Plan goals and policies is discussed in Section 3.10, Land Use and Planning. As detailed in Section 3.13.4, Project Impact Analysis, the project is consistent with all applicable goals and policies pertaining to public services.

3.13.3 Thresholds of Significance

The significance criteria used to evaluate the project impacts to public services are based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines. According to Appendix G of the CEQA Guidelines, a significant impact related to public services would occur if the project would:

- **Threshold No. 1:** Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:
  - Fire protection
  - Police protection
  - Schools
  - Parks
  - Other public facilities

3.13.4 Project Impact Analysis

Threshold No. 1: Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:

Fire Protection?

Residential uses were not considered at the project site in the City's General Plan, and the land use change from Commercial to Specific Plan Area to accommodate the proposed residential development could result in an increased demand on SMFD. As analyzed in Section 3.12 Population and Housing, the project would result in

development of 120 residential dwelling units, housing approximately 370 residents. The estimated generation of 370 residents is calculated based on an average of 3.08 occupants per household. The project would increase the demand on SMFD resources in comparison to development of a commercial use under the current allowed land use designation as a result of the increase of residents in the area. Although not all residents of the project would be new or additional to the City, the estimated additional numbers of residents at the project site would increase the need for fire protection services related to routine fire and emergency medical calls. The project would generate emergency calls, primarily medical, proportionally with its population. At build out, there may be as many as 44 calls per year generated by the on-site population. The addition of 1 call per 8 days to a station that is currently running approximately 17 to 18 calls per day is not considered a significant increase.

A Preliminary Fire Emergency Response Analysis prepared for the project (Appendix J to this EIR) included a response time analysis and call volume analysis. The Preliminary Fire Emergency Response Analysis (Appendix J) determined that SMFD could provide emergency response to the project site within its internal 7-minute response time from SMFD Station 1. Based on the conservative modeling in this analysis and the response times meeting the SMFD's internal response standards, there is no response time trigger for a new fire station to be provided in closer proximity to the project site. The existing Fire Station 1 would be able to adequately respond within the City's response time standard.

The project would be required to comply with SMFD and CFC requirements. In addition, the project would be required to comply with the City's Development Services Fees outlined in Section 17.44.030 of the SMMC. Payment of the Development Services Fees go toward City services. The project would be required to annex into the Community Facilities District (CFD 2001-01: Fire and Paramedic), which would help support the increased demand for services on existing public services and facilities. For the reasons stated above, potential impacts to fire response time as a result of the project would be **less than significant**.

Police Protection?

As discussed above under Fire Protection, the proposed residential development would develop 120 residential dwelling units, generating approximately 370 residents at the project site. Residential development at the project site would increase the demand on police protection services in comparison to the commercial uses allowed under the current land use designation because of the substantial increase in area residents. Although not all residents would be new/additional residents to the City, the project could increase the need for police protection services through routine police and emergency calls, and could increase the demand on the County Sheriff's Department San Marcos Station, which would serve the project site. The San Marcos Station is located approximately 2.5 miles east of the project site.

Implementation of the project would be expected to increase the frequency of emergency and non-emergency calls to the Sheriff's Department. However, as discussed in Section 3.13.1, Existing Conditions, more than 100 deputies, volunteers, and professional staff serve the residents of the City. Law enforcement services include general patrol, criminal investigation, crime prevention, juvenile services, narcotics and gang investigations, communications and dispatch, and various management support services. Unlike fire services, which respond solely to emergencies, law enforcement services consist of patrolling large areas 24 hours a day, 365 days a year. Police units are continuously mobile, and service calls are responded to by the nearest available mobile unit. At the San Marcos Station, patrol deputies are assigned to a geographical "beat" area, allowing deputies to become familiar with citizens and problems within their beats (SDCSD 2022). Accordingly, service ratios and response times are anticipated to remain adequate with implementation of the project. As such, the project is not expected to affect police protection such that new or physically altered governmental facilities are needed.

Additionally, the project would be required to comply with the City's Development Services Fees outlined in Section 17.44.030 of the SMMC. The project also would be required to annex into the Community Facilities District (CFD 98-01: Improvement Area No. 1 [Police Only]), which would provide funding to police services as the demand for services increases with new development. Payment of the Development Services Fees funds needed City services, which include the Sheriff's Department.

Therefore, while the project would place a slight increased demand on police protection services, it is not anticipated that the project would result in the need for construction or expansion of existing police facilities, and impacts to police response resulting from the project would be **less than significant**.

Schools?

As outlined above, the project would develop 120 residential dwelling units, generating approximately 370 residents, some of which are expected to be students. As described under Section 3.13.1, primary education throughout the City is served by the SMUSD. Paloma Elementary School (serving grades K–5), San Marcos Middle School (serving grades 6–8), and Mission Hills High School (serving grades 9–12), are the schools within the SMUSD that would be expected to serve grade-school residents at the project site. Using the SMUSD student generation rates as described in the City's General Plan, Land Use and Community Design Element (elementary students = 0.2297, middle school students = 0.0993, high school students = 0.1234), the project would generate approximately 28 elementary school students, 12 middle school students, and 15 high school students, respectively (City of San Marcos 2012a). This number of students generated by the project is not considered substantial.

Prior to project approval, the project would be required to obtain will-serve letters from the SMUSD or servicing schools to confirm such schools have adequate capacity. Furthermore, the project would be required to contribute development fees to SMUSD pursuant to California Education Code Section 17620 et seq. and Government Code Sections 65995(h) and 65996(b), as well as SMMC Section 17.52.050. The project developer/applicant would be required to pay the school mitigation fees that are in effect at the time of building permit issuance, unless a direct agreement otherwise has been made with the SMUSD. The current school fee for residential development required by SMUSD is $4.08 per square foot; however, this fee amount could change between the drafting of this EIR and the time of building permit issuance (SMUSD 2022b). Further, consistent with General Plan Policy LU-11.2, the project would be required to provide a letter from the school district(s) to the City prior to the issuance of building permits confirming these fees have been paid (City of San Marcos 2012a). SB 50 states that the fees imposed by school districts shall constitute the exclusive method of considering and mitigating impacts on school facilities caused by a development project. Such payment shall provide "full and complete mitigation of the impacts of any legislative or adjudicative act…on the provision of adequate school facilities" (Government Code Section 65995(h)). As such, with contribution of required development fees, impacts to schools as a result of the project would be **less than significant**.

Parks?

As previously described, the project would develop 120 residential dwelling units, generating approximately 370 residents. This increase in residents would increase demands for neighborhood and regional parks and other recreational facilities. Assuming 5 acres of park space per 1,000 residents (the minimum standard goal of the City's General Plan discussed in Section 3.13.2, Regulatory Setting), the addition of 370 residents at the project site equates to a demand of approximately 1.85 acres of public park space generated by the proposed residential development. Pursuant to the City's Multifamily Residential Development Design Guidelines, an area equal to 30% of livable ground floor area of all units shall be provided as common open space. For the project, this equates to 24,431 sf of common open space. As outlined in the Gran Vista Specific Plan (Appendix M), since the main living

areas proposed for all floor plans occur on the second floor, the common open space requirement has been calculated based upon the second floor's square footage. As calculated, the project would provide 92,645 sf of common open space area, which exceeds this requirement. Additionally, SMMC provides specific requirements for children's amenities on site for multifamily residential projects. The total required children's amenities for the project would be 2,720 sf, and the project proposes to include 5,811 sf, which exceeds the City's requirement. In addition to common open space, the project would provide an average of 146 sf of private open space per unit in the form of a deck or patio. Amenities on site would include tot lots and recreational areas, a dog park, a community garden, and landscaped pedestrian paths. The provided common and private open space areas would further offset demand on existing recreational facilities in the City, as required by the SMMC (Section 20.215.050).

The project would be required to pay the City's Public Facility Fees (PFFs), which are required of all projects that increase the demand for park and recreation needs in the City. The PFF would be used for developing public neighborhood and regional parks and recreational facilities, as outlined in the City's Parks Master Plan Update (City of San Marcos 2018). The provision of usable common open space, private open space, and payment of the PFF would maintain the City's service standard for parks within the City.

Therefore, impacts related to the use of park facilities would be **less than significant**. Further details regarding parks and recreation can be found in Section 3.14, Recreation.

Other Public Facilities?

The project would develop 120 units, generating approximately 370 residents at the project site. Although not all of these residents would be new residents to the City, the generation of residents at the project site would increase the demands on other public facilities, including library services and additional resources in comparison to the project site's current commercial land use designation. However, additional library services are available in the County through a cooperation of County libraries, independent city libraries, and the Imperial County Library, which collectively form the Serra Library System. This system enables County library cardholders to check out library materials from the other Serra member libraries (Serra Cooperative Library System 2016). In addition, community members can purchase a community borrower card to obtain borrowing privileges at the California State University San Marcos campus (California State University San Marcos 2023). Community members can also borrow materials at Palomar College with a valid picture ID and proof of current mailing address (Palomar College 2021). These additional library resources are located in the San Marcos community and provide more than 200,000 sf of additional library space. Therefore, impacts to other public facilities in the City as a result of the project would be **less than significant**.

3.13.5 Cumulative Impact Analysis

Fire Protection Services

The geographic area for the cumulative analysis of fire protection and emergency services consists of those areas that are serviced by the SMFPD. The cumulative projects that fall within this geographic area would add to the increased demand for fire protection and emergency services. The SMFPD provides service to the City and has existing automatic mutual aid fire agreements in place with the cities of Carlsbad, Vista, Escondido, Encinitas, and the Rancho Santa Fe Fire Protection District.

As discussed in Section 3.13.4 above, the project would increase the demand on SMFD resources in comparison to development of a commercial use under the current allowed land use because of the increase of residents in the area. The project in addition to cumulative projects could increase the need for fire protection services through routine fire and emergency medical calls, and would increase the demand on SMFD stations, specifically Station 1 which would serve the project site.

However, similar to the project, cumulative projects would be required to comply with SMFD and CFC requirements. Additionally, the developer/applicant of cumulative projects would be required to comply with the City's Development Services Fees outlined in Section 17.44.030 of the SMMC. Payment of the Development Services Fees fund City services, which include the Fire Protection District.

Furthermore, the Preliminary Fire Emergency Response Analysis prepared for the project (Appendix J to this EIR) determined that SMFD could provide emergency response to the project site within its internal 7-minute response time, and development at the project site would not trigger the need for a new fire station closer to the project site. Therefore, the project would not result in substantial adverse physical impacts associated with the provision of new or physically altered facilities. Cumulative projects are anticipated to prepare similar analyses and provide mitigation if the response time cannot be met. Therefore, cumulative impacts to fire protection as a result of the project would be **less than significant**.

Police Protection Services

The geographic area for the cumulative analysis of police protection is those areas that are serviced by the San Marcos Sheriff's Department. All cumulative projects would result in an increased demand for police protection services from the San Marcos Sheriff's Department. The project site would be served by the San Marcos Station, located approximately 4 miles from the project site. As discussed in Section 3.13.4, the project would not result in substantial adverse physical impacts associated with the provision of new or physically altered facilities. Therefore, cumulative impacts to police protection services would be **less than significant**.

For informational purposes, cumulative projects could result in additional demand for police protection services and the potential need for additional police protection resources. Similar to the project, all cumulative projects would be required to offset increased demand to police protection services through the payment of Development Services Fees, which go toward City services including the Sheriff's Department. These fees would provide for additional staff and equipment to assist in the provision of law enforcement services.

Schools

Cumulative projects that have a residential component would generate students that need to be accommodated by either the SMUSD or another school district in the area. As discussed in Section 3.13.4, the project would be required to contribute development fees to the SMUSD, pursuant to California Education Code Section 17620 et seq. and Government Code Sections 65995(h) and 65996(b), as well as SMMC Section 17.52.050. Furthermore, will-serve letters from the SMUSD or servicing schools would be required to confirm such schools have adequate capacity to serve grade-school students generated by residential development. This would apply to similar cumulative projects as well. SB 50 states that the fees imposed by school districts shall constitute the exclusive method of considering and mitigating impacts on school facilities caused by a development project. As such, with contribution of required development fees by the project and cumulative projects, cumulative impacts to schools would be **less than significant**.

Parks

The project and the cumulative projects in the City would add to the cumulative demand for park and recreation facilities in the City. All residential projects that increase the demand for park and recreation needs in the City are required to provide park space and/or pay park in lieu-fees. The environmental documentation prepared for each project would analyze impacts associated with the construction of any parks within each overall development footprint. As discussed in Section 3.13.4, the project developer/applicant would be required to pay the City's PFF, required of all projects that increase the demand for park and recreation needs in the City, and which is used for developing neighborhood and regional parks. It is expected that all cumulative projects that increase demand for parks and recreation needs would also be required to pay these fees. It is also anticipated that similar to the project, all cumulative residential projects would provide on-site open space and/or recreational amenities consistent with the requirements of the SMMC (Section 20.215.050). With payment into the City's PFF and incorporation of on-site recreation, cumulative impacts on recreational facilities in the City would be **less than significant**.

Libraries

Cumulative projects within the services area of the San Marcos Branch Library would potentially result in an increased demand for library services. Aside from the San Marcos Branch, additional library services are available in the County through the Serra Library System. In addition, community members can get borrowing privileges at the California State University San Marcos campus and Palomar College. These additional library resources provide more than 200,000 sf of additional library space. Therefore, cumulative impacts to library facilities in the City as a result of the project would be **less than significant**.

3.13.6 Mitigation Measures

No significant impacts to public services were identified; thus, no mitigation measures are required.

3.13.7 Conclusion

As analyzed above, the project would develop 120 residential units, generating approximately 370 residents at the project site. This would result in an increased demand for fire protection, emergency medical services, police protection, school services, and library facilities. However, the project and cumulative projects would be required to comply with applicable regulations and pay all applicable development fees discussed above, including payment of school mitigation fees pursuant to California Education Code Section 17620 et seq. and Government Code Sections 65995(h) and 65996(b), as well as SMMC Section 17.52.050; payment toward the City's Development Services Fees outlined in Section 17.44.030 of the SMMC, which goes toward City services that include the fire and police services; and payment of the City's PFF required of all projects that increase the demand for park and recreation needs in the City to avoid direct and cumulative impacts to schools and parks. With compliance with applicable regulations and payment of the applicable fees outlined above, direct and cumulative impacts to public services would be **less than significant**.

3.14 Recreation

This section describes the existing recreation setting of the project site, identifies associated regulatory requirements, and evaluates potential impacts related to implementation of the Proposed Gran Vista Specific Plan Project (project).

Table 3.14-1 summarizes the project- and cumulative-impact analysis by threshold for the project.

Table 3.14-1. Recreation Summary of Impacts

Threshold of Significance	Project Direct Impact	Project Cumulative Impact	Significance Determination
No. 1 – The project increases the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.	Less than Significant	Less than Significant	Less than Significant
No. 2 – The project includes recreational facilities or requires the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.	Less than Significant	Less than Significant	Less than Significant

3.14.1 Existing Conditions

This section describes existing parks, recreation facilities, and trails on the project site and in the project vicinity. The City of San Marcos has more than 290 acres of park land and 37 parks (City of San Marcos 2022). The City of San Marcos's Parks Master Plan classified parks into eight categories: Regional Park; Community Park; Neighborhood Park; Mini (Urban) Park; Special Use Facility; Historical, Monument, and Memorial; Recreation Center; and Aquatic Center (City of San Marcos 2018). Details on each of these park categories are details below.

Regional Parks

Regional Parks are defined as parks that are a minimum of 50 acres, with 75 or more acres being optimal (City of San Marcos 2018). The drive time to a Regional Park is approximately 1 hour or less, and offers a variety of terrain, scenic views, cultural amenities, and extensive natural areas with both passive and active opportunities.

Community Parks

Community Parks are defined as parks that are a minimum of 10 acres and up to 100 acres (City of San Marcos 2018). Community Parks serve two or more neighborhoods with a service area of 0.5 to 3 miles. There are five Community Parks in the City of San Marcos: Bradley Park, Woodland Park, Walnut Grove Park, Discovery/Lakeview Park, and Double Peak Park. Bradley Park, Walnut Grove Park, Discovery/Lakeview Park, and Double Peak Park would serve the project site because the project site is within the service area of these four parks. Bradley Park is the closest to the project site and is approximately 1 mile southwest of the project site.

Neighborhood Parks

Neighborhood Parks are defined as parks that are generally 5 acres, although 7 to 10 acres is optimal (City of San Marcos 2018). Neighborhood Parks have a service area of 0.25 to 0.5 miles and should be accessible by arterial roads. There are 14 Neighborhood Parks in San Marcos: Buelow Park, Connors Park, Hollandia Park, Innovation Park, Knob Hill Park, Jacks Pond Park, Cerros de Las Posas Park, Mission Sports Park, Montiel Park, Mulberry Park, Richmar Park, San Elijo Park, Simmons Family Park, and Sunset Park.

Mini (Urban) Parks

Mini (Urban) Parks are defined as parks that are 2,500 square feet to 1 acre in size, although a park area of less than 5 acres could be considered a Mini Park (City of San Marcos 2018). A Mini Park's service area is 0.25 miles or less and is in a residential setting. There are 18 Mini (Urban) Parks in San Marcos: Alder Glen Park, Amigo Park, Bougher Park, Children's Park, Civic Center Park, Creek View Park, Discovery Meadows, Foothill Park, The Laurels Park, Optimist Park, Pebblestone Park, Quail Valley Park, Questhaven Park, Regency Hills Park, Ridgeline Trailhead, Santa Fe Hills Park, Summer Hill Park, and Valley View Park.

Special Use Facility

A Special Use Facility includes three categories of facilities (City of San Marcos 2018):

- Historic/Cultural/Social Sites – A unique local resource offering historical, educational, and cultural opportunities. Examples include historic downtown areas, performing arts parks, arboretums, display gardens, performing arts facilities, indoor theaters, churches, public buildings, and amphitheaters.
- Recreation Facilities – A specialized or single-purpose facility. Examples include community centers, senior centers, community theaters, hockey arenas, marinas, golf courses, and aquatic parks.
- Outdoor Recreation Facilities – Examples include tennis centers, softball complexes, sports stadiums, skateboard parks, and bark parks.

The size and service area of a Special Use Facility varies greatly.

Historical, Monuments, and Memorials

Historical, Monuments, and Memorials parks preserve monuments and memorials, provides programmed historical interpretation, attracts tourists, and offers passive recreation opportunities (such as trails) (City of San Marcos 2018). The size and service area varies.

Recreation Centers

Recreation Centers are intended to provide indoor leisure facilities and programs at a reasonable cost. Recreation centers also serve as meeting facilities for local social gatherings and public events, and are designed to be a hub of recreation activity (City of San Marcos 2018). The size and service area varies.

Aquatic Centers

Aquatic Centers are swimming facilities that provide active recreation for resident. The size of these facilities varies. The service area is a minimum population of 25,000, and the recommended level of service is one Aquatic Center site per 40,000 persons in San Marcos (City of San Marcos 2018).

Trails

The City of San Marcos (City) currently owns and manages 63 miles of completed trails, with plans to expand the trail network to 72 miles (City of San Marcos 2018). The goal of the trail system is two-fold: to serve as a recreational amenity, and to provide an alternative means of circulation for non-motorized travelers through an inter-linked citywide system of trails connecting residential neighborhoods to parks, schools, colleges, stores, restaurants, movie theaters, other important destinations within San Marcos, and the wider regional trails system.

3.14.2 Regulatory Setting

This section describes the federal, state, and local laws and regulations that are applicable to recreation and the project.

Federal

There are no federal codes, policies, or regulations regarding recreation that would apply to the proposed project.

State

Quimby Act

Since the passage of the 1975 Quimby Act (California Government Code Section 66477), cities and counties have been authorized to pass ordinances requiring that developers set aside land, donate conservation easements, or pay fees for park improvements. Revenues generated by the Quimby Act cannot be used for the operation and maintenance of park facilities. The goal of the Quimby Act was to require developers to help mitigate the impacts of property improvements. The act gives authority for passage of land dedication ordinances only to cities and counties.

Landscape and Lighting Act of 1972

The Landscape and Lighting Act of 1972 enables cities, counties, and special districts to landscape and light public areas for parks, recreation facilities, and open space. A local government may also use the assessments to pay for improvements and maintenance in these areas.

Mello-Roos Community Facilities Act

The Mello-Roos Community Facilities Act (Government Code Section 53311 et seq.) is a tax-based financing method available to cities, counties, and special districts. It authorizes local governments to establish community facilities districts within which they may levy special taxes and issue bonds to finance open space acquisition, maintenance, and other programs. Approval of the special tax and any related bond issue requires approval by two-thirds of the district electorate.

Local

San Marcos Municipal Code Chapter 17.36 – Park and Recreational Development Construction Fee

As described in Chapter 17.36, Park and Recreational Development Construction Unit Fee, of the San Marcos Municipal Code (SMMC), the continued increase in the development of dwelling units and population within San Marcos has created the need for planning, acquisition, improvement, expansion, and operation of public

parks, playgrounds, and recreational facilities, and thus the need for additional revenue with which to finance such facilities. This chapter of the SMMC requires that each builder of each dwelling unit to be constructed within San Marcos must, prior to the construction, pay a fee, as adopted by Resolution by the City Council.

San Marcos Municipal Code Chapter 17.44 – Development Services and Public Facilities, Exaction, Fees, and/or Costs

The City recognizes that the continued development of property within the City's jurisdictional boundaries has resulted in an increased demand on existing public services, facilities, and infrastructure; the need for expansion of public services, facilities, and infrastructure; and/or the need for the installation of new public services, facilities, and infrastructure. It is the intent of the City that each applicant for a grading, construction, building, and/or development permit or entitlement must, prior to the issuance of such permit or entitlement, pay a Public Facilities Fee. The funds generated by the payment of fees described Chapter 17.44 are deposited into separate accounts established for the purposes of maintaining, expanding, and installing public infrastructure. Such public infrastructure includes active and passive open space and parks.

City of San Marcos General Plan

Parks, Recreation, and Community Health Element

The following are applicable goals and policies from the City of San Marcos General Plan, Parks, Recreation, and Community Health Element (City of San Marcos 2012):

Goal PR-1: Plan for, acquire, develop, and maintain a system of local parks connected through an integrated network of trails and high-quality recreational facilities.

Policy PR-1.1: Develop and maintain a complete system of public parks and recreational amenities that provide opportunities for passive and active recreation at a minimum standard of 5 acres per 1,000 residents. Parks, trails, and recreational facilities will enhance community livability, public health, and safety; should be equitably distributed throughout the City; and be responsive to the needs and interests of residents, employees, and visitors.

Policy PR-1.3: Ensure that the development of parks, trails, and recreation facilities and services keeps pace with development and growth within the City.

Policy PR-1.4: Promote increased access to parks and open spaces, pedestrian- and bike-oriented routes to parks and open space, greening of public rights-of-way, and a variety of active and passive uses of parks and open space.

Policy PR-1.5: Require new development to be designed and constructed in accordance with the approved Parks Master Plan to meet or exceed the City's parkland standard of 5 acres per 1,000 residents.

Policy PR-1.6: Require new infill development to provide plazas, mini parks, or other civic spaces as part of their parkland requirement.

Policy PR-1.7: Promote park and facility design that discourages vandalism, deters crime, provides natural surveillance, and creates a safe and comfortable environment.

The project's consistency with applicable General Plan goals and policies is discussed in Section 3.10, Land Use and Planning, of this environmental impact report (EIR). As detailed in Section 3.10.4, the project is consistent with the applicable goals and policies pertaining to recreation.

Parks Master Plan

The City adopted its first Parks Master Plan in 1990, which presented a vision of parks and recreation facilities for the City. Since that time, the City has changed significantly, so a Master Plan Update was adopted in 2018. The goal of the Parks Master Plan Update is to identify potential improvements to the park system and, as funding becomes available, suggest additional amenities for new parks and improvements to existing park facilities (City of San Marcos 2018).

Master Trails Plan

The City's Master Trails Plan, adopted in 1991, details a trails implementation strategy and description of each proposed trail segment. The plan envisions a system of connectivity through trail corridors networked across San Marcos. To meet this goal, the Master Trails Plan recommends the creation of 72 miles of trails that will provide an alternative means of circulation and recreational opportunities to San Marcos residents and visitors. These trails will include 21 miles of urban trails, 36 miles of multiuse trails, and 15 miles of soft-surface trails that connect neighborhoods to parks, schools, and workplaces, as well as to the trails systems of neighboring cities and the County of San Diego (City of San Marcos 1991).

3.14.3 Thresholds of Significance

The significance criteria used to evaluate project impacts to recreation are based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines. According to Appendix G of the CEQA Guidelines, a significant impact related to recreation would occur if the project would:

- **Threshold 1:** Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.
- **Threshold 2:** Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

3.14.4 Project Impact Analysis

Threshold 1: Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

According to the State of California Department of Finance, there are approximately 3.08 persons per housing unit in San Marcos (DOF 2021). The project proposes development of 120 residential dwelling units, which is estimated to generate approximately 370 residents using the California Department of Finance's 3.08 persons per household unit estimate (see Section 3.12, Population and Housing, of this EIR). This increase in residents would increase demands for neighborhood and regional parks and other recreational facilities. Assuming 5 acres of park space per 1,000 residents (the minimum standard goal of the City's General Plan, discussed in Section 3.14.2, Regulatory Setting), the addition of project residents equates to a demand of approximately 1.85 acres of public park space generated by residents of the project site.

As described in Section 3.12 of this EIR, pursuant to the City's Multifamily Residential Development Design Guidelines, an area equal to 30% of livable ground floor area of all units must be provided as common open space. For the proposed project, this equates to 24,431 square feet of common open space. As outlined in the Gran Vista Specific Plan (Appendix M), because the main living areas proposed for all floor plans occur on the second floor, the common open space requirement has been calculated based on the second floor's square footage. As calculated, the project would provide 92,645 square feet of common open space area, which exceeds the requirements of the Design Guidelines. Additionally, the SMMC provides specific requirements for children's amenities on site for multifamily residential projects. The total required children's amenities for the project would be 2,720 square feet, and the project proposes to provide 5,811 square feet, which exceeds the City's requirement. In addition to common open space, the project would provide an average of 146 square feet of private open space per unit in the form of a deck or patio. Amenities on site would include tot lots and recreational areas, a dog park, a community garden, and landscaped pedestrian paths. These provided common and private open space areas would further off-set demand on existing recreational facilities in San Marcos, as required by SMMC Section 20.215.050.

In total, the project would provide 2.12 acres of useable common open space area with grades of less than 10%, as outlined in Figure 2.2, Distribution of Allowable Uses, in the Gran Vista Specific Plan (Appendix M).

In addition to the proposed open space and amenities on site, the project would be required to pay the City's Public Facility Fees (PFFs), as applicable, required of all projects that increase the demand for park and recreation needs in the City. PFFs go toward the acquisition and development of local and community park facilities throughout San Marcos to offset the demand on public park space, as described in SMMC Chapters 17.36 and 17.44. Payment of the PFF would be made prior to City issuance of the first building permit for the project. Therefore, payment, which would ultimately contribute to development of new parks and recreational facilities, would offset the increase in demand of parks and recreational facilities generated by residential development at the project site, such that existing facilities would not substantially deteriorate. Therefore, project impacts to existing neighborhood and regional parks would be **less than significant**.

Threshold 2: Would the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

As stated under Threshold 1, the project would provide 2.12 acres of useable common open space area with amenities on site that include tot lots and recreational areas, a dog park, a community garden, and landscaped pedestrian paths. The project's proposed open space amenities are analyzed as part of this EIR. Furthermore, the project developer would be required to pay the City's PFF, which would go toward the acquisition and development of local and community park facilities throughout San Marcos to offset the demand on public park space. Therefore, impacts related to the construction or expansion of recreational facilities would be **less than significant**.

3.14.5 Cumulative Impact Analysis

The project, in addition to cumulative projects, would increase the demand for park and recreation facilities in San Marcos. Similar to the proposed project, all cumulative projects that increase the demand for park and recreation needs would be required to provide park space and/or pay the City's PFF. Furthermore, any substantial expansion or development of new recreational facilities would be subject to the appropriate CEQA environmental review, which would identify and address any site-specific impacts. Therefore, with payment of the City's PFF and project-specific environmental review, cumulative impacts to recreational facilities would be **less than significant**.

3.14.6 Mitigation Measures

No significant impacts to recreation were identified; thus, no mitigation is required.

3.14.7 Conclusion

As analyzed in Section 3.14.4, Project Impact Analysis, the project is required to present site plans outlining proposed open space and recreational amenities on site, and the project applicant/developer would be required to pay the City's PFF. Payment would be determined by the City based on the presented plans for the site. As described above, developer payment of the PFF would go toward the acquisition and development of local and community park facilities throughout San Marcos to offset the demand on public park space. With payment of the PFF and provision of the proposed on-site open space, impacts related to recreation would be **less than significant**.

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3.15 Transportation

This section describes the transportation impact analysis for the proposed Gran Vista Specific Plan Project (project). It includes a description of existing traffic conditions, trip generation for the project, traffic modeling, and identification of mitigation measures. This section is based on the Local Transportation Analysis (LTA), and Vehicle Miles Traveled (VMT) Analysis Technical Memorandum prepared by CR Associates in February 2023. These reports are included as Appendix K-1 and K-2 to this environmental impact report (EIR), respectively.

Table 3.15-1 summarizes the project- and cumulative-level impact analyses by threshold.

Table 3.15-1. Transportation Summary of Impacts

Threshold of Significance	Project-Level Impact	Cumulative-Level Impact	Significance Determination
No. 1: Conflict with a program plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities.	Less than Significant	Less than Significant	Less than Significant
No. 2: Conflict or be inconsistent with CEQA Guideline section 15064.3, subdivision (b).	Potentially Significant	Significant and Unavoidable	Significant and Unavoidable
No. 3: Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).	Less than Significant	Less than Significant	Less than Significant
No. 4: Result in inadequate emergency access.	Less than Significant	Less than Significant	Less than Significant

3.15.1 Existing Conditions

This section describes the existing circulation and transportation system in the project area and the methodology used to prepare the transportation analysis.

Project Location

The approximately 7.6-acre project site is surrounded by existing development located in the northwestern portion of the City of San Marcos (City), at the northwest corner of N Las Posas Road and W Mission Road. The project site is bounded by N Las Posas Road along the eastern boundary, W Mission Road along the southwest boundary, an existing CVS store to the south, and existing single-family residential development to the north and west, as well as to the east across N Las Posas Road. Nearby land uses in the vicinity of the project site include industrial and commercial uses to the south and east, the Santa Fe Hills residential community to the north, and Palomar College approximately 0.2 miles to the east. The closest freeway is State Route 78 located approximately 0.4 miles south of the project site.

The project site is currently zoned for Commercial (C) use with an existing General Plan designation of “Commercial” and is within the City’s General Plan Neighborhood College area. The project proposes a General Plan Amendment and Rezone to change the land use designation to Specific Plan Area (SPA).

The project site is designated as a High Quality Transit Area due to its proximity to transit and other facilities and services that support alternatives to vehicle use. Palomar College, a public community college consisting of a 200-acre campus, is located east of the project site. Palomar College Transit Center, a North County Transit District (NCTD) hub, is located less than 0.25 miles from the project site. Palomar College Transit Center consists of a bus depot on the north side of W Mission Road, near the main entrance to Palomar College, and a train station on the south side of W Mission Road that serves the SPRINTER hybrid rail train. Rail service and bus transit service offered at the Transit Center provide local and regional connections to schools, employment, shopping, and entertainment options within the City, as well as San Diego and Riverside Counties. An existing bus turnout and stop are also located on W Mission Road in front of CVS. The Inland Rail Trail, a proposed 21-mile Class I bikeway, runs along the south side of W Mission Road and connects the Cities of Oceanside, Vista, San Marcos, and Escondido, as well us areas of unincorporated San Diego County.

Methodology

Transportation Impact Analysis Approach and Methodology

As part of the TIA prepared for the project, the vehicle miles traveled (VMT) analysis was prepared to satisfy the requirements of the California Environmental Quality Act (CEQA). The level of service (LOS) analysis conducted as a part of the LTA was used to evaluate the effects of the proposed project on the circulation network. Per the City of San Marcos Transportation Impact Analysis Guidelines, the City strives to maintain intersection and roadway segment operations based on LOS standards outlined in the City of San Marcos General Plan (General Plan) Mobility Element (City of San Marcos 2020). Improvements should be identified for any study facilities that do not meet City LOS standards to increase performance to acceptable or pre-project conditions.

A discussion of LOS is included to support the Local Transportation Analysis (LTA) and consider consistency with programs addressing the circulation system for informational purposes only. Under CEQA, LOS or other measures of vehicle capacity or traffic congestion are no longer considered to be a significant impact on the environment. The effect of the project on traffic delay is not a significant impact under CEQA. For informational purposes, trip generation rates and distribution information are provided from the TIA. However, the potential CEQA environmental impact of the project in terms of vehicle trips is analyzed in terms of VMT below.

VMT Metrics

Consistent with the City's Transportation Impact Analysis Guidelines (City of San Marcos 2020), the proposed project shall be analyzed by the following VMT metric:

> VMT/Capita which includes, for all San Diego County residents, all vehicle-based resident travel grouped and summed to the home location of the individual. It includes all resident vehicle travel: home-based and non-home-based. The VMT for each individual is then summed for all individuals residing in a particular census tract and divided by the population of that census tract to arrive at Resident VMT/Capita. A significant impact will occur if the project generates VMT per resident greater than 85 percent of the regional average.

The City's Transportation Impact Analysis Guidelines provide screening criteria to screen out VMT based on project size, location, provision of affordable housing, and transit availability. The City uses screening thresholds to quickly identify when a project should be expected to cause a less-than-significant impact without conducting a detailed VMT study. Relevant screening criteria for the proposed project is described below:

- Screening Threshold for Small Projects – Absent substantial evidence indicating that a project would generate a potentially significant level of VMT, or inconsistency with the City General Plan, projects that generate or attract fewer than 110 trips per day generally may be assumed to cause a less-than-significant transportation impact.
- Map-Based Screening for Residential and Office Projects – Residential and office projects located in areas that generate VMT below adopted City threshold can be presumed to have a less-than-significant transportation impact. This determination must be made by SANDAG's [the San Diego Association of Governments'] online residential and employment VMT maps for existing year or model baselines year VMT (whichever is available at the time analysis is being conducted), which show census tracts in the city where the VMT is below the regional average.
- Presumption of Less Than Significant Impact for Affordable Residential Development – Residential projects with 100 percent deed restricted affordable housing can be presumed to have a less-than-significant transportation impact. Projects can only be screened out if they are located in parts of the city that have been identified by SANDAG and the City as Smart Growth Opportunity Areas.
- Presumption of Less Than Significant Impact Near Transit Stations – Projects located within one-half mile walkshed of a high-quality transit area can be presumed to have a less than significant transportation impact. However, this presumption does not apply if the project:
  - Has a floor area ratio (FAR) of less than 0.75;
  - Includes more parking for use by residents, customers, or employees of the project than required by the City;
  - Is inconsistent with the City's current General Plan, as determined by the City; or,
  - Replaces affordable residential units with a smaller number of moderate- or high-income residential units

If a project would result in significant impacts, CEQA requires mitigation measures to be implemented to reduce or mitigate an impact. VMT is reduced by implementing strategies that reduce the number of automobile trips generated by the project, shift more trips from automobile to non-automobile modes, and/or reduce the distances that people drive. Generally, these reductions can be achieved by the implementation of transportation demand management (TDM) strategies. TDM measures focus on understanding how people make their transportation decisions and helping people use the infrastructure in place for transit, ridesharing, walking, biking, and teleworking. The following are examples of TDM measures:

- Transit pass subsidies
- Carpool program
- Flexible work schedules
- Telework
- Showers, changing rooms, and secure bike parking to help employees bike to work

Projects for which VMT impacts are determined to be significant are required to propose a list of VMT reduction measures and document the associated percent reduction in VMT. Mitigated project VMT is calculated by applying the percent reduction. Project VMT is then compared to the threshold of significance to determine if the project's VMT impact has been mitigated.

Study scenarios used for traffic impact analysis are outlined below:

- **Existing Conditions** are utilized to establish the existing baseline of traffic operations within the study area.
- **Near-Term (Interim Year 2024) Conditions** are based on the SANDAG pre-established interim year scenario closest to the project's anticipated opening year.
- **Near-Term (Interim Year 2024) Plus Project Conditions** include project-generated traffic added to interim year volumes.
- **Horizon Year Conditions** are based on the Regional Transportation Plan year, currently 2050.
- **Horizon Year Plus Project Conditions** include project-generated traffic added to horizon year traffic volumes.

Existing Street Network

Figure 5.1 of Appendix K-1 to this EIR depicts existing conditions within the transportation study area, including signalized intersections and lane configurations. The transportation study area evaluated for the project includes the following intersections and street segments, based on the anticipated distribution traffic to/from the project site:

Intersections:

1. N Las Posas Road and Project Driveway No. 1/Palm Road (Signal)
2. W Mission Road and Project Driveway No. 2 (Side-Street Stop-Controlled)
3. N Las Posas Road and W Mission Road (Signal)

Segments:

1. N Las Posas Road, between Palm Road and W Mission Road
2. N Las Posas Road, between W Mission Road and Armorlite Drive
3. W Mission Road, between Pacific Street and N Las Posas Road
4. W Mission Road, between N Las Posas Road and Palomar College Driveway

The principal roadways in the transportation study area are described briefly below. Roadway classification was determined from a review of the General Plan Mobility Element and information gathered from field observations.

N Las Posas Road is currently constructed as a 6-lane divided roadway between the State Route 78 westbound ramps and Avenida Azul, a 4-lane divided roadway between Avenida Azul and Avenida Arana, and a 3-lane undivided roadway between Avenida Arana and Avenida Leon. The posted speed limit is 45 mph. On-street parking is prohibited. Class II bike lanes are provided. N Las Posas Road is classified as a 6-Lane Arterial between State Route 78 westbound ramps and Avenida Azul.

W Mission Road is constructed as a 4-lane undivided roadway with a two-way left-turn lane between Comet Circle and N Las Posas Road. The posted speed limit is 40 mph. On-street parking is prohibited. Class I (eastbound) and Class II (westbound) bike lanes are provided along the roadway. W Mission Road is classified as a 4-Lane Arterial between W San Marcos Boulevard and Las Flores Drive.

Existing Traffic Volumes

Both signalized and unsignalized intersections, in addition to street segments, were analyzed as part of the local transportation analysis. These terms are described below:

Signalized intersections: Signalized intersections were analyzed under AM and PM peak hour conditions. Average vehicle delay was determined utilizing the methodology found in Chapter 19 of the Highway Capacity Manual 6th Edition (TRB 2016), with the assistance of the Synchro Version 11 computer software. The delay values (represented in seconds) were qualified with a corresponding intersection LOS.

Unsignalized intersections: Unsignalized intersections were analyzed under AM and PM peak hour conditions. Average vehicle delay and LOS was determined based upon the procedures found in Chapter 20 and Chapter 21 of the Highway Capacity Manual 6th Edition (TRB 2016) with the assistance of the Synchro Version 11 computer software.

Street Segments: Street segment analysis is based upon the comparison of average daily traffic (ADT) volumes to the City's Roadway Classification, Level of Service, and ADT Table (City of San Marcos 2012b). This table provides segment capacities for different street classifications based on traffic volumes and roadway characteristics.

Intersections

Table 3.15-2 summarizes the peak hour intersection operations under existing conditions. As seen in Table 3.15-2, all study intersections operate at LOS D or better. As explained above, LOS information is provided as part of the LTA, not in support of the CEQA analysis. LOS and other measures of vehicle capacity or traffic congestion are no longer considered to be a significant impact on the environment. For informational purposes, trip generation rates and distribution information are provided from the TIA. The potential CEQA environmental impact of the project in terms of vehicle trips is analyzed in terms of VMT.

Table 3.15-2. Existing Intersection Operations

Intersection	Control Type	Peak Hour	Existing	
			Delay	LOS
N Las Posas Road/Project Driveway No. 1/Palm Road	Signal	AM	17.7	B
		PM	16.3	B
Project Driveway No. 2 and W Mission Road	SSSC	AM	10.2	B
		PM	11.1	B
N Las Posas Road and W Mission Road	Signal	AM	39.6	D
		PM	41.2	D

Source: Appendix K-1.
Notes: LOS = level of service; SSSC =Side-Street Stop Controlled.
For SSSC intersections, the delay shown is the worst delay experienced by any of the movements.

SIGNALIZED DELAY/LOS THRESHOLDS		UNSIGNALIZED DELAY/LOS THRESHOLDS	
Delay	LOS	Delay	LOS
0.0 ⩽ 10.0	A	0.0 ⩽ 10.0	A
10.1 to 20.0	B	10.1 to 15.0	B
20.1 to 35.0	C	15.1 to 25.0	C
35.1 to 55.0	D	25.1 to 35.0	D
55.1 to 80.0	E	35.1 to 50.0	E
⩾ 80.1	F	⩾ 50.1	F

Street Segments

Table 3.15-3 summarizes the segment operations under existing conditions and the available ADT volumes from counts conducted on June 15, 2021. Counts at the study intersections, including bicycle and pedestrian counts, were conducted on June 15, 2021, between 7:00 a.m. and 9:00 a.m. and 4:00 p.m. and 6:00 p.m. As described in the LTA prepared for the project (Appendix K-1), current traffic volume counts may remain artificially depressed due to restrictions and limitations on business, school, and other activities associated with the coronavirus (COVID-19) pandemic. Therefore, current counts were compared to traffic data collected prior to 2020. All existing segments outlined below currently operate at LOS B or better under Existing Conditions.

Table 3.15-3. Existing Street Segment Operations

Street Segment	Classification	ADT	LOS Threshold (LOS E)	LOS	V/C
North Las Posas Road					
Palm Road to West Mission Road	6-Lane Major Arterial	17,900	50,000	A	0.358
West Mission Road to Armorlite Drive	6-Lane Major Arterial	22,000	50,000	B	0.440
West Mission Road					
Pacific Street and North Las Posas Road	4-Lane Major Arterial	17,800	40,000	B	0.445
North Las Posas Road to Palomar College Driveway	4-Lane Major Arterial	17,800	40,000	B	0.445

Source: Appendix K-1.
Note: ADT = average daily traffic; LOS = level of service; V/C = Volume/Capacity

Existing Transit Conditions

NCTD provides public transportation within the City and the County of San Diego for Coaster rail service, SPRINTER light rail service, and Breeze bus service. SPRINTER service operates between Escondido and Oceanside, with connections to Interstate 5 and the Coaster rail service operating out of the City of Oceanside. The NCTD operates the Palomar College Station SPRINTER and Breeze transit station located approximately 0.3 miles from the project's W Mission Road entrance. Transit service is provided to the project area via NCTD bus routes 304, 305, 347, and 445 and the SPRINTER.

Route 304 provides bus service along W Mission Road, with stops within the transportation study area along W Mission Road and Rancho Santa Fe Road. This route connects the Palomar College Transit Center to the Encinitas Train Station. This route provides a direct connection to Palomar College Station with transfers to SPRINTER, Route 305, Route 347, and Route 445 bus service. The route operates in 30-minute intervals between the hours of 4:53 a.m. and 8:23 p.m., Monday through Friday, and in 60-minute intervals between 6:53 a.m. and 9:05 p.m. on Saturday.

Route 305 provides bus service between Vista and Escondido, with stops within the transportation study area along W Mission Road. This route provides a direct connection to Palomar College Station with transfers to SPRINTER, Route 304, Route 347, and Route 445 bus service. The route operates in 30-minute intervals between the hours of 4:37 a.m. and 11:30 p.m., Monday through Friday, and in 60-minute intervals between 5:34 a.m. and 11:31 p.m. on Saturday.

Route 347 provides bus service between California State University, San Marcos, SPRINTER Station and Palomar College, with stops within the transportation study area along N Las Posas Road. This route provides a direct connection to Palomar College Station with transfers to SPRINTER, Route 304, Route 305, and Route 445 bus service. The route operates in 30-minute intervals between the hours of 5:31 a.m. and 7:21 p.m., Monday through Friday, and in 60-minute intervals between 7:22 a.m. and 7:08 p.m. on Saturday.

Route 445 provides bus service between Palomar College and Carlsbad Poinsettia Station with stops within the transportation study area along N Las Posas Road. This route provides a direct connection to Palomar College Station with transfers to SPRINTER, Route 304, Route 305, and Route 347 bus service, and to Poinsettia Station with transfers to Coaster service. The route operates in 30-minute intervals between the hours of 6:34 a.m. and 7:19 p.m., Monday through Friday. This route is not in operation during the weekends.

SPRINTER provides light rail service between Oceanside Transit Center and Escondido Transit Center. This route provides a direct connection to Palomar College Station with transfers to Route 304, Route 305, Route 347, and Route 445 bus service. The route operates in 30-minute intervals between the hours of 4:03 a.m. and 9:26 p.m., Monday through Friday, and between 4:46 a.m. and 12:26 a.m. on Saturday.

The project site is located within 0.25-miles (walking distance) of two bus stops serving Route 304, Route 305, Route 347, and Route 445 located along N Las Posas Road and W Mission Road. The closest bus stops to the project site are located near the intersection of N Las Posas Road and W Mission Road and the intersection of W Mission Road and Pacific Street. The project site is also approximately 0.3 miles walking or biking distance from Palomar College Station.

At the intersection of N Las Posas Road and W Mission Road, the bus stop in the westbound direction provides route signage, route designations, seating with shade, and a trash receptacle. In the southbound direction the stop provides route signage only. At intersection of W Mission Road and Pacific Street, the bus stop in the westbound direction provides route signage, route designation, seating with shade, and a trash receptacle. In the eastbound direction it provides route signage only.

Existing Bicycle Network

Currently, Class II bike lanes are provided on the following study street segments:

- N Las Posas Road (both sides)
- W Mission Road (north side)

Currently, Class I bike lanes are provided on the following study street segments:

- W Mission Road (south side)

No other bicycle facilities are currently constructed within the transportation study area.

Existing Pedestrian Conditions

Pedestrian sidewalks are provided throughout the transportation study area along N Las Posas Road and W Mission Road.

3.15.2 Regulatory Setting

The following provides a general description of the applicable regulatory requirements and guidelines for the project area.

Federal

There are no federal codes, policies, or regulations regarding transportation that would apply to the proposed project.

State

California Department of Transportation

The California Department of Transportation (Caltrans) is the primary state agency responsible for transportation issues. One of its duties is the construction and maintenance of the state highway system. Caltrans has established standards for roadway traffic flow and has developed procedures to determine if intersections require improvements. For projects that may physically affect facilities under its administration, Caltrans requires encroachment permits before any construction work may be undertaken. For projects that would not physically affect facilities, but may influence traffic flow and levels of services at such facilities, Caltrans may recommend measures to mitigate the traffic impacts of such projects.

Assembly Bill 1358 – California Complete Streets Act of 2008

The California Complete Streets Act of 2008 (Assembly Bill 1358) requires circulation elements as of January 1, 2011, to accommodate the transportation system from a multimodal perspective, including public transit, walking, and biking.

Senate Bill 743, CEQA Guidelines Update

In December 2018, the California Natural Resources Agency certified and adopted the CEQA Guidelines update package, including Guidelines Section 15063.4, which implements Senate Bill (SB) 743. SB 743 required new metrics for analyzing transportation impacts under CEQA to provide an alternative to LOS. Measurements of transportation impacts may include VMT,[1] VMT per capita, automobile trip generation rates, or automobile trips generated. SB 743 further directed that unless otherwise provided, a project's effect on automobile delay shall no longer be considered a significant environmental impact under CEQA.[2] Under CEQA Guidelines Section 15064.3, VMT was determined to be the most appropriate measure of transportation impacts.

The justification for this paradigm shift is that when significant impacts are identified under a LOS and delay-based analysis, the mitigation is often to provide road improvements, which increase roadway capacity, which inherently accommodates more vehicular traffic resulting in additional greenhouse gas emissions. In contrast, under a VMT-based analysis, mitigation typically takes the form of strategies intended to reduce vehicle traffic, rather than accommodate such traffic, thereby reducing vehicle traffic and associated emissions.

Lead agencies were tasked to transition to the new guidelines and establish thresholds for transportation impacts no later than July 1, 2020. The City adopted its VMT thresholds for CEQA purposes in November 2020 as part of the City's Transportation Impact Analysis Guidelines (November 2020), which provides that a significant impact

1 VMT refers to the amount and distance of automobile travel attributable to a project.
2 California Public Resources Code, Section 21099(b). SB 743 also amends congestion management law to allow cities and counties to opt out of LOS standards within certain infill areas (OPR 2023).

would occur if a project proposing a residential land use would generate VMT per resident exceeding a level of 15% below the existing countywide average. The City's Transportation Impact Analysis Guidelines also provide VMT thresholds for other land use types including employment projects (office and industrial), retail uses, mixed-use projects, and redevelopment projects.

Local

The San Diego Association of Governments' San Diego Forward: The Regional Plan

The SANDAG's San Diego Forward: The Regional Plan combines the region's two most important existing planning documents—the Regional Comprehensive Plan and the Regional Transportation Plan and its Sustainable Communities Strategy (SANDAG 2015). The Regional Comprehensive Plan, adopted in 2004, laid out key principles for managing the region's growth while preserving natural resources and limiting urban sprawl. The plan covered eight policy areas, including urban form, transportation, housing, healthy environment, economic prosperity, public facilities, our borders, and social equity. These policy areas were addressed in the 2050 Regional Transportation Plan/Sustainable Communities Strategy and are now fully integrated into the regional plan.

The SANDAG Board of Directors adopted the 2021 Regional Plan on December 10, 2021. The 2021 Regional Plan is a 30-year plan that considers growth, movement, and residential location around the region (SANDAG 2021). The 2021 Regional Plan combines the Regional Transportation Plan, Sustainable Communities Strategy, and Regional Comprehensive Plan. As such, the 2021 Regional Plan must comply with specific state and feral mandates. These include a Sustainable Communities Strategy, per California SB 375, that achieves greenhouse gas emissions reduction targets set by the California Air Resources Board, compliance with federal civil rights requirements (Title VI), environmental justice considerations, air quality conformity, and public participation (SANDAG 2021).

Congestion Management Program

The 2008 Congestion Management Program for San Diego County was developed to meet the requirements of Section 65089 of the California Government Code. Since that time, the local agencies within San Diego County elected to opt out of the Congestion Management Program requirements, as allowed within the Government Code. As such, there are no Congestion Management Program-specific requirements associated with this project. However, to ensure the region's continued compliance with the federal congestion management process, SANDAG prepared San Diego Forward: The Regional Plan in compliance with Title 23 Code of Federal Regulations Section 450.320 (SANDAG 2015). The regional plan incorporates performance monitoring and measurement of the regional transportation system, multimodal alternatives to single-occupancy vehicles, land use impact analysis, congestion management tools, and integration with the Regional Transportation Improvement Program process.

City of San Marcos Bikeway Master Plan

The 2016 Bikeway Master Plan is an update to the City's original master plan adopted in 2001. Goals of the master plan were to obtain State Bicycle Transportation Account grant funds and improve bicycle facilities throughout the City for safer routes to school, connections to adjacent cities and incorporate an environmental inventory analysis. One of the goals of the master plan was to connect the City's trails to bicycle facilities to complete a safe and enjoyable trail and bikeway system.

City of San Marcos General Plan

Land Use and Community Design Element

The Land Use and Community Design Element of the General Plan identifies specific policies related to congestion management. Those that are applicable to the project are identified below (City of San Marcos 2012a).

Policy LU-3.7: Require new development to prepare traffic demand management programs.

Policy LU-3.8: Require new development and discretionary actions to annex into a Congestion Management Community Facilities District.

Mobility Element

The Mobility Element of the General Plan identifies specific goals and policies related to an efficient circulation system, traffic calming and safety, and alternative modes of travel. Those that are applicable to the project are identified below (City of San Marcos 2012b).

Goal M-1: Provide a comprehensive multimodal circulation system that serves the City land uses and provides for the safe and effective movement of people and goods.

Policy M-1.1: Safely and efficiently accommodate traffic generated by development and redevelopment associated with implementation of the General Plan Land Use Policy Map.

Policy M-1.2: Require new development to finance and construct internal adjacent roadway circulation and City-wide improvements as necessary to mitigate project impacts, including roadway, transit, pedestrian and bicycle facilities.

Policy M-1.3: Require new developments to prepare and implement Transportation Demand Management (TDM) programs to minimize vehicle trip generation and promote alternative modes of travel within the City.

Policy M-1.4: Utilize multi-modal LOS techniques to evaluate transportation facilities. For identified prioritized modes (based on facility typology), provide the following minimum LOS as shown in Table 3-4 of the Mobility Element:

- LOS D or better for Vehicles as a prioritized mode
  - Generally, provides facilities that have minimum vehicle congestion during peak periods. Most motorists are delayed less than 55 seconds at a signal (or less than one signalized cycle).
- The City shall allow for flexible LOS where warranted (e.g., accepting a lower LOS than identified above).

Policy M-1.6: Work to improve connectivity within the City by closing gaps in the existing bicycle, pedestrian, trail, transit, and roadway network. Work with new development to provide connectivity and redundancy in the mobility network.

Policy M-1.7: Strive to ensure that streets within San Marcos shall be complete streets where feasible; thereby providing accessibility, safety, connectivity, and comfort for all modes and users of the system. Appropriate new local streets and Main Streets will prioritize pedestrian and bicycle users through the corridor.

Goal M-2: Protect neighborhoods by improving safety for all modes of travel and calming traffic where appropriate.

Policy M-2.1: Work with new development to design roadways that minimize traffic volumes and/or speed, as appropriate within residential neighborhoods; while maintaining the City's desire to provide connectivity on the roadway network.

Policy M-2.3: Consider roundabouts, as appropriate, as an intersection control device with demonstrated air quality, traffic efficiency, and safety benefits.

Goal M-3: Promote and encourage use of alternative transportation modes, including transit, bicycles, neighborhood electric vehicles (NEVs), and walking, within the City.

Policy M-3.1: Develop an integrated, multimodal circulation system that accommodates transit, bicycles, pedestrians, and vehicles; provides opportunities to reduce air pollution and greenhouse gas emissions; and reinforces the role of the street as a public space that unites the City.

Policy M-3.2: Improve safety conditions, efficiency, and comfort for bicyclists and pedestrians through design, maintenance and law enforcement. Install wider sidewalks and curb extensions at pedestrian crossings (bulb outs) where appropriate.

Policy M-3.3: Provide a pedestrian and bicycle network in existing and new neighborhoods that facilitates convenient and continuous pedestrian and bicycle travel free of major impediments and obstacles.

Policy M-3.5: Ensure that streets in areas with high levels of pedestrian activity (such as employment centers, residential areas, mixed use areas, and schools) support safe pedestrian travel by providing detached sidewalks, bulb-outs, enhanced pedestrian crossings, pedestrian bridges, and medians.

Policy M-3.9: Create a pleasant walking environment for roadway typologies where pedestrian travel is prioritized. This includes providing shade trees, landscaping, benches, pedestrian-scale lighting, way finding signage, transit shelters, and other appropriate amenities.

3.15.3 Thresholds of Significance

Appendix G of the CEQA Guidelines provides thresholds for determining significant environmental impacts. A project may be deemed to have a significant impact on transportation/traffic if it would:

- **Threshold No. 1:** Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.
- **Threshold No. 2:** Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b).
- **Threshold No. 3:** Substantially increase hazards due to a geometric design feature (e.g., sharp curves, or dangerous intersections) or incompatible uses (e.g., farm equipment).
- **Threshold No. 4:** Result in inadequate emergency access.

3.15.4 Project Impact Analysis

The following discussion summarizes the findings of the LTA (Appendix K-1) and VMT analysis (Appendix K-2) as it relates to project trip generation, project trip distribution and assignment, Near-Term (Year 2024) scenarios with and without the proposed project, and Horizon Year (Year 2050) scenarios with and without the proposed project. The discussion herein supports the findings of the project impact analysis.

Project Trip Generation

As described in Chapter 2, Project Description, of this EIR, the project proposes development of 120 residential dwelling units under the proposed Specific Plan Area designation. To determine the traffic generation of the project, SANDAG's (Not So) Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region (SANDAG 2002) rates were applied to the project. The trip generation rate for Multifamily (6–20 dwelling units/acre) was used based on the project density of approximately 15.8 dwelling units/acre.

SANDAG provides for a 5% daily trip reduction for land uses with transit access or near transit stations accessible within 0.25 miles. The site is located adjacent to transit service with stops located near project driveway no. 2. To provide a conservative analysis, however, no transit trip reduction was applied to the trip generation for this analysis.

Table 3.15-4 tabulates the total project traffic generation. The project is estimated to generate a total of 960 ADT with 77 AM peak hour trips (15 inbound/62 outbound) and 96 PM peak hour trips (67 inbound/29 outbound).

Table 3.15-4. Project Trip Generation

Land Use	Size	Daily Trip Ends (ADTs)		AM Peak Hour					PM Peak Hour				
						Volume					Volume		
		Rate	ADT	%	In: Out Split	In	Out	Total	%	In: Out Split	In	Out	Total
Multi-Family 6–20 du/acre)	120 du	8/du	960	8%	2:8	15	62	77	10%	7:3	67	29	96

Source: Appendix K-1; SANDAG 2002.
Notes: ADT = average daily traffic; DU = Dwelling Unit.

Project Trip Distribution/Assignment

Trip distribution is the process of determining traffic percentage splits on the regional and local roadway network. Trip distribution is determined based on the characteristics of the project and upon the general location of other land uses at which project trips would originate or terminate, such as employment, housing, schools, recreation, and shopping.

The traffic generated by the project was distributed and assigned based on anticipated traffic patterns to and from the site, as well as the project site's proximity to state highways and arterials. The project would be served by two driveways, one located on N Las Posas Road and one located on W Mission Road. Full turning movements would be provided at the N Las Posas Road driveway. W Mission Road driveway would include a left-turn in and right-in/right-out traffic movements.

Figure 3.1 in the LTA (Appendix K-1) shows the traffic distribution, including the project driveway traffic distribution to provide additional clarity on the local distribution of trips on the streets immediately adjacent to the project site, and Figure 6.4 in the LTA shows the Near-Term Plus Project traffic volumes. Additionally, Table 6.5, Near-Term Intersection Operations and Table 6.4, Near-Term Street Segment Operations, in Appendix K-1 show intersection and street segment operations both with and without the project.

Near-Term (Interim Year 2024) Conditions

This section describes Near-Term (Interim Year 2024) roadway network and traffic volume conditions. Year 2024 was selected based on SANDAG's pre-established interim year scenarios as the closest to the opening year of the project. The existing street system as illustrated in Figure 5.1 of the LTA (Appendix K-1) is assumed for Near-Term Conditions with no notable improvements within the transportation study area. To forecast future traffic volumes for Near-Term (Interim Year 2024) Conditions, the SANDAG Series 14 Model was utilized. The forecasted ADT volumes were then used to calculate peak hour volumes based partially on the existing relationship between ADT and peak hour volumes. As outlined in Section 6.42 of the LTA (Appendix K-1), all transportation study area roadway segments are projected to operate at acceptable LOS B under Near-Term Conditions. Additionally, all transportation study area intersections are projected to operate at acceptable LOS D or better under Near-Term Conditions.

Near-Term (Interim Year 2024) Plus Project Conditions

Intersection geometrics under the Near-Term Plus Project Conditions were assumed to be identical to the Near-Term Conditions. As outlined in Section 6.6 of the LTA (Appendix K-1), all transportation study area roadway segments are projected to operate at acceptable LOS B under Near-Term Plus Project Conditions. Therefore, no transportation study area roadway segments are anticipated to degrade in LOS to unacceptable levels with implementation of the project and no improvements would be required.

Peak hour intersection volumes for the Near-Term Plus Project Conditions were derived by combining the proposed project trips with the Near-Term base traffic volumes. As outlined in Appendix K-1, all transportation study area intersections are projected to operate at acceptable LOS D or better under Near-Term Plus Project Conditions. No study intersections are anticipated to degrade in LOS to unacceptable levels with implementation of the proposed project and no improvements would be required.

Horizon Year 2050 Conditions

Intersection geometrics under Horizon Year 2050 Conditions were assumed to be identical to the Existing Conditions. Horizon Year 2050 ADT forecasts were obtained from the SANDAG Series 14 ABM2+/2021 RP forecast year 2050 model (scenario ID no. 459). Any transportation study area roadway with Near-Term ADT found to be greater than forecasted Transportation Forecast Information Center ADT were adjusted using growth rates observed between existing and forecasted Transportation Forecast Information Center ADT for adjacent segments. Intersection turning movement volumes were developed utilizing the roadway volumes analyzed for the roadway segment analysis. Growth was applied per approach based on existing and forecasted Horizon Year 2050 ADT, distributed based on existing travel patterns, and balanced utilizing engineering judgement.

As outlined in Appendix K-1, all transportation study area roadway segments are projected to operate at acceptable LOS C or better under Horizon Year 2050 conditions. Similarly, all transportation study area intersections are projected to operate at acceptable LOS D or better under Horizon Year 2050 Conditions.

Horizon Year 2050 Plus Project Conditions

Intersection geometrics under the Horizon Year 2050 Plus Project Conditions were assumed to be identical to the Horizon Year 2050 Conditions geometrics. Peak hour intersection volumes for the Horizon Year 2050 Plus Project Conditions were derived by combining the proposed project trips with the Horizon Year 2050 traffic volumes. As outlined in Appendix K-1, all transportation study area roadway segments are projected to operate at acceptable LOS C or better under Horizon Year 2050 Plus Project Conditions. Therefore, no transportation study area roadway segments are anticipated to degrade in LOS to unacceptable levels with implementation of the proposed project and no improvements would be required. Similarly, all transportation study area intersections are projected to operate at acceptable LOS D or better under Horizon Year 2050 with Project Conditions. Therefore, no study intersections are anticipated to degrade in LOS to unacceptable levels with implementation of the proposed project and no improvements would be required.

Threshold No. 1. Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.

The proposed project seeks to construct 120 multifamily dwelling units on a vacant property approximately 250 feet northwest of the W Mission Road and N Las Posas Road intersection in the City of San Marcos. The property is bordered by N Las Posas Road on the northeast side, W Mission Road on the southwest side, single-family dwelling units on the northwest side, and a CVS pharmacy to the south. Per the City's General Plan, the site is designated as a Commercial (C) land use.

The proposed project would share two existing driveways with the adjacent CVS Pharmacy, with one located off N Las Posas Road and the other off W Mission Road. The access off N Las Posas Road is via a signalized intersection at N Las Posas Road and Palm Road (driveway no. 1), and the access off W Mission Road is via a side-street (the CVS driveway) stop-controlled intersection that does not allow left-turn out movements (driveway no. 2).

The project site is located in an area surrounded by development with numerous bicycle, pedestrian, and transit facilities, as discussed in Section 3.15.1, Existing Conditions. Class II bike lanes are provided on N Las Posas Road and W Mission Road. Additionally, a Class I multi-use path exists along the south side of W Mission Road. This Class I multi-use path is identified as the Inland Rail Trail, which consists of 21 miles of proposed facilities that will eventually connect the Cities of Oceanside and Escondido while passing through the Cities of San Marcos and Vista and unincorporated areas of the San Diego County. Pedestrian sidewalks are provided throughout the area, with pedestrian crossings located at intersections surrounding the project site. As described previously, the project site is designated as a High Quality Transit Area due to its proximity to transit and other facilities and services that support alternatives to vehicle use. Palomar College, a public community college consisting of a 200-acre campus, is located east of the project site. Palomar College Transit Center, an NCTD hub, is located less than 0.25 miles from the project site. Palomar College Transit Center consists of a bus depot on the north side of W Mission Road, near the main entrance to Palomar College, and a train station on the south side of W Mission Road that serves the SPRINTER hybrid rail train. Rail service and bus transit service offered at the Transit Center provide local and regional connections to schools, employment, shopping, and entertainment options within the City, as well as San Diego and Riverside Counties. An existing bus turnout and stop are also located on W Mission Road in front of CVS.

As concluded in the TIA, the proposed project would not conflict with any existing or planned transit facilities and would not result in any impacts to transit facilities. Similarly, the proposed project would not conflict with existing bicycle facilities and would not result in any impacts to bicyclist safety and accessibility.

Sidewalks are proposed along the project frontage along N Las Posas Road and W Mission Road. Sidewalks are also proposed throughout the internal roadways providing direct access to the proposed residential units and on-site amenities. As outlined in the LTA (Appendix K-1), it is recommended that curb ramps at the project driveways be constructed, if needed, with detectable surface warning tactiles, and meeting all Americans with Disabilities Act (ADA) requirements. With project implementation of LTA recommendations, the overall pedestrian environment would be enhanced for both walkability and safety and would not result in any impacts to pedestrian facilities.

The project would be required to provide adequate on-site circulation for passenger vehicles, heavy vehicles, bicyclists, and pedestrians. Internal circulation within the project site is shown in site plans subject to City review and would be designed to comply with the following recommendations of the TIA, as required by conditions of approval:

1. Driveways would be constructed in accordance with City standards
2. Stop sign (R1-1) would be installed at project driveway no. 2
3. High visibility pedestrian crossings where crossing is allowed would be installed at project driveway no. 1
4. Existing traffic detection camera would be modified at traffic signal serving driveway no. 1 to accommodate queuing vehicles exiting through this driveway
5. Appropriate signage would be posted to warn drivers of pedestrian foot traffic
6. Installation of speed cushions/bumps along internal roadways would be considered to calm traffic

The adjacent CVS parcel includes 99 existing spaces that would remain for the exclusive and ongoing use of CVS, which only requires 53 spaces to meet the City's Parking Ordinance for commercial uses. The project site currently contains an additional 38 existing parking spaces on the project site that would be shared between the project site and CVS. The project would introduce an additional 20 guest spaces to meet the City's requirement for multifamily dwelling guest parking of 1 space per 3 units (120 units/3 = 40 spaces total). As required, 2 of the 20 additional guest parking spaces would be electric vehicle charging stations. The project also includes 240 garage spaces, which would provide two garage spaces per unit and therefore would comply with the City's Parking Ordinance. The project is consistent with SANDAG's San Diego Forward: The Regional Plan policies and strategies to manage congestion, as it would develop in an area surrounded by existing development in a manner that would reduce VMT in comparison to development under the existing land use and zoning designation of Commercial (C). The project would incorporate safe access to/from the project site and surrounding roadways and would not preclude the development of any specific improvement projects identified in the Regional Plan to reduce regional congestion. Therefore, impacts would be **less than significant.**

Threshold No. 2: Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

As discussed above, CEQA Guidelines Section 15064.3 replaces LOS with VMT as the appropriate metric to be used in assessing a project's transportation related impacts. Under CEQA Guidelines Section 15063.4(b)(1), VMT exceeding an applicable threshold of significance may indicate a significant impact. However, development projects within 0.5 miles of a major transit stop are presumed to cause a less-than-significant transportation impact (under California Public Resource Code, Section 21064.3, a "Major transit stop means a site containing an existing rail station"). Despite the project being located within 0.5 miles of a major transit stop (Palomar Station), the project would not be screened out to be less than significant because the project is inconsistent with the current General Plan. Because the project site is inconsistent with the current General Plan, a quantitative VMT analysis has been prepared for the project.

Vehicle Miles Traveled Analysis

As described under Section 3.15.1, for new land use development that does not meet any of the screening criteria, the VMT metrics and thresholds outlined in the City's Transportation Impact Analysis Guidelines, VMT Impact Thresholds by Land Use Type, are used to determine a significant transportation impact (City of San Marcos 2020). The project does not meet any of the screening criteria. Therefore, a detailed VMT analysis is required. Since the project proposes residential land uses, this EIR evaluates whether the project VMT per resident would exceed a significance threshold of 15% below the existing countywide average. The project is estimated to generate 960 ADT.

The SANDAG Series 14 model (also known as ABM 2+) is the latest available model and was used to determine the regional average VMT. VMT data should only be compared with regional averages within the same model version. Table 3.15-5 shows the project VMT analysis. Based on the model outputs, the project VMT per resident is 17.10, above the significance threshold of 15% below the regionwide average, or 14.9 VMT per resident.

Because the project's VMT per resident is more than 15% above the regionwide average, impacts would be potentially significant and mitigation is required **(Impact TRA-1).**

Table 3.15-5. VMT Impact Analysis

Metric	Regional Average[1]	Significance Threshold (15% below Average)[2]	Project[1]	Transportation Impact? (Over Threshold)
VMT per Resident	18.90	16.07	17.10	**Yes**

Source: Appendix K-2
Notes:
1 SANDAG Series 14 ABM2+/2021 RP Year 2016 Base Model
2 Regional Average x 85%

The proposed project's VMT per resident is not anticipated to fall under the significance threshold as the project site is located in a suburban area that includes single-family homes with higher automobile ownership as compared to the region. However, while the proposed project is located on an infill site and is consistent with Climate Action Plan and SANDAG's Regional Plan, impacts related to VMT per resident would not be reduced to 85% of the regional average. This impact is primarily a result of the geographic location of the proposed project in a suburban neighborhood, as trip characteristics of the surrounding residential land uses are used as a surrogate to estimate proposed project trip characteristics, regardless of the inherent differences between the land uses.

The proposed project would have a significant VMT impact and mitigation measures are required to reduce the VMT per resident. The proposed project's total VMT per resident is 17.1 miles. To mitigate the proposed project's VMT to less-than-significant levels, mitigation measures would need to reduce the total VMT per resident by 6.02% from 17.1 miles to 16.07 miles.

To reduce the average VMT per resident, it is recommended that the proposed project implement a TDM Program. A TDM program would facilitate increased opportunities for walking and bicycling, as well as provide the resources, means, and incentives for ridesharing and carpooling. The SANDAG Mobility Management Guidebook/VMT Reduction Tool was taken into consideration initially; however, this tool does not provide strategies that are applicable to project. Therefore, the methods and strategies contained in the California Air Pollution Control Officers Association Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity were considered (CAPCOA 2022).

Mitigation Measure (MM) TRA-1 through **MM-TRA-3** are proposed for the project, as outlined in Section 3.15.6. As described in Appendix K-2, based on the VMT reduction results, implementation of the TDM program is anticipated to reduce the VMT per capita generated by 0.10%. Thus, with implementation of the TDM program, the proposed project is anticipated to generate 17.08 VMT per resident (17.1 VMT per resident × (1−0.001)). The resulting 17.08 miles per resident exceeds the 16.07 miles threshold. Therefore, since the mitigation measures would not reduce the VMT per resident to less-than-significant levels, the impact is only partially mitigated, and the proposed project would have a significant and partially mitigated impact. Therefore, despite the implementation of **MM-TRA-1** through **MM-TRA-3**, impacts would be **significant and unavoidable**.

Threshold No. 3: Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves, or dangerous intersections) or incompatible uses (e.g., farm equipment)?

The project site is located in an area surrounded by development and is bounded by N Las Posas Road and W Mission Road. The project would be served by two driveways located on N Las Posas Road and W Mission Road. Internal roadways on the project site allow for two-way flow of vehicle traffic. Dead-end aisles between buildings would provide direct access to garages for each dwelling unit. The internal circulation network for the project would not include any hazardous design features or incompatible uses. The project would include connections to existing roadways within the vicinity of the project site and access to regional arterial and highway networks and SPRINTER/Breeze transit services. All final project plans and the LTA prepared for the project (Appendix K-1) are subject to review and approval by the City and the San Marcos Fire Department. Proposed circulation improvements per the LTA would be designed in accordance with the City's roadway design standards to ensure proper safety requirements are met (Appendix K-1). All uses on site, including vehicle, pedestrian, and bicycle circulation, would be typical of a residential land use, and no incompatible uses or equipment is proposed. Furthermore, the project is designed to comply with the recommendations of the TIA, outlined under response to Threshold No. 1, which are required conditions of approval for the project. As such, impacts would be **less than significant.**

Threshold No. 4: Would the project result in inadequate emergency access?

The project would be served by two driveways located on N Las Posas Road and W Mission Road. Driveway no. 1 would provide for full turning movements while driveway no. 2 would be limited to right-out only. Both would be designed to meet the design requirements codified in the California Fire Code.

According to the General Plan Safety Element, the San Marcos Emergency Operations Plan governs the operations of the City during a disaster. This plan addresses response to moderate evacuation scenarios, including the identification of evacuation points and general routes (City of San Marcos 2012c). The project would be required to abide by standards as set forth in the San Marcos Emergency Operations Plan. Implementation of the project would not impact any roadway or staging areas that are identified in any emergency planning documents and would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. Additionally, as described in Chapter 3.13, Public Services, of this EIR, the Preliminary Fire Emergency Response Analysis prepared for the project (Appendix J to this EIR) determined that San Marcos Fire Department could provide emergency response to the project site within its internal 7-minute response time from San Marcos Fire Department Station 1 to the project site.

Furthermore, the California Fire Code, along with the San Marcos Fire Department, administers the rules and regulations on fire access design. Final site plans will be required to show fire and emergency responders suitable fire access roads dimensions and surfaces (Chapter 5, Sections 503.1–503.4, of the California Fire Code) and an adequate number of emergency rated entrances to the community (Appendix D, Section D106, of the California Fire

Code). All final project plans and the LTA prepared for the project (Appendix K-1) are subject to review and approval by the City and the San Marcos Fire Department. Proposed circulation improvements would be designed in accordance with the City's roadway design standards to ensure proper safety requirements are met (City of San Marcos 2022). Therefore, for the reasons outlined above, impacts related to emergency access would be **less than significant.**

3.15.5 Cumulative Impact Analysis

The project, in addition to cumulative projects in the transportation study area, could result in cumulative impacts related to transportation and circulation. Table 6.1 in the LTA (Appendix K-1) displays the projected trip generation for the cumulative projects considered for the traffic analysis. Cumulative project traffic was assigned to the transportation study area as identified within their respective traffic studies provided by the City. Cumulative project traffic without completed traffic studies were assigned to the transportation study area utilizing the same methodology used for the proposed project, consistent with the City's Transportation Impact Analysis Guidelines. As shown in Table 6.1 in Appendix K-1, the cumulative projects are anticipated to generate 6,756 daily trips, including 536 trips during AM peak hour and 623 trips during the PM peak hour, that would be dispersed throughout the City and beyond the transportation study area.

It is expected that TIAs would be prepared for cumulative projects, consistent with City guidelines, to fully analyze project-specific impacts on site and in the transportation study area and provide mitigation measures, design features, or improvements recommendations to address any potentially significant impacts. Furthermore, all cumulative projects would be required to comply with applicable City regulations related to transportation and circulation, as the project does. As analyzed in Section 3.15.4, implementation of the project would result in a significant VMT impact in the transportation study area. For this reason, it is determined that cumulative impacts to transportation as a result of project implementation would similarly be **significant and unavoidable**.

3.15.6 Mitigation Measures

MM-TRA-1 through **MM-TRA-3** outlined below would reduce impacts related to the VMT per resident. However, even with implementation of these mitigation measures, project VMT would remain significant.

MM-TRA-1 Provide subsidized transit passes (10%) for 100% of all residents (CAPCOA T-9: Implement Subsidized or Discounted Transit Program = 0.10% VMT reduction)

MM-TRA-2 Creation and distribution of a "new resident" information packet addressing alternative modes of transportation (CAPCOA T-7: Implement Commute Trip Reduction Marketing).

MM-TRA-3 Provide on-site bike parking (CAPCOA T-10: Provide End-of-Trip Bicycle Facilities).

In addition to MM-TRA-1 through MM-TRA-3, the following improvement recommendation proposed by the LTA (Appendix K-1) would be incorporated as a condition of approval, which has the potential to further reduce VMT; however, it is not considered a mitigation measure as it does not meet CAPCOA's minimum requirements:

- Install electric vehicle charging stations at each electric vehicle guest parking space (CAPCOA T-14: Provide Electric Vehicle Charging Infrastructure).

3.15.7 Conclusion

The project would provide for residential land uses in an infill area, taking advantage of the site's location near transit, retail, employment, schools, parks, and other uses. The project would be consistent with programs, plans, ordinances, and policies addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. Implementation of the project would not conflict with any applicable plans or policies addressing circulation, would not increase hazards, and would not result in inadequate emergency access. Impacts related to Threshold Nos. 1, 3, and 4 were determined to be less than significant.

As described in response to Threshold No. 2, based on the VMT reduction results, implementation of the TDM program is anticipated to reduce the VMT per capita generated by 0.10%. Thus, with implementation of the TDM program, the proposed project is anticipated to generate 17.08 VMT per resident (17.1 VMT per resident × (1−0.001)). The resulting 17.08 miles per resident exceeds the 16.07 miles threshold. Therefore, since the mitigation measures would not reduce the VMT per resident to less-than-significant levels, the impact is only partially mitigated, and the proposed project would have a significant and partially mitigated impact. Therefore, even with implementation of **MM-TRA-1** through **MM-TRA-3**, impacts related to VMT would be significant and unavoidable. As such, cumulative impacts related to traffic would similarly be considered significant and unavoidable.

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3.16 Tribal Cultural Resources

This section describes the existing tribal cultural resources (TCRs) of the proposed Gran Vista Specific Plan Project (project), identifies associated regulatory requirements, evaluates potential impacts, and identifies mitigation measures related to implementation of the project. As defined by California Public Resources Code (PRC), Section 21074, a TCR is a site, feature, place, or cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe. A TCR is either on or eligible for the California Register of Historic Resources (CRHR) or a local historic register or determined by the City of San Marcos (City) at its discretion to treat the resources as a TCR (PRC Section 5024.1). Cultural resources are further analyzed in Section 3.4, Cultural Resources, of this environmental impact report (EIR).

The analysis in this section relies on the Archaeological Resource Inventory – Negative Findings Report for the Gran Vista Project prepared by Dudek in February 2023 (Appendix D to this EIR). The cultural resources report included a record search, literature review, correspondence with Native American contacts, and a field survey. The analysis also considers the California Environmental Quality Act (CEQA) Guidelines Appendix G and applicable state and local regulations, including the City of San Marcos General Plan (General Plan). Table 3.16-1 summarizes the TCRs project- and cumulative-level impacts by threshold.

Table 3.16-1. Tribal Cultural Resources Summary of Impacts

Threshold of Significance	Project-Level Impact	Cumulative-Level Impact	Significance Determination
No. 1: Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	Potentially Significant	Less than Significant	Less than Significant with **MM-CR-1** through **MM-CR-4**

3.16.1 Existing Conditions

The project site is undeveloped and reflects a history of disturbance. Vegetation is disturbed by an abundance of invasive and weedy plant species (Appendix C, Biological Resources Technical Report).

The project area of potential effect (APE), as analyzed in the cultural resources report, includes the entire 7.6-acre project site. The project APE is located at the northwest corner of N Las Posas Road and W Mission Road and is surrounded by commercial, residential, and light industrial uses.

The information herein describes the existing archeological context of the project site. It also provides information on the outreach and consultation efforts with local tribes, as required by existing regulations.

Methodology

South Coastal Information Center Records Search

Dudek previously completed a cultural resources constraints analysis for the project (DeCarlo et al. 2021). The purpose of the records search is to identify any previously recorded cultural resources that may be located within the property. In addition to a review of previously prepared EIRs, permit application packages, site records, and reports, the records search also reviewed historical maps of the project APE and vicinity, ethnographies, the National Register of Historic Places (NRHP), CRHR, Built Environment Resources Directory, and the lists of California State Historical Landmarks, California Points of Historical Interest, and Archaeological Determinations of Eligibility. Dudek received the results of the records search on June 17, 2021 (Appendix D).

Dudek reviewed the Built Environment Resources Directory on June 16, 2021. No previously recorded built environment resources are located on the project APE or along the blocks of N Las Posas Road and W Mission Road that border the project APE.

The South Coastal Information Center records search results identified 40 cultural resources within 1 mile of the project APE, none of which intersect the current project APE. One resource, P-37-005584/CA-SDI-5584, was identified immediately adjacent to the project APE and is discussed below. Table 1 in Appendix D summarizes the cultural resources within 1 mile of the project APE.

P-37-005584/CA-SDI-5584

This site was originally recorded by Randy Franklin in 1977 as a single grinding slick in a boulder outcrop on a small knoll. Franklin (1977) stated that there was no midden but lithic flakes, core fragments, and a hammerstone were present near the adjacent road, and suggested that they may have been intrusive. This resource was located immediately east of the project APE within the current path of N Las Posas Road. This resource was destroyed during the road's construction in 1986 and its expansion by 1990.

The records search also identified 55 previous studies that have been performed within 1 mile of the project APE. Four of these studies have addressed at least a portion of the project APE, one of which (SD-18210) addressed the entire project APE. SD-18210, however, was a constraints study and did not include a full pedestrian survey. The findings of SD-18210 are similar to the findings of this inventory; therefore, they will not be summarized here. These previous 55 studies were conducted between 1974 and 2020. No survey of the project APE has been conducted within the past 6 years. A complete list of the previous studies conducted within 1 mile of the project APE is included in Appendix D.

Archival Research

The previous constraints analysis included a review of historic topographic maps and aerial photographs of the project APE and the general vicinity, to help determine the possible development and land use of the project APE in the past. The historic aerial imagery available from Nationwide Environmental Title Research LLC includes historic

photographs available since 1953 (NETR 2021). The 1953 aerial photograph shows that the property was undeveloped but still bordered W Mission Road to the south. The knoll and rock outcrop on which archaeological resource P-37-005584 was located is vaguely visible on the 1953 aerial photograph. By 1964, a natural drainage that was located west of the project APE was channelized and demarcates the western boundary of the current project APE. The project APE itself was still undisturbed but a residential development was constructed to the northeast. By 1978, the project APE and the adjacent P-37-005584 knoll were undisturbed, though a new residential development was constructed west of the project boundary. The 1984 aerial photograph shows that the southeastern corner of the project APE was graded but the rest of the project APE and the adjacent P-37-005584 knoll was undisturbed. The 1986 aerial photograph shows the grading of the current N Las Posas Road alignment. This grading disturbed the eastern border of the project APE and destroyed part of the adjacent P-37-005584 knoll. By 1989, the grading of the eastern project APE boundary was expanded and substantial earth movement was required to support the current alignment of the six-lane N Las Posas Road. This expansion destroyed the P-37-005584 knoll adjacent to the project APE. By 1991, the entire project APE had been graded. By 2009, the entire project APE was graded again leaving the property with a northern terrace that overlooked the southern 75% of the project APE. The current commercial building and parking lot that bound the southern portion of the project APE were also constructed by 2009. The historic aerial photographs show that the project APE has been undeveloped but completely disturbed.

Intensive Pedestrian Survey

A Dudek archaeologist conducted a survey of the proposed project APE on April 22, 2022. Native American Monitor Logovii Sialoi from Saving Sacred Sites Inc., a Luiseño owned company, participated in the pedestrian survey. The project consists of a vacant lot bordering existing residential and commercial developments. The project APE has been previously disturbed, as evidenced by graded terraces. There was an elevation difference of approximately 10 feet between the northern and the southern half of the parcel, showing complete disturbance of the natural landscape. Ground visibility was low throughout the project APE due to heavy vegetation with some modern trash and debris scattered throughout the area. Though currently undeveloped, the project APE is immediately adjacent to residential and commercial development and has been subjected to illicit dumping activities. Pedestrian survey was conducted utilizing formal transects at 15-meter intervals. Deviations from transects also occurred to inspect animal burrows and other locations of exposed sediments and boulders. No remnants of adjacent resource P-37-005584 or other cultural resources were identified within the project APE (Appendix D).

Native American Heritage Commission and Native American outreach letters

Dudek requested a Native American Heritage Commission (NAHC) search of the Sacred Lands File on April 15, 2022, for the project APE and a 1-mile buffer. The Sacred Lands File consists of a database of known Native American resources. These resources may not be included in South Coastal Information Center database. The NAHC replied on May 19, 2022, and reported that the Sacred Lands File did not identify any known Native American cultural resources within the project APE or the surrounding 1-mile buffer (Appendix D). The NAHC additionally provided a list of Native American tribes and individuals/organizations with traditional geographic associations that might have knowledge of cultural resources in this area.

Outreach letters were mailed on May 27, 2022, to all Native American group representatives included on the NAHC contact list (Appendix D). These letters attempted to solicit additional information relating to Native American resources that may be impacted by the project. Native American representatives were requested to define a general area where known resources intersect the project APE. To date, Dudek has received responses to these outreach letters from three tribal representatives. On June 17, 2022, San Pasqual Band of Mission Indians responded to the

letter stating that the project APE is within the boundary of the tribe's Traditional Use Area. San Pasqual stated that they would like to engage in "formal government to government consultation." On June 21, 2022, Pechanga Band of Luiseño Mission Indians stated that the project APE is within their Ancestral Territory and that they are interested in participating in the project area. Pechanga added that the project APE is within 1.75 miles of two Ancestral Placenames and nine other previously recorded sites within 0.5 miles, one of which is within the project APE. Unfortunately, no other information about the intersecting resource was included but Pechanga is likely referring to the destroyed adjacent P-37-005584 knoll. On June 28, 2022, Rincon Band of Luiseño Indians responded to the outreach letter and stated that the project APE was within the band's specific Area of Historic Interest. Rincon added that they were concerned that the project may impact Tribal Cultural Resources, Traditional Cultural Landscapes, or potential Traditional Cultural Properties. Rincon recommended an archaeological/cultural resources inventory and that a tribal monitor from the Rincon Band should accompany the survey staff. On July 12, 2022, Dudek archaeologist Matthew DeCarlo met Cheryl Madrigal, the tribal historic preservation officer for Rincon Band, at the project APE for a site visit. They discussed the previous disturbance of the area and visited the location of former prehistoric bedrock milling site P-37-005584. Ms. Madrigal stated that she would contact the City about her concerns after she had some time to research the project area. On September 8, 2022, Rincon sent a letter to the City critiquing an earlier version of this report. Rincon requested an ethno-historic research and further analysis of adjacent sites P-37-005584 and P-37-005633.

In compliance with Assembly Bill 52 and Senate Bill 18, the City, as lead agency, is responsible for conducting government to government consultation with pertinent tribal entities. Rincon Band responded to City outreach for Senate Bill 18 and Assembly Bill 52 on February 16 and April 13 requesting consultation on the Project. The City had a consultation meeting with representatives of Rincon Band on August 16, 2022.

3.16.2 Regulatory Setting

Federal

National Historic Preservation Act

The National Historic Preservation Act established the NRHP program under the Secretary of the Interior. The act authorized funding for state programs with provision for pass-through funding and participation by local governments, created an Advisory Council on Historic Preservation, and established the Section 106 review process for protecting historic resources. The goal of the Section 106 review process is to offer protection to sites that are determined eligible for listing in the NRHP. The National Historic Preservation Act provides the legal framework for most state and local preservation laws.

Traditional Cultural Properties (Native American Heritage Values)

Federal and state laws mandate that consideration be given to the concerns of contemporary Native Americans with regard to potentially ancestral human remains, associated funerary objects, and items of cultural patrimony. Consequently, an important element in assessing the significance of the study site has been to evaluate the likelihood that these classes of items are present in areas that would be affected by the proposed project. Also, potentially relevant to prehistoric archaeological sites is the category termed Traditional Cultural Properties in discussions of cultural resource management performed under federal auspices. According to Parker and King (1998), "Traditional" in this context refers to those beliefs, customs, and practices of a living community of people that have been passed down through the generations, usually orally or through practice. The traditional cultural significance of a historic property, then, is significance derived from the role the property plays in a community's historically rooted beliefs, customs, and practices.

State

California Register of Historical Resources (California Public Resources Code Section 5020 et. seq.)

In California, the term "historical resource" includes but is not limited to "any object, building, structure, site, area, place, record, or manuscript which is historically or archaeologically significant, or is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California" (PRC Section 5020.1[j]). In 1992, the California legislature established the CRHR "to be used by state and local agencies, private groups, and citizens to identify the state's historical resources and to indicate what properties are to be protected, to the extent prudent and feasible, from substantial adverse change" (PRC Section 5024.1[a]). A resource is eligible for listing in the CRHR if the State Historical Resources Commission determines that it is a significant resource and that it meets any of the following NRHP criteria (PRC Section 5024.1[c]):

1. Associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.
2. Associated with the lives of persons important in our past.
3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.
4. Has yielded, or may be likely to yield, information important in prehistory or history.

Resources less than 50 years old are not considered for listing in the CRHR, but may be considered if it can be demonstrated that sufficient time has passed to understand the historical importance of the resource (14 CCR Section 4852[d][2]).

The CRHR protects cultural resources by requiring evaluations of the significance of prehistoric and historic resources. The criteria for the CRHR are nearly identical to those for the NRHP, and properties listed or formally designated as eligible for listing on the NRHP are automatically listed on the CRHR, as are the state landmarks and points of interest. The CRHR also includes properties designated under local ordinances or identified through local historical resource surveys. The State Historic Preservation Officer maintains the CRHR.

Native American Historical Cultural Sites (California Public Resources Code Section 5097 et. seq.)

State law addresses the following:

- The disposition of Native American burials in archaeological sites and the protection of such remains from disturbance, vandalism, or inadvertent destruction.
- The procedures to be implemented if Native American skeletal remains are discovered during construction of a project.
- The establishment of the NAHC to resolve disputes regarding the disposition of such remains.

In addition, the Native American Historic Resource Protection Act states that defacing or destroying Native American historic or cultural sites that are listed (or may be eligible for listing) in the CRHR is a misdemeanor punishable by up to 1 year in jail.

California Environmental Quality Act

As described further below, the following CEQA statutes and CEQA Guidelines are of relevance to the analysis of archaeological and historic resources:

1. PRC Section 21083.2(g): Defines "unique archaeological resource."
2. PRC Section 21084.1 and CEQA Guidelines Section 15064.5(a): Define historical resources. In addition, CEQA Guidelines Section 15064.5(b) defines the phrase "substantial adverse change in the significance of an historical resource;" it also defines the circumstances when a project would materially impair the significance of a historical resource.
3. PRC Section 5097.98 and CEQA Guidelines Section 15064.5(e): Set forth standards and steps to be employed following the accidental discovery of human remains in any location other than a dedicated ceremony.
4. PRC Sections 21083.2(b)–(c) and CEQA Guidelines Section 15126.4: Provide information regarding the mitigation framework for archaeological and historic resources, including options of preservation-in-place mitigation measures; preservation-in-place is the preferred manner of mitigating impacts to significant archaeological sites because it maintains the relationship between artifacts and the archaeological context, and may also help avoid conflict with religious or cultural values of groups associated with the archaeological site(s).

Under CEQA, a project may have a significant effect on the environment if it may cause "a substantial adverse change in the significance of an historical resource" (PRC Section 21084.1; 14 CCR 15064.5[b]). If a site is either listed or eligible for listing in the CRHR, if it is included in a local register of historic resources, or is identified as significant in a historical resources survey (meeting the requirements of PRC Section 5024.1[q]), it is a "historical resource" and is presumed to be historically or culturally significant for purposes of CEQA (PRC Section 21084.1; 14 CCR 15064.5[a]). The lead agency is not precluded from determining that a resource is a historical resource even if it does not fall within this presumption (PRC Section 21084.1; 14 CCR 15064.5[a]).

A "substantial adverse change in the significance of an historical resource" reflecting a significant effect under CEQA means "physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired" (14 CCR 15064.5[b][1]; PRC Section 5020.1[q]). In turn, the significance of a historical resource is materially impaired when a project does the following:

1. Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the CRHR
2. Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to section 5020.1(k) of the PRC or its identification in an historical resources survey meeting the requirements of Section 5024.1(g) of the PRC, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant
3. Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for inclusion in the CRHR as determined by a lead agency for purposes of CEQA

California Health and Safety Code, Section 7050.5

California law protects Native American burials, skeletal remains, and associated grave goods, regardless of their antiquity, and provides for the sensitive treatment and disposition of those remains. California Health and Safety Code, Section 7050.5, requires that if human remains are discovered in any place other than a dedicated cemetery, no further disturbance or excavation of the site or nearby area reasonably suspected to contain human remains shall occur until the County coroner has examined the remains (Section 7050.5b). If the coroner determines or has reason to believe the remains are those of a Native American, the coroner must contact the NAHC within 24 hours (Section 7050.5c). The NAHC will notify the most likely descendant. With the permission of the landowner, the most likely descendant may inspect the site of discovery. The inspection must be completed within 24 hours of notification of the most likely descendant by the NAHC. The most likely descendant may recommend means of treating or disposing of, with appropriate dignity, the human remains and items associated with Native Americans.

Senate Bill 18

Senate Bill 18 amended Section 65351 of the Government Code and dictates the following:

> During the preparation or amendment of the general plan, the planning agency shall provide opportunities for the involvement of citizens California Native American Indian tribes, public agencies, public utility companies, and civic, education, and other community groups, through public hearings and any other means the city or county deems appropriate.

Assembly Bill 52

California AB 52, which took effect July 1, 2015, establishes a consultation process between California Native American tribes and lead agencies in order to address tribal concerns regarding project impacts and mitigation to TCRs. PRC Section 21074(a) defines TCRs and states that a project that has the potential to cause a substantial adverse change to a TCR is a project that may have an adverse effect on the environment. A TCR is defined as a site, feature, place, cultural landscape, sacred place, and object with cultural value to a California Native American tribe that is either:

1. Listed or eligible for listing in the CRHR or a local register of historical resources
2. Determined by a lead agency to be a TCR

Traditional Cultural Properties/Native American Heritage Values

Federal and state laws mandate that consideration be given to the concerns of contemporary Native Americans with regard to potentially ancestral human remains associated funerary objects and items of cultural patrimony. Consequently, an important element in assessing the significance of the project site has been to evaluate the likelihood that these classes of items are present in areas that would be affected by the proposed project.

The category termed "Traditional Cultural Properties" in discussions of cultural resource management performed under federal auspices is also potentially relevant to prehistoric archaeological sites. According to Patricia L. Parker and Thomas F. King (1998), "Traditional" in this context refers to those beliefs, customs, and practices of a living community of people that have been passed down through the generations, usually orally or through practice. The traditional cultural significance of a historic property, then, is significance derived from the role the property plays in a community's historically rooted beliefs, customs, and practices. Examples of properties possessing such significance include the following:

1. A location associated with the traditional beliefs of a Native American group about its origins, its cultural history, or the nature of the world
2. A rural community whose organization, buildings and structures, or patterns of land use reflect the cultural traditions valued by its long-term residents

3. An urban neighborhood that is the traditional home of a particular cultural group, and that reflects its beliefs and practices
4. A location where Native American religious practitioners have historically gone, and are known or thought to go today, to perform ceremonial activities in accordance with traditional cultural rules of practice
5. A location where a community has traditionally carried out economic, artistic, or other cultural practices important in maintaining its historic identity

Native American Historic Resource Protection Act

State law addresses the disposition of Native American burials in archaeological sites and protects such remains from disturbance, vandalism, or inadvertent destruction; establishes procedures to be implemented if Native American skeletal remains are discovered during construction of a project; and establishes the NAHC to resolve disputes regarding the disposition of such remains. In addition, the Native American Historic Resource Protection Act (PRC Section 5097 et seq.) makes it a misdemeanor punishable by up to 1 year in jail to deface or destroy a Native American historic or cultural site that is listed or may be eligible for listing in the CRHR.

California Native American Graves Protection and Repatriation Act

The California Native American Graves Protection and Repatriation Act (California Repatriation Act) (25 USC Chapter 32), enacted in 2001, requires all state agencies and museums that receive state funding and that have possession or control over collections of human remains or cultural items, as defined, to complete an inventory and summary of these remains and items on or before January 1, 2003, with certain exceptions. The California Repatriation Act also provides a process for the identification and repatriation of these items to the appropriate tribes.

Local

City of San Marcos General Plan

The Conservation and Open Space Element of the City's General Plan contains several policies pertaining to the protection of archaeological and historic resources. The following goals and policies apply to the project (City of San Marcos 2012):

> Policy COS-2.5: Continue to review future development proposals to ensure that cultural resources (including prehistoric, historic, paleontological, and SB 18 Tribal resources) are analyzed and conserved in compliance with CEQA requirements.

Goal COS-11: Continue to identify and evaluate cultural, historic, archaeological, paleontological and architectural resources for protection from demolition and inappropriate actions.

> Policy COS-11.1: Identify and protect historic and cultural resources including individual properties, districts and sites (e.g., archaeological sites) in compliance with CEQA.

> Policy COS-11.2: Prohibit the demolition or removal of a historic structure without evaluation of the condition of the structure, the cost of rehabilitation, and the feasibility of alternatives to preservation in place including but not limited to relocation, or reconstruction off-site, and/or photo-preservation.

The project's consistency with applicable General Plan goals and policies is discussed in Section 3.10, Land Use and Planning, of this EIR.

3.16.3 Thresholds of Significance

The significance criteria used to evaluate the project impacts to TCRs are based on Appendix G of the CEQA Guidelines. According to Appendix G of the CEQA Guidelines, a significant impact related to TCRs would occur if the project would:

- **Threshold No. 1:** Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:
  a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or
  b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

3.16.4 Project Impact Analysis

Impacts to TCRs that may result from ground disturbing activities associated with the project are analyzed below.

Threshold No. 1: Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or

b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Under California's AB 52, TCRs are defined as archaeological resources that are eligible for or listed in the CRHR or resources that the lead agency determines to be a TCR with a substantial burden of evidence. Based on information on TCRs received by the City to date, no TCRs have been identified that would be impacted by project implementation.

As described above, outreach letters were mailed on May 27, 2022, to all Native American group representatives included on the NAHC contact list (Appendix D). These letters attempted to solicit additional information relating to Native American resources that may be impacted by the project. Native American representatives were requested to define a general area where known resources intersect the project APE. To date, Dudek has received responses to these outreach letters from three tribal representatives. On June 17, 2022, San Pasqual Band of Mission Indians responded to the letter stating that the project APE is within the boundary of the tribe's Traditional Use Area. San Pasqual stated that they would like to engage in "formal government to government consultation." On June 21, 2022, Pechanga Band of Luiseño Mission Indians stated that the project APE is within their Ancestral Territory and that they are interested in participating in the project area. Pechanga added that the project APE is

within 1.75 miles of two Ancestral Placenames and nine other previously recorded sites within 0.5 miles, one of which is within the project APE. Unfortunately, no other information about the intersecting resource was included but Pechanga is likely referring to the destroyed adjacent P-37-005584 knoll. On June 28, 2022, Rincon Band of Luiseño Indians responded to the outreach letter and stated that the project APE was within the band's specific Area of Historic Interest. Rincon added that they were concerned that the project may impact Tribal Cultural Resources, Traditional Cultural Landscapes, or potential Traditional Cultural Properties. Rincon recommended an archaeological/cultural resources inventory and that a tribal monitor from the Rincon Band should accompany the survey staff. On July 12, 2022, Dudek archaeologist Matthew DeCarlo met Cheryl Madrigal, the tribal historic preservation officer for rincon band, at the project APE for a site visit. They discussed the previous disturbance of the area and visited the location of former prehistoric bedrock milling site P-37-005584. Ms. Madrigal stated that she would contact the City about her concerns after she had some time to research the project area. On September 8, 2022, Rincon sent a letter to the City critiquing an earlier version of this report. Rincon requested an ethno-historic research and further analysis of adjacent sites P-37-005584 and P-37-005633.

In compliance with Assembly Bill 52 and Senate Bill 18, the City, as lead agency, is responsible for conducting government to government consultation with pertinent tribal entities. Rincon Band responded to City outreach for Senate Bill 18 and Assembly Bill 52 on February 16 and April 13 requesting consultation on the project. The City had a consultation meeting with representatives of Rincon Band on August 16, 2022.

While considered unlikely based on the South Coastal Information Center records search, the current disturbed state of the project site, and other information received by the City to date; there remains the potential for the project to encounter previously unknown and unanticipated TCRs during construction of the project (**Impact TCR-1**).

Implementation of previously identified mitigation in Section 3.4 of this EIR (**Mitigation Measure [MM] CR-1** through **MM-CR-4**) would ensure potential impacts to TCRs as a result of ground-disturbing activities on the project site would remain **less than significant with mitigation incorporated.**

3.16.5 Cumulative Impact Analysis

Each cumulative project subject to AB 52 would require tribal consultation on a case-by-case basis to identify any potential TCRs affected by each cumulative project. It is anticipated that each cumulative project would require mitigation similar to that required of the project to reduce potentially significant impacts to TCRs to a level below significance. With implementation of project-specific mitigation and compliance with applicable regulations related to TCRs, cumulative impacts would be **less than significant**.

3.16.6 Mitigation Measures

Implementation of **MM-CR-1** through **MM-CR-4** outlined in EIR Section 3.4 would be required to ensure any potential impacts to unknown and unanticipated TCRs would remain less than significant.

3.16.7 Conclusion

Implementation of **MM-CR-1** through **MM-CR-4** outlined in Section 3.4 of this EIR would ensure any potentially significant impacts to TCRs (**Impact TCR-1**) remain less than significant.

3.17 Utilities and Service Systems

This section describes the existing utilities setting of proposed Gran Vista Specific Plan Project (project), identifies associated regulatory requirements, and evaluates potential impacts related to water supply, water infrastructure, wastewater treatment capacity, wastewater infrastructure, and solid waste. Stormwater drainage and facilities are also analyzed in Section 3.9, Hydrology and Water Quality, of this environmental impact report (EIR). Energy consumption and conservation are addressed in Section 3.5, Energy, of this EIR.

The analysis herein relies on the following technical studies and supporting documentation:

- Preliminary Drainage Study for Gran Vista, prepared by Hunsaker & Associates, May 20, 2022 (included as Appendix G)
- Las Posas Meritage Homes Water and Sewer Study Final Technical Memorandum, prepared by Vallecitos Water District, March 23, 2022 (included as Appendix L)

Table 3.17-1 summarizes the utilities and service system analysis by threshold.

Table 3.17-1. Utilities and Service Systems Summary of Impacts

Threshold of Significance	Project-Level Impact	Cumulative-Level Impact	Significance Determination
No. 1: Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.	Less than Significant	Less than Significant	Less than Significant
No. 2: Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years.	Less than Significant	Less than Significant	Less than Significant
No. 3: Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.	Less than Significant	Less than Significant	Less than Significant
No. 4: Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals.	Less than Significant	Less than Significant	Less than Significant
No. 5: Comply with federal, state, or local management and reduction statutes and regulations related to solid waste.	Less than Significant	Less than Significant	Less than Significant

3.17.1 Existing Conditions

This section provides background information about the water, wastewater, and solid waste service providers that currently serve the project area and that would serve the project.

Water

The project site is located within the Vallecitos Water District (VWD) for water services (Appendix L). According to the City of San Marcos General Plan (General Plan), the VWD receives its water from the Metropolitan Water District of Southern California (MWD), which imports water from the Colorado River and Northern California (City of San Marcos 2012a).

MWD was formed in 1928 to develop, store, and distribute supplemental water to Southern California for domestic and municipal purposes. MWD consists of 26 member agencies and has a service area covering six counties, 5,200 square miles, and approximately 19 million people. MWD obtains water from local sources, as well as the Colorado River, via the Colorado River Aqueduct, and the Sacramento–San Joaquin Delta, via the State Water Project. MWD's Urban Water Management Plan (UWMP) documents the availability of these supplies to meet future demands. With a projected annual water demand of 4,925,000 acre-feet per year for 2025, the MWD UWMP concludes that, with implementation of required conservation measures, MWD has supply capabilities sufficient to meet expected demands through 2045 under normal, single dry, and multiple dry water years (MWD 2021).

The MWD water demands through normal, single dry year, and multiple dry years are shown below in Table 3.17-2.

Table 3.17-2. MWD Total Water Demands (AFY)

Year	2025	2030	2035	2040	2045
Average Year	4,925,000	5,032,000	5,156,000	5,261,000	5,374,000
Single Dry Year	4,929,000	5,037,000	5,160,000	5,265,000	5,378,000
Multiple Dry Years	4,877,000	5,064,000	5,182,000	5,299,000	5,410,000

Source: MWD 2021.
Note: MWD = Metropolitan Water District of Southern California; AFY = acre-feet per year.

San Diego County Water Authority (SDCWA) is the largest member agency of MWD. SDCWA's 2020 UWMP was approved on May 27, 2021. SDCWA's mission is to provide a safe and reliable supply of water to its 24 member agencies serving the San Diego region, which includes VWD. SDCWA is San Diego County's predominant source of water, supplying from 75% to 95% of the region's water needs (SDCWA 2021). The population within the SDCWA's service area was approximately 3.3 million people in 2020 and is projected to increase to roughly 3.8 million people by 2045. The County of San Diego is expected to develop an additional 130,000 acres between 2020 and 2050, with the majority (125,000 acres) of development dedicated to residential land uses. These regional growth projections are based on the San Diego Association of Governments Series 14 Regional Growth Forecast, developed for its 2019 Federal Regional Transportation Plan adopted by San Diego Association of Governments' Board of Directors on October 25, 2019. In fiscal year 2020, total water demand in the SDCWA's service area was 463,128 acre-feet, of which 92% was for municipal and industrial use and 8% was for agricultural water use. By 2045, the SDCWA's annual water demands are projected to reach 630,771 acre-feet. This projection accounts for planned future water conservation savings (SDCWA 2021).

The project site is entirely within the 855 zone. Water storage within this zone is located within the 920 zone and 1028 Twin Oaks pressure zones.

Wastewater

The project site is located within the VWD for sewer services (Appendix L). The VWD currently has a wastewater system that has a total liquids treatment capacity of 12.67 million gallons per day (MGD) and has an estimated daily flow of approximately 7.5 MGD (Appendix L). VWD's award-winning Meadowlark Water Reclamation Facility (MRF) is capable of recycling up to 74% of the wastewater generated in VWD's service area. Built in 1961, MRF is located within the southwestern portion of VWD's service area in Carlsbad. The MRF treats wastewater to meet the stringent standards of California Code of Regulations Title 22 and Waste Discharge Permit R9-2007-0018 issued by the Regional Water Quality Control Board Region 9. The MRF has a capacity of 5 MGD, with a wet weather treatment capacity of 8 MGD. Recycled water from MRF travels through a 24-inch pipeline and is sold to the Carlsbad Municipal Water District and Olivenhain Municipal Water District. The Carlsbad Municipal Water District is contracted to annually purchase 3 MGD, while Olivenhain Municipal Water District is contracted to annually purchase up to 1.5 MGD (VWD 2018).

Surplus water from the MRF is stored in the 54-million-gallon Mahr Reservoir. Of the total 54 million gallons within the reservoir, 32 million gallons are allocated to Carlsbad Municipal Water District, and 16 million gallons are allocated to Olivenhain Municipal Water District, leaving 6 million gallons for VWD to use in wastewater flow management. From here, water can be transported to the Encina Water Pollution Control Facility for disposal via a 3 MGD capacity failsafe pipeline. Under dry weather conditions, up to 1 MGD is conveyed for disposal. Under wet weather conditions, VWD would manage flow via the Mahr Reservoir to ensure flows to the Encina Water Pollution Control Facility would not exceed 2.5 MGD.[1] According to VWD's Master Plan, when the pipeline is at capacity, Carlsbad Municipal Water District has agreed to permit VWD to dispose of additional flow into their recycled water distribution system, subject to availability. In January 2010 through June 2014, VWD conveyed approximately 3.65 MGD of wastewater flow to the MRF for treatment and disposal (VWD 2018).

There are existing gravity sewer lines on the southwestern and northeastern sides of the project site. There is a 15-inch sewer line in N Las Posas Road and an 8-inch line in W Mission Road. These gravity sewers all convey flow to N Las Posas Road where they are conveyed south to San Marcos Boulevard and eventually to District Lift Station No. 1.

Solid Waste

Solid waste disposal in the City of San Marcos (City) is provided by a private franchise hauler, EDCO Waste and Recycling (EDCO), a private waste collection and recycling company that handles all residential, commercial, and industrial collections within the City (City of San Marcos 2012a). Waste collected by EDCO is hauled to the Escondido Resource Recovery Transfer Station. Waste is then transported to the Sycamore Sanitary Landfill in Santee, while recyclable materials are processed at the Escondido Resource Recovery Transfer Station (City of San Marcos 2012a). The project site would be serviced by EDCO.

The Escondido Resource Recovery Transfer Station has a permitted daily maximum capacity of 2,500 tons. Solid waste is consolidated here and trucked to a landfill for disposal. The transfer station is permitted to operate 7 days per week, 24 hours per day (County of San Diego 2008). The Sycamore Sanitary Landfill has a daily permitted throughput of 5,000 tons of solid waste, a remaining capacity of approximately 113,972,637 cubic yards, and an anticipated closure date of 2042 (CalRecycle 2019a).

[1] Despite a total capacity of 3 MGD in the failsafe pipeline, permitted wastewater flows are determined by acceptable depth-to-diameter ratios to ensure infrastructure longevity and functioning systems. This means that maximum flows to the Encina Water Pollution Control Facility will be less than 3 MGD.

Electrical and Gas

Electricity and natural gas would be provided by San Diego Gas & Electric (SDG&E) (City of San Marcos 2012a). SDG&E provides energy service to an estimated 3.3 million consumers through 1.3 million electric meters and approximately 800,000 natural gas meters in San Diego County and southern Orange County (City of San Marcos 2012a). Electrical facilities throughout the City include a combination of aboveground and belowground electrical distribution lines and utilities structures. The City's fiber-optic network is facilitated by a 72-strand fiber-optic line that runs on various streets throughout the City. All major arterials in the City have implemented fiber optics. Proposed development on site would require constructing private utility lines to connect to existing electrical lines within N Posas Road and natural gas lines within N Las Posas Road and W Mission Road.

Telecommunications

Telecommunications services to the project site may be provided by various distributors. Existing AT&T and Cox telecommunication lines surround the project site.

3.17.2 Regulatory Setting

Existing federal, state, and local regulations related to water supply, wastewater, and solid waste that are applicable to the project are summarized below.

Federal

Clean Water Act

The federal Clean Water Act establishes regulatory requirements for potable water supplies including raw and treated water quality criteria. The City is required to monitor water quality and conform to regulatory requirements of the Clean Water Act.

Resource Recovery and Conservation Act

The Resource Recovery and Conservation Act, Subtitle D, focuses on state and local governments as the primary planning, regulating, and implementing entities for the management of non-hazardous solid waste, such as household solid waste and nonhazardous industrial solid waste. Subtitle D provides regulations for the generation, transportation, and treatment, storage, or disposal of hazardous wastes.

State

Urban Water Management Plans

Urban water purveyors are required to prepare and update a UWMP every 5 years. The UWMPs address water supply, treatment, reclamation, and water conservation and contain a water shortage contingency plan. Local UWMPs and those of other water districts are supplemental to the regional plans prepared by MWD. The Water Conservation Bill of 2009 (Senate Bill [S] X7-7) requires each urban retail water supplier to develop an urban water use target and an interim urban water use target. Notably, SB X7-7 authorizes urban retail water suppliers to determine and report progress toward achieving these targets on an individual agency basis or pursuant to a regional alliance as provided in California Water Code Section 10608.28(a). As described above, water service to

the site is provided by MWD. In accordance with this regulation, MWD prepared and their Board of Directors adopted its 2020 UWMP in 2021. MWD's UWMP includes estimated future water demands until 2040, using updated population projections and a conservative assumption that, in the absence of mandatory water conservation measures, per-capita consumption could rebound to its 2020 target value (MWD 2021). Demands provided in MWD UWMP have been coordinated with SDWCA, MWD's wholesale supplier.

California Green Building Standards Code

In 2008, the California Building Standards Commission adopted the nation's first green building standards. The California Green Building Standards Code (Part 11 of Title 24 of the California Code of Regulations) is commonly referred to as CALGreen and establishes minimum mandatory standards and voluntary standards pertaining to the planning and design of sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and interior air quality. The CALGreen standards took effect in January 2011 and instituted mandatory minimum environmental performance standards for all ground-up, new construction of commercial, low-rise residential and state-owned buildings and schools and hospitals. The CALGreen 2022 building standards code became effective on January 1, 2023. The mandatory standards require the following measures that relate to utilities and service systems (24 CCR Part 11):

- Mandatory reduction in indoor water use through compliance with specified flow rates for plumbing fixtures and fittings
- Mandatory reduction in outdoor water use through compliance with a local water efficient landscaping ordinance or the California Department of Water Resources' Model Water Efficient Landscape Ordinance
- 65% of construction and demolition waste must be diverted from landfills
- Mandatory inspections of energy systems to ensure optimal working efficiency
- Inclusion of electric vehicle charging stations or designated spaces capable of supporting future charging stations

The CALGreen standards also include voluntary efficiency measures that are provided at two separate tiers and implemented at the discretion of local agencies and applicants. CALGreen's Tier 1 standards call for a 15% improvement in energy requirements, stricter water conservation, 65% diversion of construction and demolition waste, 10% recycled content in building materials, 20% permeable paving, 20% cement reduction, and cool/solar-reflective roofs. CALGreen's more rigorous Tier 2 standards call for a 30% improvement in energy requirements, stricter water conservation, 75% diversion of construction and demolition waste, 15% recycled content in building materials, 30% permeable paving, 25% cement reduction, and cool/solar-reflective roofs.

Senate Bill 221

Signed into law on October 8, 2001, SB 221 established a process whereby sufficient water supply must be identified and available for new development for any residential development of 500 homes or more or, in the case wherein a water supplier has fewer than 5,000 service connections or the proposed development would increase the number of connections by at least 10%, unless there is proof of adequate water over at least the next 20 years, including long periods of drought. Because the project is fewer than 500 homes, a water supply assessment and verification report pursuant to SB 221 and SB 610, described below, are not required.

Senate Bill 610

Signed into law October 9, 2001, SB 610 resulted in amendments to the California Public Resources Code and the California Water Code. Revising provisions established by SB 901, SB 610 requires that the planning agency determine whether a project subject to the California Environmental Quality Act (CEQA) meets any of the thresholds for requiring preparation of a water supply assessment. Specifically, if a project proposes development of more than 500 dwelling units, the planning agency must then request that the urban water supplier prepare a water supply assessment. The assessment would include the identification of existing water entitlements, water rights, or water service contracts relevant to the water supply identified for the project, as well as the amount of water received pursuant to such entitlements, rights, or contracts. Because the project is fewer than 500 homes, a water supply assessment pursuant to SB 610 is not required.

Assembly Bills 939 and 341

In 1989, Assembly Bill (AB) 939, known as the Integrated Waste Management Act (California Public Resources Code, Section 40000 et seq.), was passed because of the increase in waste stream and the decrease in landfill capacity. The statute established the California Integrated Waste Management Board, which oversees a disposal reporting system. AB 939 mandated a reduction of waste being disposed where jurisdictions were required to meet diversion goals of all solid waste through source reduction, recycling, and composting activities of 25% by 1995 and 50% by 2000.

AB 341 (2011) amended the California Integrated Waste Management Act of 1989 to include a provision declaring that it is the policy goal of the state that not less than 75% of solid waste generated be source-reduced, recycled, or composted by the year 2020 and annually thereafter. In addition, AB 341 required the California Department of Resources Recycling and Recovery (CalRecycle) to develop strategies to achieve the state's policy goal. CalRecycle has conducted multiple workshops and published documents that identify priority strategies that CalRecycle believes would assist the state in reaching the 75% goal by 2020.

Local

San Diego County Integrated Waste Management Plan

Pursuant to the Integrated Waste Management Act, the Countywide Integrated Waste Management Plan for San Diego County describes the goals, policies, and objectives of the county for coordinating efforts to divert, market, and dispose of solid waste during the planning period through the year 2022 (County of San Diego 2005). Countywide policies for reducing waste and implementing the programs are identified in the individual jurisdiction Source Reduction and Recycling Elements and Household Hazardous Waste Elements and are intended to reduce costs, streamline administration of programs, and encourage a coordinated and planned approach to integrated waste management.

To avoid duplication of effort, all of the jurisdictions in the county participate in the San Diego County Integrated Waste Management Local Task Force. The Local Task Force coordinates mandated planning, oversees implementation of new or countywide integrated waste management programs, and carries out an active legislative program. Regulatory reform, changes to state diversion requirements, and reduction of the costs of compliance are considered by the Local Task Force, as well as other solid waste issues of regional or countywide concerns.

City of San Marcos Municipal Code

Title 8, Health and Sanitation

San Marcos Municipal Code (SMMC) Title 8 contains regulations and provisions on sewers and sewage disposal plants, sewer connections, septic tanks, waste matter, garbage and refuse collection, and other matters concerning sanitation.

Title 14, Streets, Sidewalks, and Underground Utility Facilities

SMMC Title 14, Chapter 14.15, contains regulations concerning stormwater management and discharge control. Chapter 14.24 contains regulations concerning underground utility facilities.

Title 19, Subdivisions

SMMC Title 19 regulates subdivision requirements, including the installation of utility facilities and connections and payment or fees for such installations.

Title 20, Chapter 20.330 Water Efficient Landscaping Ordinance

The provisions of Title 20 of the SMMC are referred to as the Zoning Ordinance. SMMC Title 20, Section 20.330, details the City's Water Efficient Landscaping Ordinance. In accordance with state law, SMMC Chapter 20.330 establishes specific standards for landscape and irrigation design and installation to ensure beneficial, efficient, and responsible use of water resources within the City.

City of San Marcos General Plan

The General Plan Conservation and Open Space Element includes two goals and one policy that are applicable to the project (City of San Marcos 2012b):

Goal COS-5: Reduce water consumption and ensure reliable water supply through water efficiency, conservation, capture, and reuse.

Goal COS-10: Establish and maintain an innovative, sustainable solid waste collection, recycling, and disposal delivery system for present and future generations.

Policy COS-10.1: Promote the curbside recycling program to divert residential refuse from the landfills.

The General Plan Land Use and Community Design Element identifies the following goals and policies regarding utilities and services systems that are applicable to the project (City of San Marcos 2012a):

Goal LU-8: Ensure that existing and future development is adequately serviced by infrastructure and public services.

Policy LU-8.1: New development shall pay its fair share of required improvements to public facilities and services.

Policy LU-8.2: Promote development timing that is guided by the adequacy of existing and/or expandable infrastructure, services, and facilities.

Goal LU-13: Water Service and Supply: Manage and conserve domestic water resources by reducing water usage and waste on a per capita basis, to ensure an adequate water supply for existing and future residents.

Policy LU-13.1: Work closely with local and regional water providers to ensure high quality water supplies are available for the community.

Policy LU-13.2: Actively promote water conservation programs aimed at reducing demand.

Policy LU-13.3: Encourage exploration and use of deep underground wells to reduce reliance on treatable water.

Goal LU-14: Wastewater: Ensure a wastewater system for existing and future development.

Policy LU-14.1: Work closely with local service providers to ensure an adequate wastewater system for existing and future development is in place.

Policy LU-14.2: Ensure development approval is directly tied to commitments for the construction or improvement of primary water, wastewater, and circulation systems.

Goal LU-16: Solid Waste: Reduce the amount of waste material entering regional landfills with an efficient and innovative waste management program.

Policy LU-16.1: Work closely with local service providers to ensure adequate solid waste disposal, collection, and recycling services.

Policy LU-16.2: Increase recycling, composting, source reduction, and education efforts throughout the city to reduce the amount of solid waste requiring disposal at landfills.

Goal LU-17: Utilities and Communications: Encourage provision of power and communication systems that provide reliable, effective and efficient service for San Marcos.

Policy LU-17.2: Require all new development and redevelopment to provide the technology to support multiple telecommunications facilities and providers such as multi-media products, wireless technologies, and satellite communications.

Policy LU-17.3: The City shall prohibit above ground utility equipment within any of the pedestrian pathway and street frontage areas. All above ground utilities shall be placed either within; “wet closets” within the buildings, underground vaults, or behind buildings where they are not visible. The developer shall be responsible to contact the applicable utility agencies in advance to coordinate utilities prior to approval of the final street improvement plans for both public and private street frontages and prior to submittal of building permits.

Policy LU-17.4: Require utility location to be shown on all site development plans at the time of development/ project application.

3.17.3 Thresholds of Significance

The significance criteria used to evaluate the project impacts to utilities and service systems are based on Appendix G of the CEQA Guidelines. According to Appendix G of the CEQA Guidelines, a significant impact related to utilities and service systems would occur if the project would:

- **Threshold No. 1:** Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.
- **Threshold No. 2:** Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years.
- **Threshold No. 3:** Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.
- **Threshold No. 4:** Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals.
- **Threshold No. 5:** Comply with federal, state, and local management and reduction statutes and regulations related to solid waste.

3.17.4 Project Impact Analysis

Threshold No. 1: Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.

Water

The project development would be served by VWD. Townhome residential sites in the VWD are typically served by on-site private water systems, which consist of separate fire and domestic systems on site. Private fire systems typically supply on-site fire hydrants and building fire sprinkler systems and require a backflow preventer at the connection to the public water system.

The distribution of potable water to each home would be provided by a series of 8-inch public pipes and related infrastructure. The proposed water system would connect to an existing 8-inch pipe in N Las Posas Road. Pipes would be located within private drives and private drive aisles to create a loop system that serves the entire project site. Individual services to homes would be provided by a lateral from the main pipe to the water meter for each home.

A dedicated fire main would provide fire service to a series of new and existing fire hydrants, as well as to the individual units, for firefighting purposes. There are two existing fire hydrants on the project site that are already in service and would remain in place.

In accordance with current California Building Code, all buildings would be equipped with fire sprinklers and water conservation features such as water efficient faucets and shower heads and high-performance toilets. Homes would be Water Sense Certified to meet U.S. Environmental Protection Agency standards.

Irrigation for the site will tie into the proposed loop system. Irrigation of landscaping throughout the project site would be required to comply with the City's Water Efficient Landscaping Ordinance and the City's Landscape Manual.

The domestic system for the project would consist of a single connection to the public water system with an on-site looping system. A water meter and backflow preventer would be required at the connection to the public water system. The project would connect to the existing 855 Zone water facilities within N Las Posas Road. Landscaped areas associated with the project would require a separate irrigation service and meter. A water and sewer study was prepared by VWD for the project and is included as Appendix L to this EIR. Prior to project construction, VWD will confirm capacity fees to be paid by the project applicant. Therefore, due to the location of the project site in an urbanized area that is currently served by existing facilities, the project is not expected to require or result in the relocation or construction of new water facilities and impacts to water services would be **less than significant**.

Wastewater

As described above, the project would develop 120 townhomes, which would increase the intensity of uses on the project site and result in increased wastewater generation. The Water and Sewer Memorandum prepared for the project estimated that buildout of the project would generate approximately 24,882 gallons of wastewater per day (Appendix L).

There are existing gravity sewer lines on the southwestern and northeastern sides of the project site, including an 8-inch sewer lines in W Mission Road and a 15-inch line in N Las Posas Road. These gravity sewers all convey flow to N Las Posas Road where they are conveyed south to San Marcos Boulevard and eventually to District Lift Station No. 1. Sewer service to the project site would consist of constructing private on-site sewer lines and connecting to the public system. A wastewater system would be incorporated into the project site design, which would include an 8-inch PVC sewer main to adequately service individual homes and community areas discharging wastewater. Pipes would be located underneath internal private drives and private drive aisles. The on-site system would collect wastewater and direct flows into an existing 15-inch pipe in N Las Posas Road.

Wastewater generated by the project would be treated by the MRF. MRF has a capacity of 5 MGD, with a wet weather treatment capacity of 8 MGD, and treats wastewater at 0.25 MGD. It is expected that the MRF would be able to adequately treat wastewater flows from the project, and therefore new wastewater treatment facilities would not be needed.

The City requires that VWD provide a letter of Sewer Availability for proposed developments within VWD. VWD conducted a sewer study for the proposed development to determine whether the current infrastructure is sufficient to accommodate the development project and/or to provide recommendations for capital improvements to provide service. As discussed in the Water and Sewer Memorandum (Appendix L), the applicant would be required to pay all applicable Wastewater Capital Facility fees in effect at the time service is committed in accordance with VWD rules and regulations. Acceptance by VWD of all wastewater facilities required to be constructed to service the project would also be required. With implementation of City and VWD requirements for sewer service, and considering the scope of existing and proposed infrastructure, the project is not anticipated to exceed current capacities or significantly impact existing wastewater treatment systems. Further, to the extent the project will require or result in the relocation or construction of sewer facilities, the construction of such infrastructure has been considered throughout this EIR (e.g., within the project description and construction assumptions) and would not cause significant environmental effects. Therefore, impacts to wastewater services would be **less than significant**.

Stormwater Drainage

Development of the project would increase the impervious area on site and increase stormwater runoff in comparison to existing conditions. However, as described in Section 3.9 of this EIR, storm drainage components recommended by the Preliminary Drainage Study (Appendix G) would properly handle runoff to meet regulatory requirements and to ensure that post-development runoff quantifies rates would be similar to or less than pre-development conditions.

Stormwater arrives on site via natural rainfall only. Rainfall runoff from the site typically only occurs during a significant wet weather event. Stormwater that does accumulate on site generally drains in a southwestern direction to an existing 12-inch corrugated metal pipe riser to a 12-inch corrugated metal pipe to meet up with the commercial site to the south of the project site and is then conveyed west through a storm channel and eventually downstream to the Las Posas Creek south. Per municipal separate storm sewer system requirements, stormwater flows on site would be conveyed to biofiltration systems through storm drains throughout the project site, where water would be treated prior to being discharged. Storm drainage components would properly handle runoff to meet regulatory requirements and to ensure that post-development runoff quantifies rates are similar to or less than pre-development conditions. The project would incorporate appropriate design of on- and off-site drainage facilities and would prepare and implement a stormwater pollution prevention plan, stormwater quality management plan, and best management practices.

Implementation of all recommendations from the Preliminary Drainage Study and development-specific drainage plans would ensure the project would not substantially exceed stormwater drainage capacity or result in substantial polluted runoff. The construction of such improvements has been considered throughout this EIR (e.g., within the project description and construction assumptions) and has not been identified to cause significant environmental effects. Therefore, impacts would be **less than significant**. Please refer to Section 3.9 for additional discussion related to drainage.

Electric Power

As discussed in Section 3.5 of this EIR, implementation of the project would not result in inefficient, wasteful, or unnecessary electricity use. Temporary electric power for as-necessary lighting and electronic equipment (such as computers inside temporary construction trailers and heating, ventilation, and air conditioning) would be provided by SDG&E. The amount of electricity used during construction of the project would be minimal because typical demand stems from the use of electronic equipment in addition to electrically powered hand tools. The majority of the energy used during construction would be from petroleum. The electricity used for construction activities would be considered temporary and minimal.

Project operation would require electricity for multiple purposes, including cooling, lighting, appliances, and various equipment. Additionally, the supply, conveyance, treatment, and distribution of water would indirectly result in electricity usage. The project is estimated to have a total electrical demand of approximately 0.7 million kilowatt-hours of electricity per year. Additionally, the project would be required to implement, as applicable, the City's Climate Action Plan Consistency Checklist measures that would reduce operational electricity consumption.

The project would be required to include various on-site features and measures to reduce the project's energy consumption, which includes electric vehicle charging stations, electric or solar water heaters, solar panels, a transportation demand management plan, reduced landscaping water use, and trees. The project would be built under the 2019 Title 24 standards or newer standards. 2019 Title 24 homes would use about 53% less energy than those under the 2016 Title 24 standards.

Electricity and natural gas would be provided by SDG&E. Electrical facilities throughout the City include a combination of aboveground and belowground electrical distribution lines and utilities structures. The City fiber-optic network is facilitated by a 72-strand fiber-optic line that runs on various streets throughout the City. All major arterials in the City have implemented fiber optics. The project would require constructing private utility lines to connect to existing electrical lines within N Las Posas Road.

In summary, although electricity consumption would increase at the project site over current, vacant conditions, project would be required to comply with the Title 24 and the City's Climate Action Plan Consistency Checklist by implementing energy-efficiency measures that would further reduce electricity usage. Residential development on site is not expected to exceed existing capacity of servicing infrastructure. Therefore, implementation of the project would not require or result in the relocation or construction of expanded electric power facilities and impacts would be **less than significant**.

Natural Gas

As discussed in Section 3.5, natural gas is not anticipated to be required during construction of the project. The proposed residential land use/ zoning change is estimated to use approximately 247 million kBTU of natural gas per year, equivalent to 24,672 therms of natural gas per year. Further, the project would be required to implement project design features and comply with green building standards to reduce energy consumption.

As described above, natural gas would be provided by SDG&E. The project would require construction of private utility lines to connect to an existing natural gas pipeline within N Las Posas Road and W Mission Road. SDG&E maintains a 4-inch gas distribution system within N Las Posas Road and a 3-inch distribution system within W Mission Road. The gas lines would be extended to and through the project site through the same joint trench alignment as electric and telecommunication facilities. Use of gas for the project would be limited to gas cooktops and gas dryers.

Due to existing SDG&E infrastructure in the project area, the project is expected to be adequately served by SDG&E. However, a will-serve letter from SDG&E would be required to ensure service needs are met. For these reasons, implementation of the project would not require or result in the relocation or construction of new or expanded natural gas facilities, and impacts would be **less than significant**.

Telecommunications

Communications systems for telephones, computers, and cable television are serviced by utility providers such as AT&T, Cox, and other independent cable companies. No specific systems upgrades are proposed or anticipated for the project. Due to the existing infrastructure served in the surrounding project area, the project would not result in impacts associated with the construction or expansion of telecommunications, and impacts would be **less than significant**.

Threshold No. 2: Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?

As discussed in response to Threshold No. 1, the project would be served by VWD. Per the Water and Sewer Memorandum (Appendix L), the project is anticipated to use an estimated 37,700 gallons per day. This equates to approximately 42.26 acre-feet per year.

As discussed above, MWD's UWMP shows water supplies will be available to meet current and future demands of the region. With a projected annual water demand of 4,925,000 acre-feet per year in 2025, the MWD UWMP demonstrates that, with implementation of required conservation measures, MWD has supply capabilities sufficient to meet expected demands through 2040 under normal, single dry, and multiple dry water years (MWD 2021). The 42.26 acre-feet per year generated by the project would present an insignificant increase in water demand relative to the annual water demand projected by the MWD's UWMP.

Further, the project site would be developed in compliance with CALGreen, which implements water efficiency standards for appliances and fixtures. Compliance with CALGreen would further reduce project water usage in combination with VWD and MWD's ongoing water conservation practices. VWD requires a development-specific evaluation of water use to determine its ability to service any development and capacity fees to be paid. A Water Availability letter will be required for processing the project (VWD 2021). Compliance with these regulations and conservation measures will ensure sufficient water supplies are available to service the project. Impacts to water services would be **less than significant**.

Threshold No. 3: Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

As discussed under Threshold No. 1, wastewater generated by the project would be treated by the MRF. MRF has a capacity of 5 MGD, with a wet weather treatment capacity of 8 MGD, and treats wastewater at 0.25 MGD. The project is estimated to generate 24,882 gallons per day, or approximately 0.49% of the facility's 5 MDG capacity. It is expected that the MRF would be able to adequately treat wastewater flows from the project.

As described above, sewer facilities to serve the project would require the construction of private on-site sewer lines connecting to the public system within N Las Posas Road. As discussed in the Water and Sewer Memorandum (Appendix L), the applicant of the project would be required to pay all applicable Wastewater Capital Facility fees in effect at the time service is committed in accordance with VWD rules and regulations. Acceptance by VWD of all wastewater facilities required to be constructed to service the project would also be required. With implementation of City and VWD requirements for sewer service, and considering the scope of existing and proposed infrastructure, the project is not anticipated to exceed current capacities or significantly impact existing wastewater treatment systems. Further, to the extent the project will require or result in the relocation or construction of sewer facilities, the construction of such infrastructure has been considered throughout this EIR (e.g., within the project description and construction assumptions) and would not cause significant environmental effects. Therefore, impacts to wastewater services would be **less than significant**.

Threshold No. 4: Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

Construction of the project would result in the generation of solid waste such as scrap lumber, concrete, residual wastes, packing materials, and plastics. Operation of the project would represent an increase in intensity of uses and generation of solid waste on the project site compared to existing conditions. Solid waste generated by the project would be serviced by EDCO, and solid waste would then be transferred to Sycamore Landfill. According to CalRecycle, the facility has a daily permitted capacity of 5,000 tons per day for solid waste. As of December 2016, the remaining capacity of Sycamore Sanitary Landfill is 113,972,673 cubic yards, with an anticipated closure date of 2042. Further, three other landfills in the County of San Diego accept municipal solid waste, including Borrego Landfill, Miramar Landfill, and Otay Landfill.

The anticipated operational solid waste generation from the project was estimated using CalRecycle's Estimated Solid Waste Generation Rates (CalRecycle 2019b). It is estimated that the project (120 units) would generate approximately 1,467.6 pounds of solid waste per day (12.23 pounds per household). This does not consider any waste diversion through recycling. According to CalRecycle, the City has a disposal rate target of 8.9 pounds per person per day. If the City meets this target, the City is considered in compliance with the 50% diversion requirement of AB 939. The most recent data from CalRecycle identify the annual per capital disposal rate as 4.9 pounds per person per day (CalRecycle 2020). Thus, the City is exceeding their target for diversion.

The project would be required to comply with applicable state and local regulations related to solid waste, waste diversion, and recycling at the time of development. Implementation of the project is not expected to generate solid waste in excess of state or local standards or in excess of the capacity of local infrastructure, or to otherwise impair the attainment of solid waste reduction goals. Impacts related to solid waste would be **less than significant**.

Threshold No. 5: Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

As described in response to Threshold No. 4, the project would be required to comply with all federal, state, and local statutes and regulations related to solid waste, diversion of waste, and recycling. All solid waste facilities, including landfills, require solid waste facility permits to operate. In San Diego County, California Public Resources Code, Sections 44001–44018, and California Code of Regulations Title 27, Division 2, Subdivision 1, Chapter 4, Section 21440 et seq., authorize the County Department of Environmental Health, Local Enforcement Agency to issue solid waste facility permits. Sycamore Sanitary Landfill is a permitted facility and EDCO is a licensed hauler. For these reasons, and the reasons stated above, impacts related to solid waste as a result of project implementation would be **less than significant**.

3.17.5 Cumulative Impact Analysis

Water

Some of the cumulative projects are within VWD service area for potable water service and would contribute to the cumulative demand for water supply. However, MWD anticipates the demand of future development through their master planning process. According to MWD's UWMP, no water shortages are anticipated within MWD service area in single or multiple dry years through 2045. Not all cumulative projects fall into the VWD's service area; those that do not would be served by neighboring districts.

As described in Section 3.17.4, the project would result in less-than-significant impacts to water supply services. As discussed in Section 3.17.1, MWD has determined that with supplies provided by SDCWA and compliance with the Water Conservation Bill of 2009, no water shortages would occur in a normal year through 2045 (MWD 2021). Other cumulative projects that are consistent with the land use assumptions made in MWD's UWMP would have already been accounted for in demand projections. Projects that are inconsistent with the land use assumptions made in MWD's UWMP would also be subject to CEQA and required to include water supply assessments to demonstrate adequate supply for development. Further, related projects would be required to show that adequate infrastructure exists to serve the related projects and mitigate any potential impacts to water infrastructure caused by the project. All projects would be required to pay applicable Capital Facility fees to the SDCWA and VWD, which are required to go towards infrastructure improvements. Thus, cumulative impacts to water services would be **less than significant**.

Wastewater

Some of the cumulative projects are within VWD's service area for wastewater service and would contribute to the cumulative demand for wastewater treatment. VWD anticipates the demand for future development through their master planning process. Cumulative projects that are consistent with the land use assumptions made in VWD's Master Plan would have already had their demand accounted for. Lastly, not all cumulative projects fall into the VWD's service area; those that do not would be served by neighboring districts.

As discussed in Section 3.17.4, VWD has sufficient capacity to account for the project's estimated wastewater generation rate. Thus, with payment of all applicable Wastewater Capital Facility fees to VWD, impacts to wastewater treatment facilities would be less than significant. Cumulative projects that result in an increase in density or development over what was accounted for in VWD's Master Plan would further exacerbate wastewater deficiencies. However, these projects would also be subject to CEQA and required to mitigate any potential impacts to water supply services caused by the project. As such, cumulative impacts to wastewater facilities would be **less than significant**.

Electrical Power

Potential cumulative impacts on energy would result if the project, in combination with past, present, and future projects, would result in the wasteful or inefficient use of energy. This could result from development that would not incorporate sufficient building energy efficiency features, would not achieve building energy efficiency standards, or would result in the unnecessary use of energy during construction and/or operation. The cumulative projects within the areas serviced by the energy service providers would be applicable to this analysis; this includes existing aging structures that are energy inefficient. Projects that include development of large buildings or other structures that would have the potential to consume energy in an inefficient manner would have the potential to contribute to a cumulative impact. Projects that would mostly include construction, such as transportation infrastructure, could also contribute to a cumulative impact; however, the impact of these projects would be limited because they would typically not involve substantial ongoing energy use.

As described previously in Section 3.5, the project would not result in significant environmental impacts due to wasteful, inefficient, or unnecessary use of energy due to various design features, including installing electric vehicle charging stations, installing electric or solar water heaters, implementing a Transportation Demand Management plan, reducing landscaping water use, and planting trees, that would be required of the project. Like the project, cumulative projects would be subject to CALGreen, which provides energy efficiency standards for commercial and residential buildings. Over time, CALGreen would implement increasingly stringent energy efficiency standards that would require the project and the cumulative projects to minimize the wasteful and inefficient use of energy. In addition, cumulative projects would be required to meet or exceed the Title 24 building standards, further reducing the inefficient use of energy.

Cumulative projects are also required to comply with the state's energy efficiency standards and local regulations. Cumulative projects are therefore unlikely to result in significant effects related to requiring or resulting in the relocation or construction of new or expanded electric power facilities. As such, cumulative impacts related to electrical power would be **less than significant**.

Solid Waste

Cumulative development projects would generate solid waste to be disposed of at the Sycamore Sanitary Landfill. According to CalRecycle, the facility has a daily permitted capacity of 5,000 tons per day for solid waste. As of February 2021, the remaining capacity of Sycamore Sanitary Landfill is 113,972,673 cubic yards, or approximately 40 million tons, with an anticipated closure date of 2042. Further, three other landfills in the County of San Diego accept municipal solid waste (County of San Diego 2022). This includes Borrego Landfill, with a remaining capacity of 88,750 cubic yards in January 2020; Otay Landfill, with a remaining capacity of 11.1 million cubic yards in February 2021; and Miramar Landfill, with a remaining capacity of 11.0 million cubic yards in January 2020 (County of San Diego 2022). Therefore, it is determined there is adequate capacity throughout the County of San Diego to serve future development projects, including those identified on the cumulative project list. Cumulative impacts related to solid waste would be **less than significant**.

3.17.6 Mitigation Measures

Impacts to utilities and service systems would be less than significant, and no mitigation is required.

3.17.7 Conclusion

Project implementation would result in an increase in the need for water, wastewater, stormwater, electrical power, and solid waste services. However, as outlined in the project impact analysis in Section 3.17.4, there would be adequate existing facilities to service the project; impacts to/from such utilities and service systems would be less than significant.

4 Alternatives

4.1 Introduction

Section 15126.6 of the California Environmental Quality Act (CEQA) Guidelines states that the environmental impact report (EIR) shall "describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project and evaluate the comparative merits of the alternatives." The comparative merits of the alternatives evaluated, including the No Project Alternative, shall also be discussed.

The range of alternatives evaluated in an EIR is governed by the "rule of reason," which requires the EIR set forth alternatives adequate to permit a reasoned choice by decisionmakers and limited to alternatives that "would avoid or substantially lessen any of the significant effects of the project." An EIR need not consider an alternative whose effects cannot be reasonably ascertained and whose implementation is remote and speculative (14 CCR 15126.6[a]).

Other than the No Project Alternative, the EIR needs to examine only those alternatives that could feasibly obtain most of the basic objectives of the proposed project even if the alternative would impede to some degree the attainment of project objectives.

Factors that may influence feasibility of an alternative also include "site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries, and whether the proponent can reasonably acquire, control, or otherwise have access to the alternative site (or the site is already owned by the proponent)" (14 CCR 15126.6[f][1]). The ultimate determination as to whether an alternative is feasible or infeasible is made by the lead agency's decision-making body, the San Marcos City Council (California Public Resources Code, Section 21081[a][3]).

This section presents several alternatives to the proposed Gran Vista Specific Plan Project (project) that were considered pursuant to CEQA and evaluated for their ability to meet the basic objectives of the project, while reducing or avoiding the environmental impacts of the project identified throughout Chapter 3, Environmental Analysis, of the EIR. The alternatives proposed herein include the No Project Alternative (Section 4.4.3), the Existing Land Use Designation Alternative (Section 4.4.4), and the Reduced Density Alternative (Section 4.4.5). Other alternatives were considered but rejected, as summarized in Section 4.3.

4.2 Project Objectives

The following objectives of the proposed project describe the underlying purpose of the project and provide a basis for identification of a range of reasonable alternatives evaluated in this EIR:

1. Maximize residential densities, to the extent feasible, within proximity to major transit, education facilities, commercial uses, and trails to reduce reliance on automobiles and potentially minimize greenhouse gas (GHG) emissions.
2. Create a highly connected and efficient system of sidewalks and pathways supported by pedestrian friendly architecture and landscaping to promote walkability and connect people to surrounding transit and destinations.

3. Design a vehicular circulation system that adequately accommodates traffic and minimizes traffic impacts in and around the project site.
4. Support the housing needs of the City of San Marcos (City) and the region by developing high-quality workforce housing that balances density with price-points and long-term maintenance costs, such that new homes remain financially attainable to entry-level home buyers.
5. Establish development standards and design guidelines that ensure distinctive architecture, landscaping, and recreational amenities that complement and enhance the existing surrounding neighborhood while providing a desirable living environment.
6. Identify a program for the long-term maintenance of the community to ensure all facilities are adequately maintained to City standards.
7. Finance or contribute a fair share of funding to all community services and infrastructure needed to support development proposed by the project to promote economic stability.

4.3 Alternatives Considered But Rejected

The CEQA Guidelines state that an EIR should identify any alternatives that were considered by the lead agency but were rejected during the planning or scoping process, and should briefly explain the reasons underlying the lead agency's determination. Among the factors that may be used to eliminate alternatives from detailed consideration in an EIR are: failure to meet most of the basic project objectives, infeasibility, or inability to avoid significant environmental impacts. Factors that may be taken into account when evaluating an alternative's feasibility include, among other things, site suitability, economic viability, availability of infrastructure, general plan consistency, consistency with other plans, regulatory limitations, jurisdictional boundaries, and whether the proponent can reasonably acquire, control, or otherwise have access to the alternative site (or the site is already owned by the proponent). The following describes concepts that were considered as alternatives to the proposed project by the City but were rejected from further evaluation in this EIR, and a brief description of the reasons for their rejection.

4.3.1 Alternative Location

Pursuant to Section 15126.6(f)(2) of the CEQA Guidelines, the City considered the potential for alternative locations to develop the proposed project. There are sites within the City that are already zoned for residential use under the City of San Marcos General Plan (General Plan) that could be developed or redeveloped with a residential project. However, the project applicant does not control another site within the City of comparable land area that is surrounded by existing infrastructure and near existing transit. One of the factors for feasibility of an alternative is "whether the proponent can reasonably acquire, control or otherwise have access to the alternative site." Because the City is highly urbanized and is largely built out, obtaining another site of a similar size in a similar location is not considered feasible. The project site is surrounded on all sides by development and considered an infill site in an urban area. As such, an alternative location was ultimately rejected from further analysis in the EIR.

4.4 Project Alternatives Considered in this EIR

4.4.1 Description of Alternatives

The following alternatives are under consideration for this project:

- No Project Alternative (Section 4.4.3)
- Existing Land Use Designation Alternative (Section 4.4.4)
- Reduced Density Alternative (Section 4.4.5)

Alternatives considered and removed from further consideration are summarized in Section 4.3.

4.4.2 Summary of Project Impacts

Project- and cumulative-level impacts associated with implementation of the proposed project are evaluated throughout Chapter 3 of this EIR. As identified in Table 1-1, in Chapter 1, Executive Summary, construction and/or operation of the proposed project would cause the following significant but mitigable environmental impacts:

- **Impact BIO-1:** There is potential for project activities to cause disturbances that would result in impacts to adjacent habitat.
- **Impact BIO-2:** There is potential for construction activities could result in indirect impacts to nesting birds.
- **Impact CR-1:** Unknown archaeological resources may occur on the project site, and the proposed project has the potential to disturb such unidentified resources during project grading.
- **Impact CR-2:** There is a potential for project construction activities to disturb previously unidentified human remains on the project site.
- **Impact TCR-1:** There is potential for project construction to adversely affect previously unidentified tribal cultural resources.

The following impacts are significant and unavoidable:

- **Impact TRA-1:** The project vehicle miles traveled (VMT) per resident would exceed 16.07 VMT per resident, which exceeds the 15% below regional average threshold.

4.4.3 No Project Alternative

Under the No Project Alternative, the proposed project would not be implemented and the project site would remain undeveloped in its existing condition. This alternative would eliminate all the significant impacts identified for the proposed project. Since the No Project Alternative would not provide any development, overall impacts would be reduced compared to the proposed project. However, certain benefits would not be realized under this alternative, including the provision of housing units as identified in the General Plan in an infill and transit area.

4.4.3.1 Comparison of the Effects of the No Project Alternative to the Proposed Project

Aesthetics

Under the No Project Alternative, the site would remain in its current condition and the visual character of the site would not change. Existing vegetation would remain on site, and no grading or landform modification would occur under this alternative. This alternative would result in no impacts related to scenic vistas, scenic highways, visual character or quality, or lighting and glare. No new sources of light, glare, or shading would be introduced. However, as discussed in Section 3.1, Aesthetics, of this EIR, the proposed project would similarly not result in significant impacts to aesthetics and no mitigation would be required. Further, leaving the site condition unchanged in an infill area would be inconsistent with, and not enhance, the character of the surrounding area. However, when compared to the proposed project, this alternative would reduce impacts, as no new development or construction would occur.

Air Quality

Under the No Project Alternative, air pollutant emissions associated with construction, including emissions associated with grading, site preparation, site finishing and building finishing, would not occur. This alternative would avoid any potential impacts related to construction volatile organic compound emissions, because no construction air pollutant emissions would occur. Implementation of this alternative would not introduce any uses that would generate operational air pollutant emissions. Although the proposed project would result in less-than-significant impacts related to air quality, the No Project Alternative would reduce air quality impacts overall, because no development would occur.

Biological Resources

The No Project Alternative would not require any ground-disturbing activities. As such, this alternative would not result in direct impacts to biological resources. Because impacts to biological resources would be avoided under the No Project Alternative, **Mitigation Measure (MM) BIO-1** and **MM-BIO-2** proposed for the project would not be implemented or required for this alternative. Thus, compared to the proposed project, this alternative would result in a reduced level of direct impacts to biological resources.

Cultural Resources

The No Project Alternative would not require any ground-disturbing activities. Therefore, there would be no potential to impact unknown archaeological resources potentially located within the project site. Further, there would be no potential to disturb previously unidentified human remains that may be present on the project site. As such, **MM-CR-1** through **MM-CR-4** proposed for the project would not be implemented or required for this alternative. Although there may be a reduced level of direct impact to cultural resources, any previously undiscovered on-site resources could be subject to continued degradation due to lack of preservation of the undeveloped site. Nonetheless, compared to the proposed project, this alternative would result in a reduced level of impact to cultural resources as no ground disturbance would occur.

Energy

Under the No Project Alternative, energy use associated with construction or operation of the proposed development, including from electricity use and natural gas use, would not occur. No construction would occur; therefore, no construction-related energy impacts associated with the construction equipment and worker and vendor vehicles would occur as they would with the proposed project. This alternative would not introduce any people or uses that would generate energy use, and, in comparison to the proposed project, this alternative would reduce energy use. As described in Section 3.5, Energy, of this EIR, the proposed project's impacts related to energy emissions would be less than significant. Therefore, compared to the proposed project's less-than-significant impact to energy, the No Project Alternative would have reduced impacts.

Geology and Soils

Under the No Project Alternative, the project site would remain in its current state. Existing topography and on-site soils would not be disturbed by any development. Although the project site would still be subject to potential seismic hazards such as seismic ground shaking, under this alternative, no structures would be present on site. Additionally, paleontological resources would be avoided as no grading or construction would occur. Thus, the risk of loss, injury, or death involving seismic hazards or other geologic conditions would be reduced compared to development of the proposed project.

Greenhouse Gas Emissions

Under the No Project Alternative, GHG emissions associated with construction or operation of future residences at the site, including from electricity use, natural gas use, water use, and solid waste handling, would not occur. No construction would occur; therefore, no construction related GHG impacts associated with the operation of construction equipment and worker and vendor vehicles would occur like they would under the proposed project. This alternative would not introduce any people or uses that would generate GHG emissions. GHG emissions associated with vehicular trips would not occur. In comparison to the proposed project, this alternative would reduce GHG emissions. As described in Section 3.7, Greenhouse Gas Emissions, of this EIR, the proposed project's impacts related to GHG emissions would be less than significant. Therefore, compared to the proposed project's less-than-significant impact to GHGs, the No Project Alternative would have reduced impacts.

Hazards and Hazardous Materials

Under the No Project Alternative, no land uses would be introduced that could result in the use or generation of hazardous materials. In comparison to the proposed project, this alternative would not have the potential for transport, accidental release, or spill of hazardous materials during construction and would not expose people or structures to the potential of wildland fires, as the site would remain undeveloped. As described in Section 3.8, Hazards and Hazardous Materials, of this EIR, the proposed project's impacts related to hazards and hazardous materials would be less than significant. Therefore, compared to the proposed project's less-than-significant impact to hazards/hazardous materials, this alternative would have reduced impacts.

Hydrology and Water Quality

Under No Project Alternative, no development would occur and no impervious surfaces would be created. The existing on-site hydrologic conditions, drainage patterns, and drainage volumes would remain unaltered. Water quality would also remain unchanged. However, no best management practices would be implemented and

stormwater runoff would continue to leave the project site untreated. Additionally, as described in Section 3.9, Hydrology and Water Quality, of this EIR, the proposed project's impacts to hydrology and water quality would be less than significant. Therefore, compared to the proposed project's less-than-significant impacts to hydrology and water quality, this alternative would have reduced impacts.

Land Use and Planning

Under this alternative, the project site would remain undeveloped and none of the discretionary approvals identified for the project would be required. The proposed General Plan Amendment (GPA) and Rezone of the site from Commercial (C) to Specific Plan Area (SPA) would not be required. However, this alternative would not meet many of the overall goals of the City's General Plan, including accommodating growth in areas that can sustain a concentration of a variety of uses and constructing residential uses in areas suitable for multimodal transportation. Nonetheless, because discretionary approvals would not be required to change the existing land use and zoning designations under this alternative to allow for intended development (i.e., potential conflict regarding consistency with applicable regulations), impacts to land use and planning would be reduced compared to the proposed project.

Noise

The project site is currently vacant and does not generate any noise. Under the No Project Alternative, the project site would remain undeveloped and would not create any new sources of construction or operational noise. Additionally, this alternative would not generate any groundborne vibration. As described in Section 3.11, Noise, of this EIR, the proposed project's impacts related to noise would be less than significant. Therefore, compared to the proposed project's less-than-significant impact to noise, this alternative would have reduced impacts.

Population and Housing

The project site is currently undeveloped. The No Project Alternative would not induce population growth in the area, as no development would occur. However, this alternative would also not contribute to meeting regional housing demands. Similar to the proposed project, this alternative would not displace any housing or people. As described in Section 3.12, Population and Housing, of this EIR, the proposed project's impacts related to population and housing would be less than significant. However, because this alternative would not induce unplanned population growth, overall impacts would be reduced.

Public Services

The No Project Alternative would not result in an increase in demand for public services since no development would occur. Specifically, the No Project Alternative would not increase the demand for police and fire protection services, nor would this alternative increase the demand on parks, schools, and library services. As stated in Section 3.13, Public Services, of this EIR, the proposed project would result in less-than-significant impacts to public services. Therefore, compared to the proposed project's less-than-significant impact to public services, this alternative would have reduced impacts.

Recreation

Under the No Project Alternative, there would not be an increased demand for park and recreational facilities. As such, payment of the City's Public Facility Fees by the applicant would not be required. However, under this alternative, recreation and open space amenities proposed as part of the project would also not be developed. As

stated in Section 3.14, Recreation, of this EIR, the proposed project would result in less-than-significant impacts to recreation. Because this alternative would not result in increased demands to parks and recreation, impacts would be reduced compared to the proposed project.

Transportation

Under the No Project Alternative, no development would occur. Therefore, this alternative would have no direct impact on VMT, would not result in hazards due to design features, and would not alter emergency access; no impact would occur. However, compared to the proposed project, this alternative would not promote sustainability by focusing housing development in an infill area identified as having low VMT due to proximity to existing employment, entertainment, schools, markets, parks, transit, and shopping centers. Additionally, other improvements, such as circulation and pedestrian improvements, would not occur under this alternative. As outlined in Section 3.15, Transportation, of this EIR, because the project's VMT per resident is more than 15% above the regionwide average, impacts would be significant; despite the implementation of **MM-TRA-1** through **MM-TRA-3**, impacts would remain significant and unavoidable. Under the No Project Alternative, no mitigation would be required as no development would occur. Therefore, compared to the proposed project, the No Project Alternative would result in reduced impacts related to transportation.

Tribal Cultural Resources

The No Project Alternative would not require any ground-disturbing or other construction/development activities. Therefore, there would be no potential to impact unknown tribal cultural resources potentially located within the project site. However, although there may be a reduced level of direct impact to tribal cultural resources, any previously undiscovered on-site resources could be subject to continued degradation due to lack of preservation with the undeveloped site.

Nevertheless, because the site would not be disturbed under this alternative, **MM-CR-1** through **MM-CR-4** proposed for the project would not be implemented or required under this alternative. Compared to the proposed project, this alternative would result in a reduced level of impact to tribal cultural resources.

Utilities and Service Systems

No development would occur under the No Project Alternative. As such, the increase in demand for water service, wastewater service, and solid waste handling services would not occur. As discussed in Section 3.17 of this EIR, impacts to utilities and service systems were determined to be less than significant under the proposed project. Nonetheless, because no development would occur under this alternative, the demand for utilities would be eliminated. Therefore, impacts to utilities and service systems would be reduced under this alternative compared to the proposed project and no impacts on utilities and service systems would occur.

Summary and Relation to Project Objectives

Since the No Project Alternative would not provide any development, overall impacts would be reduced compared to the proposed project. However, certain benefits would not be realized under this alternative, including the provision of housing units in an infill area identified in the General Plan and enhanced uses and connectivity in the surrounding area.

As the No Project Alternative would not develop the site or allow for housing, this alternative would not fulfill any of the project objectives.

4.4.4 Existing Land Use Designation Alternative

Under the Existing Land Use Designation Alternative, the project site would be developed per the City's General Plan as a Commercial (C) land use. The project site would be developed as previously processed with the existing CVS Conditional Use Permit. The Existing Land Use Designation Alternative would include 69,000 square feet (sf) of grocery store and gas station uses and 23,000 sf of office space. This alternative would include 276 parking spaces. This alternative could be processed with a Conditional Use Permit and Site Development Plan and would not require a GPA or Rezone of the site.

Other improvements, such as circulation, landscaping, and utility connections would occur as required. Off-site improvements beyond those required by mitigation measures would not occur under this alternative. No open space uses would occur on site.

4.4.4.1 Comparison of the Effects of the Existing Land Use Designation Alternative to the Proposed Project

Aesthetics

The Existing Land Use Designation Alternative would develop commercial uses on the currently undeveloped site. This alternative would consist of 69,000 sf of grocery store and gas station uses, 23,000 sf of office space, and 276 parking spaces. This alternative would result in similar less-than-significant impacts or no impacts related to scenic vistas, scenic highways, visual character or quality, or lighting and glare compared to the proposed project. The visual character of the site would change from vacant to commercial, which is consistent with the existing land use designation and immediately adjacent uses to the south/southeast. New sources of lighting would be introduced, but, similar to the project, they would be required to comply with the City's Light and Glare Standards. Therefore, aesthetic impacts of the Existing Land Use Designation Alternative would be comparable to those of the proposed project.

Air Quality

Under the Existing Land Use Designation Alternative, air pollutant emissions associated with project construction, including emissions associated with grading, site preparation, site finishing and building finishing, would occur, which would be similar to the proposed project.

Under the Existing Land Use Designation Alternative, mobile source operational emissions from vehicle trips are expected to be greater than those of the proposed project, based on the alternative land use of a grocery store, gas station, and office space. Commercial development would likely result in greater stationary source operational air pollutant emissions compared to the proposed project's residential use of the site. Commercial uses generally use more energy than residential land uses, which translates to increased air pollutant emissions related to energy generation and energy transmission. Diesel particulate matter emissions from heavy-duty equipment operations and heavy-duty truck trips associated with the gas station and grocery store may also generate significant operational emissions, which could potentially result in associated health impacts to nearby sensitive receptors. Unlike operation of a residential development, development of the Existing Land Use Designation Alternative could result in significant long-term toxic air contaminant emissions, including diesel particulate matter. Commercial development of the site may also result in adverse impacts from odors associated with the gas station. As such, this alternative would likely result in greater impacts to air quality compared to the proposed project.

Biological Resources

The development footprint of the Existing Land Use Designation Alternative would result in a similar or greater ground disturbance area on the project site. Development of this alternative would result in a similar potential to impact existing biological resources on site, including loss of vegetation communities and potential impacts to special-status species, sensitive natural communities, and nesting birds. Under this alternative, designated open space areas would not be required and the site would be developed with more impervious area than the proposed project. Like the project, this alternative would likely require mitigation measures similar to MM-BIO-1 and MM-BIO-2 in order to reduce impacts to biological resources. With implementation of mitigation measures similar to those proposed for the project, this alternative would result in similar impacts to biological resources compared to the project.

Cultural Resources

The development footprint of the Existing Land Use Designation Alternative would be slightly greater than the proposed project since no open space area would be required. Development could result in similar or greater ground-disturbance compared to the proposed project. Therefore, the potential to impact unknown archaeological resources located within the project site, as well as unidentified human remains, would still occur. As with the proposed project, implementation of MM-CR-1 through MM-CR-4 would be required to reduce potential impacts to unknown/unidentified cultural resources. Compared to the proposed project, this alternative would result in a similar level of impact to cultural resources.

Energy

Development of the Existing Land Use Designation Alternative would result in construction and operational energy use. Energy use during construction would be similar to the proposed project and primarily be associated with construction equipment, as-necessary lighting, and electronic equipment such as computers inside temporary construction trailers and heating, ventilation, and air conditioning. The operation of this alternative would require electricity for multiple purposes, including proposed daily uses associated with the industrial land use, cooling, lighting, and various equipment. Additionally, the supply, conveyance, treatment, and distribution of water would indirectly result in electricity usage.

As described above, commercial uses generally use more energy than residential land uses, which translates to increased air pollutant emissions related to energy generation and energy transmission. As such, demand for energy would be greater under the Existing Land Use Designation Alternative than under the proposed project.

Similar to the proposed project, this alternative would be required to comply with building requirements (including Title 24 California Code of Regulations standards) designed to ensure efficient energy use, reduce energy demand, and comply with state and local renewable energy and energy efficiency requirements. Petroleum use during operation of the Existing Land Use Designation Alternative is expected to be increased compared to the proposed project as a result of grocery store and gas station land use activities and vehicles. As such, demand for energy would be greater under this alternative than under the proposed project.

Geology and Soils

Under the Existing Land Use Designation Alternative, although the project site would be developed with different land uses, ground-disturbance areas would be similar. Development under this alternative would be subject to the same potential seismic hazards such as seismic ground shaking. This alternative would also require abiding by geological recommendations, such as the ones identified in the geotechnical evaluation for the proposed project.

Similar to the proposed project, paleontological resources would be avoided because the potential for paleontological resources to be located on the project site is considered low. Compared to the proposed project, this alternative would result in similar level of impacts to geology and soils.

Greenhouse Gas Emissions

Construction and operation of the Existing Land Use Designation Alternative would result in construction GHG emissions that are primarily associated with use of off-road construction equipment, on-road vehicles, vendor trucks, daily operations, and worker vehicles. The GHG emissions associated with this alternative are expected to be greater due to typical daily operations associated with the commercial land uses, specifically transportation trucks associated with the gas station and grocery store. Additionally, the City's zoning does not have an open space requirement for commercial uses, as it does for the project's residential land use.

Although this alternative is not expected to conflict with an applicable GHG related plan, policy, or regulation due to consistency with the existing General Plan land use and zoning designation, the Existing Land Use Designation Alternative is expected to result in greater emissions compared to the project due to operational uses typical of such commercial projects. As such, impacts to GHG emissions under the Existing Land Use Designation Alternative would be greater in comparison to the proposed project.

Hazards and Hazardous Materials

Similar to the proposed project, there is the potential for the Existing Land Use Designation Alternative to generate hazardous materials during construction; however, existing federal and state standards are in place for the handling, storage, and transport of these materials. Because the Existing Land Use Designation Alternative would result in development of commercial uses on site, including a gas station, operation of this alternative would likely result in increased use of hazardous materials on site compared to the household products that would be utilized under the project's proposed residential uses. Therefore, compared to the proposed project, this alternative would result in greater impacts related to hazards and hazardous materials.

Hydrology and Water Quality

As described above, the Existing Land Use Designation Alternative would result in a similar or greater disturbance area on the project site. Due to uses associated with commercial development and associated parking, it is assumed that this alternative would introduce more impervious surfaces to the site compared to the proposed project, as the proposed project would be required to incorporate open space and landscaped areas for residents under the San Marcos Municipal Code. Development of both the proposed project and this alternative would alter the existing on-site hydrologic conditions, drainage patterns, and drainage volumes in comparison to existing vacant conditions. It is expected that this alternative, like the proposed project, would also incorporate all required and applicable best management practices to avoid any violations of water quality standards and to avoid otherwise modifying or adversely affecting surface and groundwater quality or increasing runoff rate or volume from the site. Therefore, as compared to the proposed project, this alternative would result in similar, less-than-significant impacts.

Land Use and Planning

Because development of this alternative would be consistent with land uses identified in the City's General Plan, a GPA and Rezone would not be required. Development of commercial uses on the project site would also be consistent with adjacent land uses to the south/southeast. By contrast, the proposed project would introduce population growth in an area of the City that has not been accounted for in the City's General Plan. Therefore,

because this alternative would avoid a GPA/Rezone, which would be required for the proposed project, no impacts would occur under this alternative, and impacts would be reduced compared to the proposed project.

Noise

The Existing Land Use Designation Alternative would result in similar ground-disturbance on site in comparison to the proposed project. As analyzed in Section 3.11 of this EIR, proposed project noise impacts were determined to be less than significant. Construction noise of this alternative is expected to be similar to that of the proposed project. Operationally, this alternative may result in greater noise generation during commercial operating hours, particularly with components such as the grocery store and gas station. While it is likely that such commercial uses would generate more noise than a residential development, it would be expected that the uses would comply with the City's noise ordinance regarding generation of noise at the property line, and that appropriate mitigation would be implemented as needed to reduce potential impacts to less than significant. Therefore, compared to the proposed project, this alternative would result in similar impacts.

Population and Housing

The Existing Land Use Designation Alternative would not induce substantial unplanned population growth in the area, either directly or indirectly. This alternative would propose new businesses consistent with the General Plan and provide for infrastructure only as needed to serve the alternative. The proposed project seeks to change the land use designation of the project site to allow for development of residential land uses that have not been accounted for in the City's General Plan; however, the proposed new homes and associated estimate of 370 residents is not expected to substantially induce unplanned population growth in this infill area. Like the proposed project, the Existing Land Use Designation Alternative would have no impact related to displacing substantial numbers of people or housing. Overall, impacts related to population and housing for this alternative would be reduced compared to the proposed project's less-than-significant impact.

Public Services

Similar to the proposed project, the Existing Land Use Designation Alternative would result in an increase in demand for public services due to the development of a currently vacant site. However, commercial development under this alternative would likely result in less of a demand on public services (especially parks, schools, and libraries) compared to the residential development proposed by the project. Therefore, impacts to public services under this alternative would be reduced compared to the proposed project, but would remain less than significant.

Recreation

Unlike the proposed project, the Existing Land Use Designation Alternative would not result in an increase in demand for parks and recreation services over existing conditions, as no residents or substantial population generation would be associated with development of commercial uses on site. Additionally, this alternative would not require usable open space on site. This alternative would result in reduced impacts to recreational facilities compared to the proposed project's less-than-significant impacts.

Transportation

The Existing Land Use Designation Alternative is assumed to be served by a larger volume of large trucks and machinery during both construction and operation. However, traffic signals and entries to the site were designed

and built to accommodate anticipated heavy commercial traffic during processing of the CVS development. It is anticipated that this alternative would be required to provide adequate emergency access, similar to the project.

VMT for the Existing Land Use Designation Alternative is expected to be greater in comparison to the proposed project as a result of operational uses typical of such commercial uses, including daily transport and volume of large trucks. The estimated daily vehicle trips for this alternative is approximately 10,672 average daily trips, in comparison to the proposed project's calculated 960 average daily trips. Further, this alternative would not promote sustainability by focusing housing development in an infill area identified as a High Quality Transit Area due to proximity to existing employment, entertainment, schools, markets, parks, transit, and shopping centers.

This alternative would likely result in a larger volume of large trucks during operation. However, such uses would be compatible with surrounding commercial uses to the south/southwest and are unlikely to result in hazards due to design features or incompatible uses. Compared to the proposed project, the Existing Land Use Designation Alternative is expected to result in similar or greater impacts related to transportation.

Tribal Cultural Resources

This alternative would result in new commercial development within a slightly greater footprint than the proposed project on a currently vacant site. As such, this alternative would have similar potential to affect unknown tribal cultural resources compared to the proposed project. It is expected that this alternative would require implementation of mitigation measures similar to **MM-CR-1** through **MM-CR-4** proposed for the project. Thus, with the implementation of mitigation, impacts to tribal cultural resources are expected to be similar to the proposed project.

Utilities and Service Systems

The Existing Land Use Designation Alternative demand for water service, energy, and solid waste is expected to be greater than that required to serve a 120-unit residential project (approximately 370 residents). As described under the air quality analysis above, commercial uses including the grocery store and gas station proposed under this alternative generally use more energy and water than residential land uses. As such, the Existing Land Use Designation Alternative's demand for utilities and service systems is likely to be greater than the demand under the proposed project.

Summary and Relation to Project Objectives

Under the Existing Land Use Designation Alternative, the project site would be developed per the City's General Plan land use designation with Commercial (C) land uses. As described above, this alternative would develop 69,000 sf of grocery store and gas station uses, 23,000 sf of office space, and 276 parking spaces. This alternative could be processed with a Site Development Plan and would not require a GPA or Rezone of the site.

Because development of the Existing Land Use Designation Alternative would include grading and development of the same site, construction-related impacts would be similar to the proposed project and would require similar mitigation for impacts to biological resources, cultural resources, geology and soils, tribal cultural resources, and traffic. However, the commercial use of the site would be expected to result in greater impacts to air quality, energy, GHG emissions, hazards and hazardous materials, transportation, and utilities, in comparison to the impacts resulting from the proposed project's residential use, and additional mitigation may be required.

This alternative would promote infill development on site; however, it would not fulfill any of the basic project objectives and would also not aid the City in achieving its Regional Housing Needs Assessment allocation. Furthermore, the project site has been designated for commercial development under the existing and previous General Plans but has remained vacant, evidencing that it is not marketable or feasible for commercial uses.

Although this alternative would be consistent with the existing designated land use and zoning for the site and adjacent land uses to the south, this alternative would not reduce or avoid significant environmental impacts and would not meet any project objectives.

4.4.5 Reduced Density Alternative

The Reduced Density Alternative would reduce the density on site in comparison to the project by changing the General Plan land use designation to Low Density Residential (LDR) and changing the zoning to Residential 1 (R-1-7.5), which "provides for low-density, single family detached homes that are suitable in massing and character or inclusion in single-family detached neighborhoods," as outlined in the Municipal Code. Under this alternative, the site would accommodate approximately 33 single-family homes for a total residential density of 4.34 dwelling units per acre. The Reduced Density Alternative would not incorporate private useable open space area within the residential community since each single-family home would have a backyard. The access points and internal streets would be configured to fit the 33 single-family home layout. This alternative would utilize the entire 7.6-acre site.

4.4.5.1 Comparison of the Effects of the Reduced Density Alternative to the Proposed Project

Aesthetics

The Reduced Density Alternative would reduce the density on site with the development of 33 single-family homes instead of 120 townhomes. The visual character of the site would change from vacant to residential in an urbanized and developed area. Compared to the proposed project, the Reduced Density Alternative would decrease impacts related to visual character and consistency for the land uses to the north and west of the project due to the more similar single-family housing. New sources of lighting would be introduced but, similar to the project, they would be required to comply with the City's Light and Glare Standards. Therefore, aesthetic impacts of the Reduced Density Alternative would be comparable to the proposed project, resulting in less-than-significant impacts.

Air Quality

Under the Reduced Density Alternative, air pollutant emissions associated with project construction, including emissions associated with grading, site preparation, site finishing, and building finishing, would be similar compared to the proposed project.

Under the Reduced Density Alternative, mobile source operational emissions from light vehicle trips would be reduced compared to the proposed project, since the unit count would decrease to 33 single-family homes. As such, this alternative would likely result in overall reduced impacts to operational air quality compared to the proposed project.

Biological Resources

The Reduced Density Alternative would result in similar ground disturbance area on the project site and would result in similar impacts as the proposed project to existing biological resources on site. Similar to the proposed project, this alternative would require mitigation similar to **MM-BIO-1** and **MM-BIO-2**, proposed for the project.

With implementation of mitigation measures similar to those proposed for the project, this alternative would result in similar less-than-significant impacts to biological resources compared to the project.

Cultural Resources

The Reduced Density Alternative would result in similar ground-disturbance compared to the proposed project and would result in similar impacts to unknown archaeological resources located within the project site, as well as unidentified human remains. As with the proposed project, implementation of mitigation measures similar to **MM-CR-1** through **MM-CR-4** would be required to reduce potential impacts to unknown/unidentified cultural resources. With implementation of mitigation measures similar to those proposed within the project, this alternative is expected to result in similar less-than-significant impacts to cultural resources compared to the project.

Energy

Under the Reduced Density Alternative, development would result in construction and operational energy use. Energy use during construction would primarily be associated with construction equipment, as-necessary lighting, and electronic equipment, such as computers inside temporary construction trailers and heating, ventilation, and air conditioning, similar to the proposed project. Natural gas is not anticipated to be used during construction, similar to the proposed project, and would be temporary and negligible if used. Petroleum would be used throughout construction of the alternative and would be similar to the proposed project. Ultimately, like the proposed project, the petroleum consumed related to construction would be typical of construction projects of similar types and sizes and would not be wasteful or inefficient.

The operation of this alternative would also require electricity for multiple purposes, similar to the proposed project. The Reduced Density Alternative demand for energy use is expected to be similar or slightly reduced to that required to serve the proposed project. Similar to the proposed project, this alternative would be required to comply with building requirements (including Title 24 California Code of Regulations standards) designed to ensure efficient energy use, reduce energy demand, and comply with state and local renewable energy and energy efficiency requirements. Like the proposed project, the operation of residential units would require natural gas for space heating and to power appliances, but compliance with Title 24 would ensure its efficient use. As such, demand for energy under this alternative would be comparable to demand under the proposed project, or would be slightly reduced. Similar, less-than-significant impacts to energy would occur under this alternative.

Geology and Soils

Under the Reduced Density Alternative, ground-disturbance areas would be similar. Development under this alternative would be subject to the same potential seismic hazards, such as seismic ground shaking. This alternative would also require abiding by geological recommendations, such as the ones identified in the geotechnical evaluation for the proposed project. Similar to the proposed project, paleontological resources would be avoided because the potential for paleontological resources to be located on the project site is considered low. Compared to the proposed project, this alternative would result in similar less-than-significant impacts to geology and soils.

Greenhouse Gas Emissions

Construction of the Reduced Density Alternative would result in construction GHG emissions that are primarily associated with use of off-road construction equipment, on-road vehicles, vendor trucks, and worker vehicles, similar to the proposed project. Construction GHG emissions under this alternative may be slightly reduced as a result of the decreased unit count.

Estimated annual operational GHG emissions from this alternative would be similar or slightly reduced compared to the proposed project as the unit count would be reduced to 33 single-family homes. Thus, this alternative would result in overall similar GHG emissions compared to the proposed project and impacts would remain less than significant.

Hazards and Hazardous Materials

Similar to the proposed project, there is the potential for the Reduced Density Alternative to generate hazardous materials during construction; however, existing federal and state standards are in place for the handling, storage, and transport of these materials. Because the Reduced Density Alternative would result in similar development of residential units on site, operation of this alternative would result in similar use of hazardous materials on site, such as household products, that would be utilized under the proposed project. Therefore, compared to the proposed project, this alternative would result in similar impacts related to hazards and hazardous materials.

Hydrology and Water Quality

As described above, the Reduced Density Alternative would result in similar ground disturbance area on the project site. Due to the similar development footprint under this alternative, impervious surfaces would be similar to those of the proposed project or would slightly increase since no communal useable open space area would be incorporated on site. Development of both the proposed project and this alternative would alter the existing on-site hydrologic conditions, drainage patterns, and drainage volumes in comparison to existing vacant conditions. It is expected that this alternative, like the proposed project, would also incorporate all required and applicable best management practices to avoid any violations of water quality standards and to avoid otherwise modifying or adversely affecting surface and groundwater quality or increasing runoff rate or volume from the site. Therefore, as compared to the proposed project, this alternative would result in similar, less-than-significant impacts to hydrology and water quality.

Land Use and Planning

Similar to the proposed project, the Reduced Density Alternative would introduce housing on site and a GPA and Rezone would be required. Similar to the proposed project, this alternative would introduce population growth in an area of the City that has not been accounted for in the City's General Plan. Therefore, because this alternative would also require a GPA/Rezone but would not conflict with applicable plans, policies, and regulations, impacts under this alternative would result in similar impacts to land use to those of the proposed project.

Noise

The Reduced Density Alternative could potentially result in reduced noise levels as a result of the reduction in unit count from 120 townhomes to 33 single-family homes. As analyzed in Section 3.11 of this EIR, noise impacts

associated with the proposed project were determined to be less than significant. Construction noise of this alternative is expected to be similar to that of the proposed project. Operationally, this alternative would result in similar or slightly reduced noise generation to that of the proposed project due to the layout. Development of this alternative would be expected to comply with the City's noise ordinance regarding generation of noise at the property line. Therefore, as compared to the proposed project, this alternative may result in slightly reduced noise, but would still result in similar, less-than-significant impacts.

Population and Housing

The Reduced Density Alternative would similarly introduce unplanned population growth in the area with the development of 33 single-family housing units on the currently vacant site. As of 2021, the City has a person per household ratio of 3.08 (DOF 2021). Using this household ratio of 3.08, development of 33 single-family residential dwelling units at the project site would generate approximately 102 people, in comparison to the proposed project's estimated generation of 370 people. The proposed project seeks to change the land use designation of the project site to allow for development of residential land uses that have not been accounted for in the City's General Plan. Development of this alternative would also require a GPA/Rezone. However, similar to the project, the new homes under this alternative would not be considered to substantially induce unplanned population growth as the project site is an infill site surrounding by existing roadways, utilities, and development. Like the proposed project, this alternative would have no impact related to displacing substantial numbers of people or housing. Therefore, impacts related to population and housing for this alternative would be similar to the proposed project's less-than-significant impacts.

Public Services

Similar to the proposed project, the Reduced Density Alternative would result in an increase in demand for public services due to the development of a currently vacant site. Because the unit count would be reduced under this alternative, impacts to public services would be slightly less than the proposed project, but still result in similar less-than-significant impacts.

Recreation

Similar to the proposed project, the Reduced Density Alternative would result in an increased demand on existing park and recreational facilities within the City with the introduction of 33 single-family housing units. However, similar to the proposed project, this alternative would be required to incorporate private open space on site and would be required to pay into applicable developer and park impact fees. Therefore, impacts related to recreation for this alternative would be similar to the proposed project's less-than-significant impacts.

Transportation

The Reduced Density Alternative would be served by similar vehicle traffic during construction compared to the proposed project. Construction traffic impacts under this alternative are expected to be less than significant, as with the proposed project.

During operation, project access points for this alternative would be designed to fit the 33 single-family unit layout. It is anticipated that this alternative would be required to provide adequate emergency access, similar to the project.

Due to the project site being located in an urban setting and the limited options available to mitigate VMT impacts for residential projects, the Reduced Density Alternative would still result in a significant and unavoidable transportation impact due to VMT. Therefore, compared to the proposed project, this alternative would result in similar significant and unavoidable impacts related to transportation.

Tribal Cultural Resources

This alternative would result in development within the same footprint as the proposed project on the project site. As such, this alternative would result in a similar potential to affect unknown tribal cultural resources compared to the proposed project. It is expected that this alternative would require implementation of mitigation measures similar to **MM-CR-1** through **MM-CR-4** proposed for the project. Thus, with the implementation of mitigation, impacts to tribal cultural resources would be similar to the proposed project and would be less than significant.

Utilities and Service Systems

The Reduced Density Alternative demand for water service, energy, and solid waste is expected to be similar to that required to serve the proposed project. Therefore, the demand for utilities and service systems is determined to be similar to that of the proposed project under this alternative, and result in a less-than-significant impact.

Summary and Relation to Project Objectives

The Reduced Density Alternative would reduce the total unit and population density on site, but retain the same development footprint as the proposed project. The Reduced Density Alternative would develop 33 single-family homes on the 7.6-acre site. Development of single-family homes would be more consistent with the adjacent single-family homes to the west. However, the 33 single-family homes under this alternative would not be consistent with the urban setting of the area and other adjacent land uses, and would not maximize development of the site near transit, schools, and commercial uses.

While this alternative would develop infill housing on an urbanized site and rezone the site to residential to assist the City to implement its housing goals, it would less efficiently promote infill development and would not enhance connectivity. Due to the site configuration and single-family units, communal recreational amenities would not be incorporated into this alternative. Furthermore, due to the project site being located in an urban setting and the limited options available to mitigate VMT impacts for residential projects, the Reduced Density Alternative would still result in a significant and unavoidable transportation impact due to VMT.

However, the Reduced Density Alternative would potentially provide a slightly reduced level of impact in some environmental analysis areas including aesthetics, air quality, energy, GHG, and noise. As described above, mitigation measures would still be required to mitigate impacts to biological resources, cultural resources, geology and soils, and tribal cultural resources. This alternative would not meet most of the project objectives.

4.5 Environmentally Superior Alternative

Table 4-1 provides a qualitative comparison of the impacts for each Alternative compared to the proposed project. As shown in Table 4-1, the No Project Alternative would eliminate all of the significant impacts identified for the project. However, the No Project Alternative would not meet any of the project objectives. CEQA Guidelines Section 15126.6(e)(2) states that if the No Project Alternative is identified as the environmentally superior alternative, then an environmentally superior alternative should be identified among the other alternatives.

Among the other alternatives, not including the proposed project, the Reduced Density Alternative would be considered the environmentally superior alternative because it would potentially provide a reduced level of impact in some environmental analysis areas including air quality, GHG, and noise. However, such impacts under this alternative would still remain as less than significant, similar to the proposed project. The Reduced Density Alternative would cover the same development footprint as the proposed project but would result in decreased unit count and population count on site. Because the Reduced Density Alternative would cover the same development footprint as the project, impacts to biological resources, cultural resources, geology and soils, and tribal cultural resources would remain the same as the proposed project and mitigation measures would still be required to mitigate impacts to these environmental resources. The Reduced Density Alternative would not meet project objectives 1, 2, and 4. Furthermore, due to the project site being located in an urban setting and the limited options available to mitigate VMT impacts for residential projects, the Reduced Density Alternative would still result in a significant and unavoidable transportation impact due to VMT.

For the Existing Land Use Designation Alternative, although this alternative would be consistent with the existing land use and zoning designation for the site and would promote infill development on site, it would not fulfill any of the project objectives, would not reduce or avoid significant environmental impacts, would not aid the City in achieving its Regional Housing Needs Assessment allocation. Additionally, it may result in new or more severe impacts related to air quality, GHG emissions, and hazards.

Table 4-1. Comparison of Impacts of Proposed Project and Alternatives

Environmental Topic	Proposed Project	No Project Alternative	Existing Land Use Designation Alternative	Reduced Density Alternative
Aesthetics	LTS	No Impact (Reduced)	LTS (Same)	LTS (Same/Reduced)
Air Quality	LTS	No Impact (Reduced)	LTS (Greater)	LTS (Same/Reduced)
Biological Resources	LTSM	No Impact (Reduced)	LTSM (Same/Greater)	LTSM (Same)
Cultural Resources	LTSM	No Impact (Reduced)	LTSM (Same/Greater)	LTSM (Same)
Energy	LTS	No Impact (Reduced)	LTS (Same/Greater)	LTS (Same/Reduced)
Geology and Soils	LTS	No Impact (Reduced)	LTS (Same)	LTS (Same)
Greenhouse Gas Emissions	LTS	No Impact (Reduced)	LTS (Same/Greater)	LTS (Same/Reduced)
Hazards and Hazardous Materials	LTS	No Impact (Reduced)	LTS (Same/Greater)	LTS (Same)
Hydrology and Water Quality	LTS	No Impact (Reduced)	LTS (Same)	LTS (Same)
Land Use	LTS	No Impact (Reduced)	LTS (Reduced)	LTS (Same)
Noise	LTSM	No Impact (Reduced)	LTS (Same/Greater)	LTS (Same/Reduced)
Population and Housing	LTS	No Impact (Reduced)	LTS (Reduced)	LTS (Same/Reduced)
Public Services	LTS	No Impact (Reduced)	LTS (Reduced)	LTS (Same/Reduced)
Recreation	LTS	No Impact (Reduced)	LTS (Reduced)	LTS (Same)
Transportation	LTS	No Impact (Reduced)	LTSM (Same/Greater)	LTSM (Same)
Tribal Cultural Resources	LTSM	No Impact (Reduced)	LTSM (Same/Greater)	LTSM (Same)
Utilities and Service Systems	LTS	No Impact (Reduced)	LTS (Same/Greater)	LTS (Same)

Note: LTS = Less Than Significant Impact; LTSM = Less Than Significant with Mitigation; SU = Significant and Unavoidable.

5 Environmental Effects Found Not To Be Significant

As required by Section 15128 of the California Environmental Quality Act Guidelines, the following is a discussion of the environmental effects that were considered as part of this environmental impact report (EIR) but were determined to have no impact and therefore are not discussed in detail in Chapter 3, Environmental Analysis, of this EIR. Agriculture and forestry resources, mineral resources, and wildfire were the only environmental issue areas eliminated from Chapter 3 and are briefly discussed below.

As discussed in Chapter 2, Project Description, of this EIR, the proposed Gran Vista Specific Plan Project (project) proposes development of 120 townhomes and associated amenities on a 7.6-acre project site. The project proposes a General Plan Amendment and Rezone from Commercial (C) to Specific Plan Area (SPA).

5.1 Agriculture and Forestry Resources

The project site is designated as Urban and Built-Up Land by the California Department of Conservation Farmland Mapping and Monitoring Program (DOC 2016). As a result, the proposed project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural uses.

Furthermore, the project site is not zoned for agricultural use or designated as land under the Williamson Act, nor is the project site zoned for forest land or timberland production (DOC 2014). Therefore, implementation of the proposed project would not result in the loss or conversion of forest land. No impact would occur regarding conflicts with existing zoning for agricultural use or forest land.

Designated farmland does not exist within the vicinity of the project site. The proposed project would not result in substantial changes that could result in the conversion of farmland to non-agricultural use. The project site is surrounded entirely by developed land, with the exception of two small vacant lots adjacent to the east and west portion of the site. This vacant lots are designated Commercial by the City of San Marcos (City). Other existing development adjacent to the project site include Commercial, Specific Plan Amendment, and Low Density Residential (City of San Marcos 2022). Given the extent of development surrounding the project site, the proposed project would not result in the conversion of any existing farmland, and **no impact** would occur.

5.2 Mineral Resources

According to the City of San Marcos General Plan Conservation and Open Space Element, the City has land classified in all four Mineral Resource Zones (MRZs) (City of San Marcos 2012). The different MRZs are defined as follows:

- **MRZ-1:** Areas where adequate information indicates that no significant mineral deposits are present or where it is judged that little likelihood exists for their presence.
- **MRZ-2:** Areas where adequate information indicates that significant mineral deposits are present or where it is judged that a high likelihood for their presence exists.
- **MRZ-3:** Areas containing mineral deposits the significance of which cannot be evaluated from available data.
- **MRZ-4:** Areas where available information is inadequate for assignment to any other MRZ zone.

California does not require that local governments protect land designated as MRZ-1, MRZ-3, or MRZ-4. However, the City is responsible for recognizing lands designated as MRZ-2 and protecting these areas from premature development incompatible with mining. City lands designated as MRZ-2 include small portions between Double Peak, Mt. Whitney, and Franks Peak and small portions in the northern Sphere of Influence within Twin Oaks Valley Neighborhood (City of San Marcos 2012). These locations do not overlap with the proposed project site and the project site is located in MRZ-4 (DOC 2017); therefore, no loss of known mineral resources would occur.

Furthermore, the project site is not designated as a locally important mineral resource recovery site on any local general plan, specific plan, or other land use plan (City of San Marcos 2012). Therefore, due to the location and nature of the proposed project, there would be **no impact** to mineral resources.

5.3 Wildfire

The project site is not located in any fire hazard severity zones (CAL FIRE 2022). Nor is the project site located near any local responsibility areas, state responsibility areas, or lands classified as very high fire hazards severity zones (CAL FIRE 2022). The existing project site is a vacant lot. Implementation of the proposed project would likely reduce the potential for wildfire hazards on site. Proposed development would not include infrastructure that would exacerbate fire risk. Additionally, the proposed project would be required to comply with all applicable state and local fire codes. Furthermore, as determined in the Fire Response Summary Letter prepared for the project (Appendix J to this EIR), the San Marcos Fire Department's existing Station 1 would adequately serve future development at the project site while maintaining their response goals. For these reasons, the proposed project is not expected to result in significant impacts related to wildfire. **No impact** would occur.

6 Other CEQA Considerations

6.1 Significant Unavoidable Impacts

California Environmental Quality Act (CEQA) Guidelines Section 15126.2(b) requires that an environmental impact report (EIR) describe any significant impacts that cannot be avoided, including those impacts that can be mitigated but not reduced to a less-than-significant level. Chapter 3, Environmental Analysis, of this EIR describes the potential environmental impacts of the proposed Gran Vista Specific Plan Project (project) and recommends mitigation measures to reduce impacts, where feasible.

As discussed in this EIR, all potentially significant impacts would be reduced to a less-than-significant level with mitigation incorporated, with the exception of traffic impacts, which would remain significant and unavoidable after incorporation of proposed mitigation.

6.2 Growth Inducement

Section 15126.2(d) of the CEQA Guidelines mandates that the growth-inducing nature of a proposed project be discussed. The CEQA Guideline state the growth-inducing analysis is intended to address the potential for the proposed project to "foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment." Further, the CEQA Appendix G Checklist (Population and Housing) also mandates that a CEQA document speak to the proposed project's likelihood to induce substantial population growth in an area, either directly (e.g., by proposing new homes or businesses) or indirectly (e.g., through extension of roads or other infrastructure).

A project may be distinguished as either facilitating planned growth or inducing unplanned growth. Facilitating growth is related to the establishment of direct employment, population, or housing growth that would occur within a project site. Inducing growth is related to lowering or removing barriers to growth or creating an amenity or facility that attracts new population/economic activity. For purposes of this EIR analysis, a significant growth inducement impact would occur if the proposed project, as well as associated infrastructure improvements, directly or indirectly removes obstacles to growth such that the induced growth would significantly burden existing community services or the environment or cause a demand for General Plan Amendments. This section contains a discussion of the growth inducing factors related to the proposed project as defined under CEQA Guidelines Section 15126.2(d). A project is defined as growth inducing when it directly or indirectly:

1. Fosters population growth
2. Includes the construction of additional housing in the surrounding environment
3. Removes obstacles to population growth
4. Taxes existing community service facilities, requiring construction of new facilities that could cause significant environmental effects
5. Encourages or facilitates other activities that could significantly affect the environments, either individually or cumulatively

It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment.

The project proposes development of 120 multifamily residential dwelling units on 7.6 acres for an approximate total density of 15.8 dwelling units per acre. The project would include a total of 260 new parking spaces in addition to 37 existing spaces on site, approximately 92,645 square feet of common recreation area, and an average of 146 square feet of private open per unit. Amenities on site would include tot lots and recreational areas, a dog park, a community garden, and a landscaped pedestrian path along the N Las Posas Road frontage. The proposed project also includes landscaping, bio-retention areas, and circulation improvements. The project would include two points of entry, the first entry point is located off N Las Posas Road and the second entry point is located off W Mission Road.

The project proposes a General Plan Amendment, Rezone, Specific Plan, Tentative Map, and Site Development Plan. The General Plan Amendment and Rezone would change the General Plan designation and Zoning from Commercial (C) to Specific Plan Area (SPA). The Specific Plan serves as both a policy document and a regulatory document for the systematic implementation of the policies and goals of the City of San Marcos General Plan (General Plan) (the Specific Plan is included as Appendix M to this EIR). The Tentative Map presents specific lot configurations for the site. The Site Development Plan will configure the site for townhome dwelling units, street configuration, infrastructure, recreational open space, and private open space.

As described in Section 3.12, Population and Housing, it is anticipated that the proposed residential development at the project site could generate a population increase of up to approximately 370 people. Although the proposed project would accommodate some planned growth within the City of San Marcos (City) and not all potential future residents of the project are expected to be new to the City, the project could still result in unplanned growth for the City because residential land uses for the project site were not accounted for in the City's General Plan.

As described in Section 3.12 of this EIR, the City is forecast to grow from 96,302 persons in 2020 to 109,095 persons in 2035, which is a population increase of 12,793 (SANDAG 2013). Additionally, San Diego Association of Governments allocated 3,116 housing units to the San Marcos area for the 2021–2029 Housing Element Cycle (SANDAG 2020). Approval of the proposed project to residential land use could help the City accommodate this substantial population growth and its need for housing. The proposed project would be subject to compliance with the City's General Plan Housing Element goals and policies, compliance with housing-related ordinances in the San Marcos Municipal Code, and applicable development fees as outlined in Section 3.12 of this EIR. Compliance with these policies, ordinances, and fee provisions would ensure any growth at the site is adequately planned for in terms of ensuring the provision of community service facilities, including utilities, public services, recreation, emergency access, and roadways.

There is no hardline number or percentage available to determine whether or not the estimated introduction of approximately 370 people would be considered a substantial increase in population. However, the San Diego Association of Governments 2050 Regional Growth Forecast is intended to be used as a starting point for regional planning, as opposed to a prescribed growth pattern. While the City has determined that there are adequate sites available with appropriate designations/zoning to accommodate the remaining Regional Housing Needs Assessment allocation for the current General Plan Housing Element planning period (2013 to 2021), and has tentatively determined the same for the 2021–2029 Draft Housing Element Update (City of San Marcos 2021), the City has the discretion to adjust allocated housing units/sites as necessary to balance proposed plans for residential development with approved/constructed residential development. It is likely the site would act to accommodate some of the planned population growth in the City.

Potential indirect growth inducing impacts are unlikely to result from the proposed project. No extension of infrastructure is anticipated to be needed for the proposed project, as the site is located in an urbanized, infill area. In addition, the proposed project would be required to evaluate project-specific requirements, which would ensure the development does not overtax existing infrastructure or community service facilities, consistent with the guidelines, standards, design features, and mitigation measures provided in this EIR.

Therefore, while the proposed project would induce growth beyond current estimates and forecasts, it would not remove obstacles to further growth, expand infrastructure, or overtax existing community facilities. The proposed project would therefore not be considered substantially growth inducing.

6.3 Significant Irreversible Environmental Changes

CEQA Guidelines Section 15126.2(c) requires that an EIR identify any significant irreversible environmental changes associated with the proposed project. Such changes include, for example, the intensification of land use or irreversible damage from environmental accidents associated with the proposed project.

The project proposes development of 120 multifamily residential dwelling units on 7.6 acres for an approximate total density of 15.8 dwelling units per acre. The project would include a total of 260 new parking spaces in addition to 37 existing spaces on site, approximately 92,645 square feet of common recreation area, and an average of 146 square feet of private open per unit. The project proposes a General Plan Amendment, Rezone, Specific Plan, Tentative Map, and Site Development Plan. The General Plan Amendment and Rezone would change the General Plan designation and Zoning from Commercial (C) to Specific Plan Area (SPA).

The proposed project's change in land use would not be an intensification of land use over the existing commercial designation. As analyzed in Chapter 4, Alternatives, of this EIR, commercial development under the existing land use and zoning designation would result in additional and more severe environmental impacts in comparison to the development under the proposed project designations. Nevertheless, as analyzed throughout Chapter 3 of this EIR, the proposed project may result in significant impacts to biological resources, cultural resources, tribal cultural resources, and traffic (see Tables 1-1 and 1-2 in Chapter 1, Executive Summary, of this EIR). All potential impacts as a result of the proposed project would be mitigated to a less-than-significant level with the exception of impacts related to traffic. Such impacts would be considered irreversible.

Further, construction and/or operation of the proposed project would require the use of resources that include, but are not limited to, soils, gravel, concrete, and asphalt, lumber and other related forest products, petrochemical construction materials, steel, copper, and other metals, water, fuels, and energy. As such, the proposed project would result in the short-term and long-term use of fossil fuels and other nonrenewable resources.

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8 List of Preparers

8.1 City of San Marcos

Norm Pedersen, Associate Planner
Saima Qureshy, Principal Planner
Joe Farace, Planning Manager

8.2 Dudek

Brian Grover, AICP, Principal
Vanessa Scheidel, Environmental Planner
Erin Lucett, Environmental Analyst
Adam Poll, Air Quality Specialist
Mark Storm, Senior Acoustician Technical Specialist
Connor Burke, Environmental Technical Analyst
Michael Huff, Urban Forestry Specialist
Matthew DeCarlo, Cultural Archaeologist
Callie Amoaku, Biologist
Daniela Yurovsky, Technical Editor
Hannah Wertheimer-Roberts, Technical Editor
Rachel Dobrolenski, Publications Specialist
Morgan Maddox-Ramsey, Publications Specialist

8.3 Technical Preparers

Kelby Styler, LGC Geotechnical, Inc. – Geotechnical Evaluation
Shipa Sunil, Hillmann Consulting, LLC. – Phase I Environmental Site Assessment
Alisa Vialpando, Hunsaker & Associates - Preliminary Drainage Study
Alisa Vialpando, Hunsaker & Associates – SWQMP
Jonathan Snachez, CR Associates - Local Transportation Analysis
Jonathan Snachez, CR Associates - Vehicle Miles Traveled Analysis Technical Memorandum
Elizabeth Lopez, Vallecitos Water District – Water and Sewer Study

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Appendix A

Scoping Letter, NOP and NOP Comments

NOTICE OF PREPARATION OF AN ENVIRONMENTAL IMPACT REPORT (EIR) AND SCOPING MEETING/PUBLIC WORKSHOP

Project Title:	Gran Vista Specific Plan
Project Number:	Specific Plan (SP21-0003), General Plan Amendment (GP21-0007), Rezone (R21-0003), Multi-Family Site Development Plan (MFSDP21-0001), and Tentative Subdivision Map (TSM21-0003).
Applicant:	Meritage Homes- MLC Holdings, Inc.
NOP Comment Period:	April 20, 2022 to May 20, 2022
Meeting Date/Time:	May 12, 2022 at 6 P.M.

PURPOSE FOR NOTICE: This Notice of Preparation (NOP) is being issued by the City of San Marcos for the proposed Gran Vista condominium project located in the City of San Marcos. The City is the lead agency for the project and will prepare an Environmental Impact Report (EIR) in accordance with the requirements of the California Environmental Quality Act (CEQA) and the CEQA implementation guidelines. This NOP is being circulated pursuant to California Resources Code Section 211153(a) and CEQA Guidelines Section 15082.

The City is requesting written feedback from the public, interested organizations, and responsible trustee agencies about the scope and content of the environmental information that will be addressed in the EIR.

Project Location: West of the intersection of Las Posas Road and Palm Road. Assessor's Parcel Number: 219-121-15-00 & 219-121-16-00.

Project Description: Request for a Specific Plan, Multi-Family Site Development Plan, and Tentative Subdivision Map for a 120-unit residential condominium development on 7.6 acres. Project includes a General Plan Amendment and Rezone to change the land use and zone of the property from Commercial (C) to Specific Plan Area (SPA). The project site is bounded by Las Posas Road and Mission Road to the east and south, respectively, and an existing CVS store is located to the south and a single-family residential subdivision to the west. Nearby land uses in the vicinity of the project site include industrial and commercial uses to the south and west, the Santa Fe Hills residential community to the north, and single-family residential and Palomar College to the east.

The project consists of 120 townhomes consisting of 2 and 3-bedroom units. The project includes approximately 148,297 square feet of recreation area and landscaping on-site and approximately 144 square feet of private open space per unit. Amenities on site include tot lots and exercise equipment, bbq and seating areas, dog park, and community garden. The project would use the existing driveway entries on Las Posas Road and Mission Road that currently provide access to the adjacent CVS store.

Potential Environmental Effects: Pursuant to CEQA Section 15060(d) of the CEQA Guidelines, the project may result in significant impacts related to: Aesthetics, Air Quality, Biological Resources, Cultural Resources, Geology and Soils, Greenhouse Gas Emissions, Hazards and Hazardous Materials, Hydrology and Water Quality, Land Use and Planning, Noise, Population and Housing, Public Services, Recreation, Transportation, Tribal Cultural Resources, and Utilities and Service Systems. An EIR will be prepared to evaluate the proposed project's potential impacts on the environment, outline mitigation measures, and analyze potential project alternatives. Responses received on this NOP may modify or add to the preliminary assessment of potential issues addressed in the EIR.

Scoping Meeting/Public Workshop: A joint Scoping Meeting/Public Workshop for the project will be held on **May 12, 2022 at 6 PM** at the San Marcos City Hall in the Valley of Discovery Room (next to City Council Chambers) located at 1 Civic Center Drive, San Marcos, CA 92069. The intent of the Scoping Meeting/Public Workshop is to obtain information and solicit comments from the public about the issues and content of the EIR. During the meeting, the project applicant will provide an overview of the project, will explain the environmental review process, and will be available to hear your comments and questions. Attendance of the scoping meeting is not required in order to submit written comments.

NOP Comments: All written comments must be submitted within 30 days of this notice and received no later than close of business on **May 20, 2022**. Written comments can be submitted via letter or email to the following address, and should include your name and contact information or the name of a contact person in your organization or agency, if applicable.

Norm Pedersen, Associate Planner
City of San Marcos Planning Division
1 Civic Center Drive
San Marcos, CA 92069
Email: npedersen@san-marcos.net

For more information regarding the proposed project, please visit:
https://www.sanmarcos.net/departments/development-services/planning/environmental-review-sustainability/environmental-documents

or contact Norm Pedersen, Associate Planner, at (760) 744-1050 x3236 or npedersen@san-marcos.net.

PROJECT LOCATION MAP



Gran Vista Specific Plan Project
Public Comments to Notice of Preparation Matrix

#	Comment Letter Cite	Comments / Concerns	Considered in EIR or Planning Documents	Applicable EIR Section	Date Dated or Received
Federal Agencies					
1	NAHC	AB52, SB 18, direct or indirect impacts to cultural resources, appropriate and adequate mitigation	Yes	Cultural Resources/Tribal Cultural Resources	April 26, 2022
State Agencies					
1	CALTRANS	VMT/TIS, means of alternative transportation, GHG emission reduction, compatibility with surround land uses/development	Yes	Traffic, Land Use	May 18, 2022
Organizations					
1	North County Transit District	No improvements requested, construction impacts to transit facilities, pedestrian and bicycle friendly development design,	Yes	Traffic	May 3, 2022
2	San Diego County Archaeological Society	Requests copy of Cultural report and notification of DEIR availability	No	N/A	May 16, 2022
Individuals					
1	Tracy Mousner	Traffic, adequate water supply, cumulative water supply, general concern for utility capacity.	Yes	Traffic, Public Utilities	April 29, 2022
2	Ellen Kaplan	Traffic, request for additional opportunity for public engagement	Yes	Traffic	April 30, 2022
3	Dale Armitage	Traffic, impacts to schools, more opportunity for public comment, adequate water supply, cumulative water supply, rezoning,	Yes	Traffic, Public Services, Public Utilities, Land Use	May 7, 2022
4	Andrew Post	Traffic volumes, noise, air pollution from traffic, parking requirements, cumulative impacts to biological resources, cumulative impacts to recreational resources, rezoning, need for commercial development	Yes	Traffic, Noise, Air Quality, Recreation, Land use, Biological Resources,	May 16, 2022
5	Jillcene Bachman	Traffic, impacts to schools, impacts to police,	Yes	Traffic, Public Services	May 18, 2022
6	Tom Byrne	Traffic	Yes	Traffic	May 22,2022
7	Marie Marcinko	rezoning, need for commercial development, cumulative residential projects, traffic, noise, pedestrian safety,	Yes	Land use, traffic, noise	May 23, 2022

Erin Lucett

From: Pedersen, Norman <NPedersen@san-marcos.net>
Sent: Monday, May 23, 2022 11:11 AM
To: Jason Greminger (jason.greminger@cciconnect.com); Vanessa Scheidel
Subject: Fwd: The 120 Condos Proposed at Las Posas and Mission, against

Follow Up Flag: Follow up
Flag Status: Flagged

These comments were received after the NOP closing date

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From: Tom Byrne <tom.j.byrne@gmail.com>
Sent: Sunday, May 22, 2022 10:27 AM
To: Jones, Rebecca <RJones@san-marcos.net>; Musgrove, Ed <EMusgrove@san-marcos.net>; Pedersen, Norman <NPedersen@san-marcos.net>
Subject: The 120 Condos Proposed at Las Posas and Mission, against

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Good Morning,

I am against this proposal.

With the 274-Homes going in already which were against public approval . We do not yet know the traffic congestion as it worsens for morning and evening commutes. Its already a big traffic jam as one approaches Ranch Santa Fe on M-F afternoons.

The morning there are already "ghost crosswalk" delays at the multiple lights and traffic alread. This is without all the vehicles and commutes of the 274 new homes.

It is not a good time to approve another 120 Condos , without seeing how traffic will actually be once these 274 new homes get populated.

Please listen to the community, instead of just adding ever more dwellings and worsening the life of current residents. I would like to be added to all future communication on this proposal. Thank You.

Tom Byrne
1388 Corte Bagalso
San Marcos, CA 92069

Erin Lucett

From: Pedersen, Norman <NPedersen@san-marcos.net>
Sent: Monday, May 23, 2022 11:10 AM
To: Jason Greminger (jason.greminger@cciconnect.com); Vanessa Scheidel
Subject: Fwd: Grand Vista-SP21-0003,GPA21-0007,R21-0003,MFS21-0001,TSM21-0003

Follow Up Flag: Follow up
Flag Status: Flagged

These comments were received after the NOP closing date

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From: marie marcinko <hanahau@yahoo.com>
Sent: Monday, May 23, 2022 12:55 AM
To: Pedersen, Norman <NPedersen@san-marcos.net>
Subject: Grand Vista-SP21-0003,GPA21-0007,R21-0003,MFS21-0001,TSM21-0003

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Comments on project next to CVS in San Marcos
To: Norm Pedersen

Comments regarding the proposed project: Grand Vista-SP21-0003,GPA21-0007,R21-0003,MFS21-0001,TSM21-0003

I am opposed to this project located on the north west corner of Las Posas and Mission with the current plan in place. This site was originally planned for retail and now has been "rezoned" for residential. I don't think this project in taking into consideration the residents that already live in the area (Santa Fe Hills). There are roughly 300 homes being built behind Santa Fe Hills which would add to the 120 townhomes planned in this community. Additionally, another 450 units are planned for the area across from the shopping center on Las Posas. The amount of traffic (2 cars per unit/home = ~1600-1800 additional automobiles) would be extremely difficult to handle on Las Posas and the surrounding roads. It can take an additional 15-20 minutes just to get through Santa Fe/San Marcos Blvd when the high school is in session. Second, there is no store/retail for the community to walk/bike to safely. Walking to the Grand Plaza shopping center (further down Las Posas) is extremely dangerous with several streets to cross and the noise level is high. San Marcos is consistently pushing environmentally friendly ways to commute yet there are no solutions or new ideas. Homes/condos are being build at an alarming rate in San Marcos with no way of commuting except with the use of a car. We need to have some type of retail/store/coffee shop within this site to enhance and create a gathering spot for our community. Yes, I understand housing is an issue but what about what the current residents want and need. The area was planned for retail so why isn't there a compromise...have both.

Thank you,
Marie Marcinko
1254 Via Caliente
San Marcos
760 845-8870

Erin Lucett

From: Pedersen, Norman <NPedersen@san-marcos.net>
Sent: Thursday, May 19, 2022 4:06 PM
To: Jason Greminger (jason.greminger@cciconnect.com); Vanessa Scheidel
Subject: Fwd: No new condos on Las Posas at Mission

Follow Up Flag: Follow up
Flag Status: Flagged

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From: jillcene@aol.com <jillcene@aol.com>
Sent: Wednesday, May 18, 2022 1:51:37 PM
To: Jones, Rebecca <RJones@san-marcos.net>; Pedersen, Norman <NPedersen@san-marcos.net>; Jillcene Bachman <jillcene@aol.com>; Musgrove, Ed <EMusgrove@san-marcos.net>
Subject: No new condos on Las Posas at Mission

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hello Ms. Mayor and City Planners: I am writing to ask that you do not approve the proposed development of over 100 condominiums on Las Posas near Mission next to the CVS store. Traffic is my main concern as it already backs up on Las Posas, and it's not just occurring during workday commuting hours. Secondly is that elementary school near Borden and Las Posas cannot accommodate more children. Finally, our Sheriff Department is stretched thin and adding high density housing which will include low income residents (because a significant percentage must be affordable housing) is an invitation to more trouble that Law Enforcement won't be able to handle. Crime will increase in the Santa Fe Hills neighborhood.

So, in summary, we current residents in Santa Fe Hills do not want our City Leaders to increase traffic, crime, and school overcrowding.

Thank you for taking my feedback seriously. Jillcene Bachman, resident home owner in San Marcos. You may contact me to discuss my thoughts on developing San Marcos at (858)761-5981.

Erin Lucett

From: Pedersen, Norman <NPedersen@san-marcos.net>
Sent: Monday, May 16, 2022 9:54 PM
To: Jason Greminger (jason.greminger@cciconnect.com); Vanessa Scheidel
Subject: Fwd: Gran Vista Specific Plan, Meritage Homes Proposed Location

Follow Up Flag: Follow up
Flag Status: Flagged

Get Outlook for iOS

From: Andrew Post <mrandrewpost@gmail.com>
Sent: Monday, May 16, 2022 2:32 PM
To: Pedersen, Norman <NPedersen@san-marcos.net>
Subject: Gran Vista Specific Plan, Meritage Homes Proposed Location

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Dear Norm Pedersen,

I am writing to officially express my concern and opposition towards the proposed Meritage homes development at Las Posas and Palm Road.
I live in Santa Fe Hills and our neighborhood already experiences high volumes of traffic, along with the accompanying noise, automotive pollution, and additional parking requirements. There is, as I am sure you are aware, currently an expansion of homes being constructed at the end of Las Posas, which will add many more cars to our busy local roads. Very few people (none that I've met) that actually live here want that development; it has erased natural habitat for animals, vegetation, and recreational areas in which humans previously enjoyed the above-mentioned nature and whose presence had a lot to do with many people choosing to move here. The last thing the people of this neighborhood want is even more development at the proposed Meritage home site, which would further bookend our already impacted neighborhood with even more traffic, noise, and pollution. At some point the traffic becomes untenable, and gainfully employed citizens will move to less congested areas to avoid commuting traffic.
None of this has even touched on the proposed rezoning from commercial to residential, as is proposed for the Las Posas and Palm Rd site. Commercial is what is needed in the area, to service the already existing residents. What the area does not need, for a healthy developmental balance and quality of life, is more residential forced into an area previously designated for commercial use.
There is already detrimental development occurring in this area. I speak for my household, and many others I've spoken with in this community when I say that this proposed Meritage homes development is Not what the people in the affected area want. Choosing to allow this proposed development does not represent sound developmental policy, but rather a further betrayal of your constituents wishes and a substantial reduction to their quality of life. Long term impacts of such bad decisions may likely include an exodus of residents who can afford to leave, causing great damage to this city.

Very Sincerely,

Andrew Post

From: Dale Armiyage <armitagedl@yahoo.com>
Sent: Saturday, May 7, 2022 2:50 PM
To: Pedersen, Norman; Musgrove, Ed; Jones, Rebecca
Subject: Objection to high-density condo plan Gran Vista at Las Posas and Mission Roads

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Dear Mr. Pedersen, Mr, Musgrove and Ms. Jones: I have sent a letter to all of you, but write this to provide some added comment. I object to the Gran Vista proposal.

1- The Santa Fe Hills development has over 1500 homes, with more approved. They all rely on Las Posas Road to get to the 78 freeway and most of the rest of San Marcos. The condo plan would clog traffic further.

The Las Posas and Mission Road intersection is already a mess during weekday rush hour periods for work and school. Adding up to 264 more cars right at that problem intersection means longer back-ups, longer idling, more exhaust, and likely resentment from Santa Fe Hills voters.

2- How schools will be affected by the proposed residents of 330 new bedrooms is not something I have had time to examine, nor my business, since our child is grown. But the parents of Santa Fe Hills ought to be afforded time to consult with the Principals and Board members of their childrens' schools, so they can make informed comments on this issue.

Yet City Planning has set the only Public Workshop on this condo plan for May 12th, and had set the comment period from April 20th to May 20th - leaving working parents just eight days to try to speak to Principals and School Boards before the City cuts off comments. Whether that would be found legal if challenged is beside the point, right now. It does not pass a common-sense test for honest hearing of public comments.

Why not extend the comment period to June 20th to allow intelligent gathering of facts by Santa Fe Hills parents?

3- What about water - not just this one new development - but do we not have responsibility in our region to be water stewards along with the rest of South California? We appear to be in a regional megadrought, both in California and the Colorado River Basin that supplies a large portion of our water.

Historical evidence of droughts, using a tree-ring measurement data recently published, have demonstrated natural cycles of drought visited here in the past. Some have lasted lasting as long as 30 years. We are 22 years into the current megadrought. When will we return to the wet years of the 1900's ? We truly do not know when - or even if we will. We need to face facts today - not just the Vallecitos Water District - but collectively in South California.

Piecemeal approval of new developments seems akin to piecemeal spending by legislators: "A billion here, a billion there and pretty soon you are talking about real money."

Restating this criticism: " A new development here, a new development there, and pretty soon you will have to compel existing water customers (not just new ones) to pay for a second desalination plant at the coast."

Voters might determine they want to do that for the sake of temporary construction jobs - or they might not. That expensive decision ought not to be forced on them by piecemeal development decisions.

4- The parcel at Las Posas and Mission is zoned for commercial use in the general plan. There are still good reasons to retain that designation. Santa Fe Hills citizens could use an economical food market like at least an Aldi or a Walmart Neighborhood Market for groceries. Palomar College has large student body and significant sized staff who would likely welcome breakfast and lunch sources. There not yet any close gathering spots for neighbors to talk over coffee or other fare. Perhaps the general plan got the zoning right.

Thank you for the opportunity to comment. Dale Armitage, 438 Palm Road, San Marcos

From: Ellen Kaplan <elbopinch@gmail.com>
Sent: Saturday, April 30, 2022 11:51 AM
To: Pedersen, Norman
Subject: Opposition to multi dwelling project behind CVS

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Mr. Petersen,

Please let me know what I need to do to express concern and opposition over the proposed planning to build a large complex behind the CVS on Mission at Las Posas Road.

I am a homeowner and live less than a mile from the proposed site. I do not feel this neighborhood can support this project. Our roads are congested and our schools are already overcrowded.

Please confirm if I need to complete anything more formal to express concern and opposition to these plans.

I'd also like to be informed of future meetings or community forums on the proposed project.

Thank you,
Ellen Kaplan
745 Avenida Codorniz
San Marcos, CA 920)9
619.309.8747

STATE OF CALIFORNIA Gavin Newsom, Governor

NATIVE AMERICAN HERITAGE COMMISSION

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Miwok/Nisenan

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov
NAHC.ca.gov

April 26, 2022

Norm Pedersen
City of San Marcos
1 Civic Center Drive
San Marcos, CA 92069

Re: 2022040440, Gran Vista Specific Plan Project, San Diego County

Dear Mr. Pedersen:

The Native American Heritage Commission (NAHC) has received the Notice of Preparation (NOP), Draft Environmental Impact Report (DEIR) or Early Consultation for the project referenced above. The California Environmental Quality Act (CEQA) (Pub. Resources Code §21000 et seq.), specifically Public Resources Code §21084.1, states that a project that may cause a substantial adverse change in the significance of a historical resource, is a project that may have a significant effect on the environment. (Pub. Resources Code § 21084.1; Cal. Code Regs., tit.14, §15064.5 (b) (CEQA Guidelines §15064.5 (b)). If there is substantial evidence, in light of the whole record before a lead agency, that a project may have a significant effect on the environment, an Environmental Impact Report (EIR) shall be prepared. (Pub. Resources Code §21080 (d); Cal. Code Regs., tit. 14, § 5064 subd.(a)(1) (CEQA Guidelines §15064 (a)(1)). In order to determine whether a project will cause a substantial adverse change in the significance of a historical resource, a lead agency will need to determine whether there are historical resources within the area of potential effect (APE).

CEQA was amended significantly in 2014. Assembly Bill 52 (Gatto, Chapter 532, Statutes of 2014) (AB 52) amended CEQA to create a separate category of cultural resources, "tribal cultural resources" (Pub. Resources Code §21074) and provides that a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment. (Pub. Resources Code §21084.2). Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource. (Pub. Resources Code §21084.3 (a)). **AB 52 applies to any project for which a notice of preparation, a notice of negative declaration, or a mitigated negative declaration is filed on or after July 1, 2015.** If your project involves the adoption of or amendment to a general plan or a specific plan, or the designation or proposed designation of open space, on or after March 1, 2005, it may also be subject to Senate Bill 18 (Burton, Chapter 905, Statutes of 2004) (SB 18). **Both SB 18 and AB 52 have tribal consultation requirements.** If your project is also subject to the federal National Environmental Policy Act (42 U.S.C. § 4321 et seq.) (NEPA), the tribal consultation requirements of Section 106 of the National Historic Preservation Act of 1966 (154 U.S.C. 300101, 36 C.F.R. §800 et seq.) may also apply.

The NAHC recommends consultation with California Native American tribes that are traditionally and culturally affiliated with the geographic area of your proposed project as early as possible in order to avoid inadvertent discoveries of Native American human remains and best protect tribal cultural resources. Below is a brief summary of portions of AB 52 and SB 18 as well as the NAHC's recommendations for conducting cultural resources assessments.

Consult your legal counsel about compliance with AB 52 and SB 18 as well as compliance with any other applicable laws.

AB 52

AB 52 has added to CEQA the additional requirements listed below, along with many other requirements:

1. Fourteen Day Period to Provide Notice of Completion of an Application/Decision to Undertake a Project: Within fourteen (14) days of determining that an application for a project is complete or of a decision by a public agency to undertake a project, a lead agency shall provide formal notification to a designated contact of, or tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, to be accomplished by at least one written notice that includes:

- **a.** A brief description of the project.
- **b.** The lead agency contact information.
- **c.** Notification that the California Native American tribe has 30 days to request consultation. (Pub. Resources Code §21080.3.1 (d)).
- **d.** A "California Native American tribe" is defined as a Native American tribe located in California that is on the contact list maintained by the NAHC for the purposes of Chapter 905 of Statutes of 2004 (SB 18). (Pub. Resources Code §21073).

2. Begin Consultation Within 30 Days of Receiving a Tribe's Request for Consultation and Before Releasing a Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report: A lead agency shall begin the consultation process within 30 days of receiving a request for consultation from a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project. (Pub. Resources Code §21080.3.1, subds. (d) and (e)) and prior to the release of a negative declaration, mitigated negative declaration or Environmental Impact Report. (Pub. Resources Code §21080.3.1(b)).

- **a.** For purposes of AB 52, "consultation shall have the same meaning as provided in Gov. Code §65352.4 (SB 18). (Pub. Resources Code §21080.3.1 (b)).

3. Mandatory Topics of Consultation If Requested by a Tribe: The following topics of consultation, if a tribe requests to discuss them, are mandatory topics of consultation:

- **a.** Alternatives to the project.
- **b.** Recommended mitigation measures.
- **c.** Significant effects. (Pub. Resources Code §21080.3.2 (a)).

4. Discretionary Topics of Consultation: The following topics are discretionary topics of consultation:

- **a.** Type of environmental review necessary.
- **b.** Significance of the tribal cultural resources.
- **c.** Significance of the project's impacts on tribal cultural resources.
- **d.** If necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend to the lead agency. (Pub. Resources Code §21080.3.2 (a)).

5. Confidentiality of Information Submitted by a Tribe During the Environmental Review Process: With some exceptions, any information, including but not limited to, the location, description, and use of tribal cultural resources submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public, consistent with Government Code §6254 (r) and §6254.10. Any information submitted by a California Native American tribe during the consultation or environmental review process shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public. (Pub. Resources Code §21082.3 (c)(1)).

6. Discussion of Impacts to Tribal Cultural Resources in the Environmental Document: If a project may have a significant impact on a tribal cultural resource, the lead agency's environmental document shall discuss both of the following:

- **a.** Whether the proposed project has a significant impact on an identified tribal cultural resource.
- **b.** Whether feasible alternatives or mitigation measures, including those measures that may be agreed to pursuant to Public Resources Code §21082.3, subdivision (a), avoid or substantially lessen the impact on the identified tribal cultural resource. (Pub. Resources Code §21082.3 (b)).

7. Conclusion of Consultation: Consultation with a tribe shall be considered concluded when either of the following occurs:

a. The parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or

b. A party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached. (Pub. Resources Code §21080.3.2 (b)).

8. Recommending Mitigation Measures Agreed Upon in Consultation in the Environmental Document: Any mitigation measures agreed upon in the consultation conducted pursuant to Public Resources Code §21080.3.2 shall be recommended for inclusion in the environmental document and in an adopted mitigation monitoring and reporting program, if determined to avoid or lessen the impact pursuant to Public Resources Code §21082.3, subdivision (b), paragraph 2, and shall be fully enforceable. (Pub. Resources Code §21082.3 (a)).

9. Required Consideration of Feasible Mitigation: If mitigation measures recommended by the staff of the lead agency as a result of the consultation process are not included in the environmental document or if there are no agreed upon mitigation measures at the conclusion of consultation, or if consultation does not occur, and if substantial evidence demonstrates that a project will cause a significant effect to a tribal cultural resource, the lead agency shall consider feasible mitigation pursuant to Public Resources Code §21084.3 (b). (Pub. Resources Code §21082.3 (e)).

10. Examples of Mitigation Measures That, If Feasible, May Be Considered to Avoid or Minimize Significant Adverse Impacts to Tribal Cultural Resources:

a. Avoidance and preservation of the resources in place, including, but not limited to:

i. Planning and construction to avoid the resources and protect the cultural and natural context.

ii. Planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.

b. Treating the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:

i. Protecting the cultural character and integrity of the resource.

ii. Protecting the traditional use of the resource.

iii. Protecting the confidentiality of the resource.

c. Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.

d. Protecting the resource. (Pub. Resource Code §21084.3 (b)).

e. Please note that a federally recognized California Native American tribe or a non-federally recognized California Native American tribe that is on the contact list maintained by the NAHC to protect a California prehistoric, archaeological, cultural, spiritual, or ceremonial place may acquire and hold conservation easements if the conservation easement is voluntarily conveyed. (Civ. Code §815.3 (c)).

f. Please note that it is the policy of the state that Native American remains and associated grave artifacts shall be repatriated. (Pub. Resources Code §5097.991).

11. Prerequisites for Certifying an Environmental Impact Report or Adopting a Mitigated Negative Declaration or Negative Declaration with a Significant Impact on an Identified Tribal Cultural Resource: An Environmental Impact Report may not be certified, nor may a mitigated negative declaration or a negative declaration be adopted unless one of the following occurs:

a. The consultation process between the tribes and the lead agency has occurred as provided in Public Resources Code §21080.3.1 and §21080.3.2 and concluded pursuant to Public Resources Code §21080.3.2.

b. The tribe that requested consultation failed to provide comments to the lead agency or otherwise failed to engage in the consultation process.

c. The lead agency provided notice of the project to the tribe in compliance with Public Resources Code §21080.3.1 (d) and the tribe failed to request consultation within 30 days. (Pub. Resources Code §21082.3 (d)).

The NAHC's PowerPoint presentation titled, "Tribal Consultation Under AB 52: Requirements and Best Practices" may be found online at: http://nahc.ca.gov/wp-content/uploads/2015/10/AB52TribalConsultation_CalEPAPDF.pdf

SB 18

SB 18 applies to local governments and requires local governments to contact, provide notice to, refer plans to, and consult with tribes prior to the adoption or amendment of a general plan or a specific plan, or the designation of open space. (Gov. Code §65352.3). Local governments should consult the Governor's Office of Planning and Research's "Tribal Consultation Guidelines," which can be found online at: https://www.opr.ca.gov/docs/09_14_05_Updated_Guidelines_922.pdf.

Some of SB 18's provisions include:

1. Tribal Consultation: If a local government considers a proposal to adopt or amend a general plan or a specific plan, or to designate open space it is required to contact the appropriate tribes identified by the NAHC by requesting a "Tribal Consultation List." If a tribe, once contacted, requests consultation the local government must consult with the tribe on the plan proposal. **A tribe has 90 days from the date of receipt of notification to request consultation unless a shorter timeframe has been agreed to by the tribe.** (Gov. Code §65352.3 (a)(2)).

2. No Statutory Time Limit on SB 18 Tribal Consultation. There is no statutory time limit on SB 18 tribal consultation.

3. Confidentiality: Consistent with the guidelines developed and adopted by the Office of Planning and Research pursuant to Gov. Code §65040.2, the city or county shall protect the confidentiality of the information concerning the specific identity, location, character, and use of places, features and objects described in Public Resources Code §5097.9 and §5097.993 that are within the city's or county's jurisdiction. (Gov. Code §65352.3 (b)).

4. Conclusion of SB 18 Tribal Consultation: Consultation should be concluded at the point in which:

- **a.** The parties to the consultation come to a mutual agreement concerning the appropriate measures for preservation or mitigation; or
- **b.** Either the local government or the tribe, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached concerning the appropriate measures of preservation or mitigation. (Tribal Consultation Guidelines, Governor's Office of Planning and Research (2005) at p. 18).

Agencies should be aware that neither AB 52 nor SB 18 precludes agencies from initiating tribal consultation with tribes that are traditionally and culturally affiliated with their jurisdictions before the timeframes provided in AB 52 and SB 18. For that reason, we urge you to continue to request Native American Tribal Contact Lists and "Sacred Lands File" searches from the NAHC. The request forms can be found online at: http://nahc.ca.gov/resources/forms/.

NAHC Recommendations for Cultural Resources Assessments

To adequately assess the existence and significance of tribal cultural resources and plan for avoidance, preservation in place, or barring both, mitigation of project-related impacts to tribal cultural resources, the NAHC recommends the following actions:

1. Contact the appropriate regional California Historical Research Information System (CHRIS) Center (http://ohp.parks.ca.gov/?page_id=1068) for an archaeological records search. The records search will determine:

- **a.** If part or all of the APE has been previously surveyed for cultural resources.
- **b.** If any known cultural resources have already been recorded on or adjacent to the APE.
- **c.** If the probability is low, moderate, or high that cultural resources are located in the APE.
- **d.** If a survey is required to determine whether previously unrecorded cultural resources are present.

2. If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.

- **a.** The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum and not be made available for public disclosure.
- **b.** The final written report should be submitted within 3 months after work has been completed to the appropriate regional CHRIS center.

3. Contact the NAHC for:
   a. A Sacred Lands File search. Remember that tribes do not always record their sacred sites in the Sacred Lands File, nor are they required to do so. A Sacred Lands File search is not a substitute for consultation with tribes that are traditionally and culturally affiliated with the geographic area of the project's APE.
   b. A Native American Tribal Consultation List of appropriate tribes for consultation concerning the project site and to assist in planning for avoidance, preservation in place, or, failing both, mitigation measures.

4. Remember that the lack of surface evidence of archaeological resources (including tribal cultural resources) does not preclude their subsurface existence.
   a. Lead agencies should include in their mitigation and monitoring reporting program plan provisions for the identification and evaluation of inadvertently discovered archaeological resources per Cal. Code Regs., tit. 14, §15064.5(f) (CEQA Guidelines §15064.5(f)). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American with knowledge of cultural resources should monitor all ground-disturbing activities.
   b. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the disposition of recovered cultural items that are not burial associated in consultation with culturally affiliated Native Americans.
   c. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the treatment and disposition of inadvertently discovered Native American human remains. Health and Safety Code §7050.5, Public Resources Code §5097.98, and Cal. Code Regs., tit. 14, §15064.5, subdivisions (d) and (e) (CEQA Guidelines §15064.5, subds. (d) and (e)) address the processes to be followed in the event of an inadvertent discovery of any Native American human remains and associated grave goods in a location other than a dedicated cemetery.

If you have any questions or need additional information, please contact me at my email address: Andrew.Green@nahc.ca.gov.

Sincerely,

Andrew Green

Andrew Green
Cultural Resources Analyst

cc: State Clearinghouse

NORTH COUNTY TRANSIT DISTRICT

810 Mission Avenue
Oceanside, CA 92054
(760) 966-6500
(760) 967-2001 (fax)
GoNCTD.com

May 3, 2022

Mr. Norm Pedersen
Planning Division
City of San Marcos
1 Civic Center Drive
San Marcos, CA 92069
Sent Via Electronic Mail: npedersen@san-marcos.net

Re: Gran Vista Specific Plan

Dear Mr. Pedersen:

Thank you for the opportunity to review the Gran Vista Specific Plan, based on the notice of preparation received on April 14, 2022. This project is located west of the intersection of Las Posas Road and Palm Road.

Upon review of the notice received by the North County Transit District (NCTD), NCTD has determined that there is a bus stop on the project site (Stop ID: 24848 "Mission Rd & Las Posas Rd"). This stop is already equipped with a shelter and trash can, so no further improvements are requested at this time.

Detours Required:

The construction may take place in the right-of-way of NCTD BREEZE Routes 304 and 305. NCTD requests that you or the developer's contractor provide notice two (2) weeks prior to starting work so that we may send a supervisor to meet with the construction crew to determine if the traffic control methods affect NCTD's stops. Notice should be provided via e-mail to detours@nctd.org.

TOD/Pedestrian:

NCTD highly recommends that the project site design allow for sufficient ADA paths for connecting pedestrians from within your future development to access nearby bus stops, sidewalks, and crosswalks. To make your development pedestrian and bike friendly, NCTD highly encourages you to provide shading from trees or structures, lighting, bike racks, and seating.

As described in NCTD's Bus Stop Development Handbook (2018), new developments should be designed to provide clear and direct access to bus stops (existing or new), and should emphasize pedestrian access, activity, and safety.

Gated or walled developments should provide openings through walls to minimize the walking distance and provide a more direct route to bus stops. Developments with parking lots should be designed with clear pedestrian walkways. Distinct walkway networks should be provided where bus stops and/or transit centers can be linked with building entrances. Entrances to buildings should face the street with pedestrian access located close to the nearest bus stop.

Below is a sample of Guidelines for design supported by NCTD, as found in our Bus Stop Development Handbook (2018).

Key Transit Supportive Design and Development Guidelines Supported by NCTD
Orient developments towards the street, with parking located to the rear of buildings rather than along the street frontage.
Building design and circulation plans should minimize the need for parking and increase the opportunity for transit and active transportation.
Bus stop and station elements should be incorporated into the design, in addition to other public spaces like walkways, bicycle paths, and street furniture.
Emphasize compatible and compact land uses that enable convenient access to and from bus routes, and that are designed to provide connections to a variety of uses (i.e. residential, employment, educational, and commercial).
Minimize walk distances through developments to bus stops, especially those with walls or gates, so that transit is accessible to most patrons or residents.

Supporting transit elements is essential for the City of San Marcos to meet its goals and objectives described in the City's Climate Action Plan. This aligns with Policy LU-2.1: "*Promote compact development patterns that reduce air pollution and automobile dependence and facilitate walking, bicycling, and transit use*" for the city goal to "*Promote development standards and land use patterns that encourage long-term environmental sustainability*" (pg. 1-8). Other supported goals include increasing transit ridership, reducing greenhouse gas emissions (GHG), and decrease Vehicle Miles Travelled (VMT) (pg. 1-8, 3-9).

Thank you again for allowing NCTD to review and comment on this project. Should you have any questions related to this review, feel free to contact me via e-mail at kpersons@nctd.org or by phone at (760) 966-6683.

Sincerely,



Katie Persons
Director of Service Planning

cc: Chris Orlando, Chief of Planning, Marketing & Communications, NCTD
Damon Blythe, Chief Operations Officer – Bus, NCTD
Mary Balderrama, Transit Planner, NCTD

From: Tracy Mousner <tmm1155@gmail.com>
Sent: Friday, April 29, 2022 2:03 PM
To: Pedersen, Norman
Subject: Las Posas Condo Project

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

To Whom it May Concern,

I was made aware of this proposed condo subdivision at Las Posas and Mission Rd., behind the CVS, and you are taking public comments. First of all, terrible idea to allow this to move forward, and as a San Marcos resident- we live in Santa Fe Hills, pay property taxes as owners. The traffic already is horrendous at that intersection, and the homes at the end of Las Posas are not even close to being completed. Imagine the traffic that new neighborhood will create. The stress to our utilities, and water bill increases, and not to mention the overcrowding of the middle school and high school. Interesting you only have to inform homes within 500 feet of the development, kinda sneaky isn't it? We would only know by paying attention and expressing our views, which is NO! No thank you! Please reply to this email confirming receipt.

Tracy Mousner
1291 Via Contessa
San Marcos, CA 92069

tmm1155@gmail.com
949-274-2023

Appendix B

Air Quality and Greenhouse Gas Emissions Technical Report

Air Quality and Greenhouse Gas Emissions Technical Report

Gran Vista Project

MARCH 2023

Prepared for:

CITY OF SAN MARCOS
1 Civic Center Drive
San Marcos, California 92069

Prepared by:

DUDEK
605 Third Street
Encinitas, California 92024
Contact: Adam Poll

Printed on 30% post-consumer recycled material.

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Acronyms and Abbreviations

Acronym/Abbreviation	Definition
µg/m^3	micrograms per cubic meter
AB	Assembly Bill
APN	Assessor's Parcel Number
BAU	Business as Usual
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emissions Estimator Model
CALGreen	California Green Building Standards Code
CalRecycle	California Department of Resources Recycling and Recovery
Caltrans	California Department of Transportation
CAP	Climate Action Plan
CARB	California Air Resources Board
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CH_4	methane
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
DPM	diesel particulate matter
EO	Executive Order
EPA	U.S. Environmental Protection Agency
g/L	grams per liter
GHG	greenhouse gas
GWP	global warming potential
HCFC	hydrochlorofluorocarbon
HFC	hydrofluorocarbon
IPCC	Intergovernmental Panel on Climate Change
LOS	level of service
mg/m^3	milligrams per cubic meter
MMT	million metric tons
MT	metric ton
N_2O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NHTSA	National Highway Traffic Safety Administration
NO	nitric oxide
NO_2	nitrogen dioxide
NO_x	oxides of nitrogen
O_2	oxygen (molecular)
O_3	ozone
PFC	perfluorocarbon

Acronym/Abbreviation	Definition
PM_{10}	coarse particulate matter
$PM_{2.5}$	fine particulate matter
ppb	parts per billion
ppm	parts per million
RAQS	Regional Air Quality Strategy
RPS	Renewables Portfolio Standard
RTP	Regional Transportation Plan
SANDAG	San Diego Association of Governments
SB	Senate Bill
SCS	Sustainable Communities Strategy
SDAB	San Diego Air Basin
SDAPCD	San Diego Air Pollution Control District
SF_6	sulfur hexafluoride
SIP	State Implementation Plan
SO_x	sulfur oxides
SR-	State Route
TAC	toxic air contaminant
VOC	volatile organic compound
ZEV	Zero Emissions Vehicle
ZNE	zero net energy

Executive Summary

The Gran Vista Project (project) involves construction of up to 120 townhomes on a 7.6-acre site situated at the City of San Marcos' (City's) southeastern limits. The project site is located within the San Diego Air Basin (SDAB) and is subject to the guidelines and regulations of the San Diego Air Pollution Control District (SDAPCD).

Air Quality

The air quality impact analysis provides an evaluation of the potential for significant adverse impacts to the ambient air quality due to construction and operational emissions resulting from the project. Construction of the project would result in a temporary addition of pollutants to the local airshed caused by soil disturbance, fugitive dust emissions, and combustion pollutants from on-site construction equipment, as well as from off-site trucks hauling construction materials. The analysis concludes that the daily and annual construction emissions would not exceed SDAPCD's significance thresholds for criteria pollutants and thus would result in a less than significant impact.

Operational emissions for the project were also found to be below SDAPCD's significance thresholds; therefore, impacts during project operation would be less than significant. Additionally, impacts to sensitive receptors during temporary construction activities and operation of the project were determined to be less than significant. Lastly, project operation would not generate odors at levels that would cause a nuisance; therefore, impacts would be less than significant.

Greenhouse Gas Emissions

The project's potential effect on global climate change was evaluated, and emissions of greenhouse gas (GHG) were estimated based on the use of construction equipment and vehicle trips associated with construction activities, as well as operational emissions once construction phases are complete. First, the annual project-generated GHG emissions were estimated to result in approximately 627 metric tons of carbon dioxide equivalent (MT CO_2e) per year as a result of project operations and amortized construction emissions. With a service population of 408, the project would result in 1.5 MT CO_2e per person per year, which is less than the significance threshold of 2.1 MT CO_2e per person per year anticipated in the City's Climate Action Plan (CAP). As such, the project was also deemed consistent with the City's CAP.

Third, the project would be consistent with and would not conflict with the applicable GHG-reducing strategies of the state that implicate the project's construction and operational components. The project did not have a cumulative impact on the environment when evaluated with the City's CAP. Therefore, GHG impacts would be less than significant.

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1 Introduction

1.1 Report Purpose and Scope

The purpose of this technical report is to assess the potential air quality and greenhouse gas (GHG) emissions impacts associated with construction and operation of the Gran Vista Project (project). This analysis uses the significance thresholds in Appendix G of the California Environmental Quality Act (CEQA) Guidelines (14 CCR 15000 et seq.) and the emissions-based significance thresholds recommended by the San Diego Air Pollution Control District (SDAPCD) and other applicable thresholds of significance.

This introductory section provides a description of the project and the project location. Section 2, Air Quality, describes the air quality–related environmental setting, regulatory setting, existing air quality conditions, and thresholds of significance and analysis methodology, and presents an air quality impact analysis per Appendix G of the CEQA Guidelines. Section 3, Greenhouse Gas Emissions, follows the same format as Section 2 and similarly describes the GHG emissions-related environmental setting, regulatory setting, existing climate change conditions, and thresholds of significance and analysis methodology, and presents a GHG emissions impact analysis per Appendix G of the CEQA Guidelines. Section 4, References Cited, includes a list of the references cited in this technical report. Section 5, List of Preparers, includes a list of those who prepared this technical report.

1.2 Regional and Local Setting

The site is located in the land use jurisdictions of both the City of San Marcos (City) and the County of San Diego (County); however, it is proposed to be annexed into the City of San Marcos. The site is located at the southeastern portion of the City of San Marcos, bordering the City of Escondido to the east and unincorporated County of San Diego lands to the south.

The City is located within the San Diego Air Basin (SDAB) and is under the jurisdiction of the SDAPCD. The project site is bounded by Las Posas Road along the eastern boundary, W. Mission Road along the southwest boundary, an existing CVS store to the south, and existing single-family residential development to the west/northwest. Nearby land uses in the vicinity of the project site include industrial and commercial uses to the west on the other side of W. Mission Road, the Santa Fe Hills residential community to the north, and Palomar College approximately half a mile to the east. The project site is comprised of Assessor's Parcel Numbers (APNs) 219-121-1500 and 219-121-1600.

1.3 Project Description

The residential component of the Project consists of 120 townhomes, a mix of 2- and 3-bedroom units. The project includes approximately 148,297 square feet of recreation area on-site and up to 198 square feet of private open space per unit. Amenities on site would include tot lots and recreational areas, a dog park, a community garden, and a landscaped pedestrian path along the Las Posas Road frontage. The project would include two points of entry: one off N. Las Posas Road, and the other off of W. Mission Road. A total of 264 parking spaces would be provided for the total residential dwelling units, including 20 guest spaces. The project site is currently zoned for Commercial (C) use with an existing General Plan designation of Commercial

and is within the City's General Plan Neighborhood College area. The project proposes a General Plan and Zoning Amendment to change the land use designation to Specific Plan Area (SPA).

2 Air Quality

2.1 Environmental Setting

2.1.1 Climate and Topography

The weather of the San Diego region, as in most of Southern California, is influenced by the Pacific Ocean and its semi-permanent high-pressure systems that result in dry, warm summers and mild, occasionally wet winters. The average summertime high temperature in the region is approximately 74°F, with highs approaching 76°F in August on average. The average wintertime low temperature is approximately 49°F, although record lows have approached 48°F in January. Average precipitation in the local area is approximately 10 inches per year, with the bulk of precipitation falling between December and March (WRCC 2017).

The topography in the San Diego region varies greatly, from beaches on the west to mountains and desert on the east; along with local meteorology, topography influences the dispersal and movement of pollutants in the air basin. The mountains to the east prevent dispersal of pollutants in that direction and help trap them in inversion layers.

The interaction of ocean, land, and the Pacific High Pressure Zone maintains clear skies for much of the year and influences the direction of prevailing winds (westerly to northwesterly). Local terrain is often the dominant factor inland, and winds in inland mountainous areas tend to blow through the valleys during the day and down the hills and valleys at night.

2.1.2 Air Pollution Climatology

The SDAB is one of 15 air basins that geographically divide the State of California. The SDAB is currently classified as a federal nonattainment area for ozone (O_3) and a state nonattainment area for particulate matter less than or equal to 10 microns (coarse particulate matter (PM_{10})), particulate matter less than or equal to 2.5 microns (fine particulate matter ($PM_{2.5}$)), and O_3.

The SDAB lies in the southwest corner of California and comprises the entire San Diego region, covering 4,260 square miles, and it is an area of high air pollution potential. The SDAB experiences warm summers, mild winters, infrequent rainfalls, light winds, and moderate humidity. This usually mild climatological pattern is interrupted infrequently by periods of extremely hot weather, winter storms, or Santa Ana winds.

The SDAB experiences frequent temperature inversions. Subsidence inversions occur during the warmer months as descending air associated with the Pacific High Pressure Zone meets cool marine air. The boundary between the two layers of air creates a temperature inversion that traps pollutants. Another type of inversion, a radiation inversion, develops on winter nights when air near the ground cools by heat radiation and the air aloft remains warm. The shallow inversion layer formed between these two air masses also can trap pollutants. As the pollutants become more concentrated in the atmosphere, photochemical reactions occur that produce O_3, commonly known as smog (CARB 2014a).

Light daytime winds, predominantly from the west, further aggravate the condition by driving air pollutants inland, toward the mountains. During the fall and winter, air quality problems are created due to carbon monoxide (CO)

and oxides of nitrogen (NO_x) emissions. CO concentrations are generally higher in the morning and late evening. In the morning, CO levels are elevated due to cold temperatures and the large number of motor vehicles traveling. Higher CO levels during the late evenings are a result of stagnant atmospheric conditions trapping CO in the area. Since CO is produced almost entirely from automobiles, the highest CO concentrations in the SDAB are associated with heavy traffic. Nitrogen dioxide (NO_2) levels are also generally higher during fall and winter days.

Under certain conditions, atmospheric oscillation results in the offshore transport of air from the Los Angeles region to San Diego County. This often produces high O_3 concentrations, as measured at air pollutant monitoring stations within the County. The transport of air pollutants from Los Angeles to San Diego has also occurred within the stable layer of the elevated subsidence inversion, where high levels of O_3 are transported.

2.1.3 Sensitive Receptors

Some land uses are considered more sensitive to changes in air quality than others, depending on the population groups and the activities involved. People most likely to be affected by air pollution, as identified by the California Air Resources Board (CARB), include children, the elderly, and people with cardiovascular and chronic respiratory diseases. Sensitive receptors include residences, schools, playgrounds, childcare centers, long-term healthcare facilities, rehabilitation centers, convalescent centers, and retirement homes. The closest existing sensitive receptors include single-family residents bordering the western boundary of the project site.

2.1.4 Pollutants and Effects

2.1.4.1 Criteria Air Pollutants

Criteria air pollutants are defined as pollutants for which the federal and state governments have established ambient air quality standards, or criteria, for outdoor concentrations to protect public health. The federal and state standards have been set, with an adequate margin of safety, at levels above which concentrations could be harmful to human health and welfare. These standards are designed to protect the most sensitive persons from illness or discomfort. Pollutants of concern include O_3, NO_2, CO, SO_2, PM_{10}, $PM_{2.5}$, and lead. These pollutants, as well as toxic air contaminants (TACs), are discussed in the following text.[1] In California, sulfates, vinyl chloride, hydrogen sulfide, and visibility-reducing particles are also regulated as criteria air pollutants.

Ozone. O_3 is a strong-smelling, pale blue, reactive, toxic chemical gas consisting of three oxygen atoms. It is a secondary pollutant formed in the atmosphere by a photochemical process involving the sun's energy and O_3 precursors, such as hydrocarbons and NO_x. These precursors are mainly NO_x and volatile organic compounds (VOCs). The maximum effects of precursor emissions on O_3 concentrations usually occur several hours after they are emitted and many miles from the source. Meteorology and terrain play major roles in O_3 formation, and ideal conditions occur during summer and early autumn, on days with low wind speeds or stagnant air, warm temperatures, and cloudless skies. O_3 exists in the upper atmosphere ozone layer (stratospheric ozone) as well as at the Earth's surface in the troposphere (ozone). O_3 in the troposphere causes numerous adverse health effects; short-term exposures (lasting for a few hours) to O_3 at levels typically observed in Southern California can result in

[1] The descriptions of health effects for each of the criteria air pollutants associated with project construction and operations are based on the U.S. Environmental Protection Agency's (EPA's) "Criteria Air Pollutants" (EPA 2016a) and CARB's "Glossary of Air Pollution Terms" (CARB 2014a).

breathing pattern changes, reduction of breathing capacity, increased susceptibility to infections, inflammation of the lung tissue, and some immunological changes. These health problems are particularly acute in sensitive receptors such as the sick, the elderly, and young children.

Nitrogen Dioxide. NO_2 is a brownish, highly reactive gas that is present in all urban atmospheres. The major mechanism for the formation of NO_2 in the atmosphere is the oxidation of the primary air pollutant nitric oxide (NO), which is a colorless, odorless gas. NO_x plays a major role, together with VOCs, in the atmospheric reactions that produce O_3. NO_x is formed from fuel combustion under high temperature or pressure. In addition, NO_x is an important precursor to acid rain and may affect both terrestrial and aquatic ecosystems. The two major emissions sources are transportation and stationary fuel combustion sources such as electric utility and industrial boilers. NO_2 can irritate the lungs, cause bronchitis and pneumonia, and lower resistance to respiratory infections.

Carbon Monoxide. CO is a colorless, odorless gas formed by the incomplete combustion of hydrocarbon, or fossil, fuels. CO is emitted almost exclusively from motor vehicles, power plants, refineries, industrial boilers, ships, aircraft, and trains. In urban areas such as the project location, automobile exhaust accounts for the majority of CO emissions. CO is a non-reactive air pollutant that dissipates relatively quickly; therefore, ambient CO concentrations generally follow the spatial and temporal distributions of vehicular traffic. CO concentrations are influenced by local meteorological conditions; primarily, wind speed, topography, and atmospheric stability. CO from motor vehicle exhaust can become locally concentrated when surface-based temperature inversions are combined with calm atmospheric conditions, a typical situation at dusk in urban areas from November to February. The highest levels of CO typically occur during the colder months of the year, when inversion conditions are more frequent. In terms of adverse health effects, CO competes with oxygen, often replacing it in the blood, thus reducing the blood's ability to transport oxygen to vital organs. The results of excess CO exposure can include dizziness, fatigue, and impairment of central nervous system functions.

Sulfur Dioxide. SO_2 is a colorless, pungent gas formed primarily from incomplete combustion of sulfur-containing fossil fuels. The main sources of SO_2 are coal and oil used in power plants and industries; as such, the highest levels of SO_2 are generally found near large industrial complexes. In recent years, SO_2 concentrations have been reduced by the increasingly stringent controls placed on stationary source emissions of SO_2 and limits on the sulfur content of fuels. SO_2 is an irritant gas that attacks the throat and lungs and can cause acute respiratory symptoms and diminished lung function in children. When combined with particulate matter, SO_2 can injure lung tissue and reduce visibility and the level of sunlight. SO_2 can also yellow plant leaves and erode iron and steel.

Particulate Matter. Particulate matter pollution consists of very small liquid and solid particles, which can include smoke, soot, dust, salts, acids, and metals, floating in the air. Particulate matter can form when gases emitted from industries and motor vehicles undergo chemical reactions in the atmosphere. $PM_{2.5}$ and PM_{10} represent fractions of particulate matter. $PM_{2.5}$ (fine particulate matter) is roughly 1/28 the diameter of a human hair. $PM_{2.5}$ results from fuel combustion (e.g., from motor vehicles and power generation and industrial facilities), residential fireplaces, and woodstoves. In addition, $PM_{2.5}$ can be formed in the atmosphere from gases such as sulfur oxides (SO_x), NO_x, and VOCs. PM_{10} (respirable particulate matter, or coarse particulate matter), is about 1/7 the thickness of a human hair. Major sources of PM_{10} include crushing or grinding operations; dust stirred up by vehicles traveling on roads; wood-burning stoves and fireplaces; dust from construction, landfills, and agriculture; wildfires and brush/waste burning; industrial sources; windblown dust from open lands; and atmospheric chemical and photochemical reactions.

$PM_{2.5}$ and PM_{10} pose a greater health risk than larger-size particles. When inhaled, these tiny particles can penetrate the human respiratory system's natural defenses and damage the respiratory tract. $PM_{2.5}$ and PM_{10} can increase the number and severity of asthma attacks, cause or aggravate bronchitis and other lung diseases, and reduce the body's ability to fight infections. Very small particles of substances such as lead, sulfates, and nitrates can cause lung damage directly or be absorbed into the bloodstream, causing damage elsewhere in the body. Additionally, these substances can transport adsorbed gases such as chlorides or ammonium into the lungs, also causing injury. Whereas PM_{10} tends to collect in the upper portion of the respiratory system, $PM_{2.5}$ is so tiny that it can penetrate deeper into the lungs and damage lung tissue. Suspended particulates also damage and discolor surfaces on which they settle, as well as producing haze and reducing regional visibility.

People with influenza, people with chronic respiratory and cardiovascular diseases, and the elderly may suffer worsening illness and premature death as a result of breathing particulate matter. People with bronchitis can expect aggravated symptoms from breathing in particulate matter. Children may experience a decline in lung function due to breathing in PM_{10} and $PM_{2.5}$. Other groups considered sensitive are smokers, people who cannot breathe well through their noses, and exercising athletes (because many breathe through their mouths).

Lead. Lead in the atmosphere occurs as particulate matter. Sources of lead include leaded gasoline; the manufacturing of batteries, paints, ink, ceramics, and ammunition; and secondary lead smelters. Prior to 1978, mobile emissions were the primary source of atmospheric lead. Between 1978 and 1987, the phaseout of leaded gasoline reduced the overall inventory of airborne lead by nearly 95%. With the phaseout of leaded gasoline, secondary lead smelters, battery recycling, and manufacturing facilities are becoming lead-emissions sources of greater concern.

Prolonged exposure to atmospheric lead poses a serious threat to human health. Health effects associated with exposure to lead include gastrointestinal disturbances, anemia, kidney disease, and in severe cases, neuromuscular and neurological dysfunction. Of particular concern are low-level lead exposures during infancy and childhood. Such exposures are associated with decrements in neurobehavioral performance, including intelligence quotient (IQ) performance, psychomotor performance, reaction time, and growth. Children are highly susceptible to the effects of lead.

Volatile Organic Compounds. Hydrocarbons are organic gases that are formed from hydrogen and carbon, and sometimes other elements. Hydrocarbons that contribute to formation of O_3 are referred to and regulated as VOCs. Combustion engine exhaust, oil refineries, and fossil-fueled power plants are sources of hydrocarbons. Other sources of hydrocarbons include evaporation from petroleum fuels, solvents, dry-cleaning solutions, and paint.

The primary health effects of VOCs result from the formation of O_3 and its related health effects. High levels of VOCs in the atmosphere can interfere with oxygen intake by reducing the amount of available oxygen through displacement. Carcinogenic forms of hydrocarbons, such as benzene, are considered TACs. There are no separate health standards for VOCs as a group.

2.1.4.2 Non-Criteria Air Pollutants

Toxic Air Contaminants. A substance is considered toxic if it has the potential to cause adverse health effects in humans, including increasing the risk of cancer upon exposure, or acute and/or chronic noncancer health effects. A toxic substance released into the air is considered a TAC. TACs are identified by federal and state agencies based on a review of available scientific evidence. In the State of California, TACs are identified through a two-

step process that was established in 1983 under the Toxic Air Contaminant Identification and Control Act. This two-step process of risk identification and risk management and reduction was designed to protect residents from the health effects of toxic substances in the air. In addition, the California Air Toxics "Hot Spots" Information and Assessment Act, Assembly Bill (AB) 2588, was enacted by the legislature in 1987 to address public concern over the release of TACs into the atmosphere. The law requires facilities emitting toxic substances to provide local air pollution control districts with information that will allow an assessment of the air toxics problem, identification of air toxics emissions sources, location of resulting hotspots, notification of the public exposed to significant risk, and development of effective strategies to reduce potential risks to the public over 5 years.

Examples include certain aromatic and chlorinated hydrocarbons, certain metals, and asbestos. TACs are generated by a number of sources, including stationary sources, such as dry cleaners, gas stations, combustion sources, and laboratories; mobile sources, such as automobiles; and area sources, such as landfills. Adverse health effects associated with exposure to TACs may include carcinogenic (i.e., cancer-causing) and noncarcinogenic effects. Noncarcinogenic effects typically affect one or more target organ systems and may be experienced on either short-term (acute) or long-term (chronic) exposure to a given TAC.

The California Air Resources Board (CARB) classified "particulate emissions from diesel-fueled engines" (i.e., diesel particulate matter (DPM)) as a TAC in August 1998. DPM is part of a complex mixture that makes up diesel exhaust. Diesel exhaust is composed of two phases, gas and particle, both of which contribute to health risks. DPM is emitted from a broad range of diesel engines: on-road diesel engines of trucks, buses, and cars and off-road diesel engines including locomotives, marine vessels, and heavy-duty construction equipment, among others. Approximately 70% of all airborne cancer risk in California is associated with DPM (CARB 2000). To reduce the cancer risk associated with diesel particulate matter, CARB adopted a diesel risk reduction plan in 2000 (CARB 2000).

Valley Fever. Coccidioidomycosis, more commonly known as "Valley Fever," is an infection caused by inhalation of the spores of the *Coccidioides immitis* fungus, which grows in the soils of the southwestern United States. When fungal spores are present, any activity that disturbs the soil, such as digging, grading, or other earth-moving operations, can cause the spores to become airborne and thereby increase the risk of exposure. The ecologic factors that appear to be most conducive to survival and replication of the spores are high summer temperatures, mild winters, sparse rainfall, and alkaline sandy soils.

Valley Fever is not considered highly endemic to San Diego. Per the San Diego County Health and Human Services Agency, the 10-year average (2008–2017) for Coccidioidomycosis cases in the County of San Diego is 4.5 cases per 100,000 people per year. The project area is wholly contained within the 92069 zip code. For the 92069 zip code, there were 16 cases of Coccidioidomycosis between 2008 and 2017, which is equivalent to a rate of 3.4 cases per 100,000 people (Nelson 2018). Statewide incidences in 2016 were 13.7 per 100,000 people (CDPH 2017).

Even if present at a site, earth-moving activities may not result in increased incidence of Valley Fever. Propagation of *Coccidioides immitis* is dependent on climatic conditions, with the potential for growth and surface exposure highest following early seasonal rains and long dry spells. *Coccidioides immitis* spores can be released when filaments are disturbed by earth-moving activities, although receptors must be exposed to and inhale the spores to be at increased risk of developing Valley Fever. Moreover, exposure to *Coccidioides immitis* does not guarantee that an individual will become ill—approximately 60% of people exposed to the fungal spores are asymptomatic and show no signs of an infection (USGS 2000).

2.2 Regulatory Setting

2.2.1 Federal

The federal Clean Air Act, passed in 1970 and last amended in 1990, forms the basis for the national air pollution control effort. The U.S. Environmental Protection Agency (EPA) is responsible for implementing most aspects of the Clean Air Act, including setting National ambient air quality standards (NAAQS) for major air pollutants, setting hazardous air pollutant standards, approving state attainment plans, setting motor vehicle emission standards, issuing stationary source emission standards and permits, and establishing acid rain control measures, stratospheric O_3 protection measures, and enforcement provisions. Under the Clean Air Act, NAAQS are established for the criteria pollutants O_3, CO, NO_2, SO_2, PM_{10}, $PM_{2.5}$, and lead.

The NAAQS describe acceptable air quality conditions designed to protect the health and welfare of the citizens of the nation. The NAAQS (other than for O_3, NO_2, SO_2, PM_{10}, $PM_{2.5}$, and those based on annual averages or arithmetic mean) are not to be exceeded more than once per year. NAAQS for O_3, NO_2, SO_2, PM_{10}, and $PM_{2.5}$ are based on statistical calculations over 1- to 3-year periods, depending on the pollutant. The Clean Air Act requires the U.S. Environmental Protection Agency (EPA) to reassess the NAAQS at least every 5 years to determine whether adopted standards are adequate to protect public health based on current scientific evidence. States with areas that exceed the NAAQS must prepare a state implementation plan that demonstrates how those areas will attain the standards within mandated time frames.

2.2.2 State

The federal Clean Air Act delegates the regulation of air pollution control and the enforcement of the NAAQS to the states. In California, the task of air quality management and regulation has been legislatively granted to CARB, with subsidiary responsibilities assigned to air quality management districts and air pollution control districts at the regional and county levels. CARB, which became part of the California Environmental Protection Agency in 1991, is responsible for ensuring implementation of the California Clean Air Act of 1988, responding to the federal Clean Air Act, and regulating emissions from motor vehicles and consumer products.

CARB has established California ambient air quality standards (CAAQS), which are generally more restrictive than the NAAQS. The CAAQS describe adverse conditions; that is, pollution levels must be below these standards before a basin can attain the standard. Air quality is considered “in attainment” if pollutant levels are continuously below the CAAQS and violate the standards no more than once each year. The CAAQS for O_3, CO, SO_2 (1-hour and 24-hour), NO_2, PM_{10}, and $PM_{2.5}$ and visibility-reducing particles are values that are not to be exceeded. All others are not to be equaled or exceeded. The NAAQS and CAAQS are presented in Table 1.

Table 1. Ambient Air Quality Standards

Pollutant	Averaging Time	CAAQS[a]	NAAQS[b]	
		Concentration[c]	Primary[c,d]	Secondary[c,e]
O_3	1 hour	0.09 ppm (180 µg/m³)	—	Same as primary standard[f]
	8 hours	0.070 ppm (137 µg/m³)	0.070 ppm (137 µg/m³)[f]	
NO_2[g]	1 hour	0.18 ppm (339 µg/m³)	0.100 ppm (188 µg/m³)	Same as primary standard
	Annual arithmetic mean	0.030 ppm (57 µg/m³)	0.053 ppm (100 µg/m³)	
CO	1 hour	20 ppm (23 mg/m³)	35 ppm (40 mg/m³)	None
	8 hours	9.0 ppm (10 mg/m³)	9 ppm (10 mg/m³)	
SO_2[h]	1 hour	0.25 ppm (655 µg/m³)	0.075 ppm (196 µg/m³)	—
	3 hours	—	—	0.5 ppm (1,300 µg/m³)
	24 hours	0.04 ppm (105 µg/m³)	0.14 ppm (for certain areas)[g]	—
	Annual	—	0.030 ppm (for certain areas)[g]	—
PM_{10}[i]	24 hours	50 µg/m³	150 µg/m³	Same as primary standard
	Annual arithmetic mean	20 µg/m³	—	
$PM_{2.5}$[i]	24 hours	—	35 µg/m³	Same as primary standard
	Annual arithmetic mean	12 µg/m³	12.0 µg/m³	15.0 µg/m³
Lead[j,k]	30-day average	1.5 µg/m³	—	—
	Calendar quarter	—	1.5 µg/m³ (for certain areas)[k]	Same as primary standard
	Rolling 3-month average	—	0.15 µg/m³	
Hydrogen sulfide	1 hour	0.03 ppm (42 µg/m³)	—	—
Vinyl chloride[j]	24 hours	0.01 ppm (26 µg/m³)	—	—
Sulfates	24- hours	25 µg/m³	—	—
Visibility reducing particles	8 hour (10:00 a.m. to 6:00 p.m. PST)	Insufficient amount to produce an extinction coefficient of 0.23 per kilometer due to particles when the relative humidity is less than 70%	—	—

Source: CARB 2016a.

Notes: CAAQS = California Ambient Air Quality Standards; NAAQS = National Ambient Air Quality Standards; O_3 = ozone; ppm = parts per million by volume; µg/m³ = micrograms per cubic meter; NO_2 = nitrogen dioxide; CO = carbon monoxide; mg/m³= milligrams per cubic meter; SO_2 = sulfur dioxide; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter.

[a] California standards for O_3, CO, SO_2 (1-hour and 24-hour), NO_2, suspended particulate matter—PM_{10}, $PM_{2.5}$, and visibility-reducing particles, are values that are not to be exceeded. All others are not to be equaled or exceeded. CAAQS are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

[b] National standards (other than O_3, NO_2, SO_2, particulate matter, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once a year. The O_3 standard is attained when the fourth-highest 8-hour concentration measured at each site in a year, averaged over 3 years, is equal to or less than the standard. For PM_{10}, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m³ is equal to or less than 1. For $PM_{2.5}$, the 24-hour standard is attained when 98% of the daily concentrations, averaged over 3 years, are equal to or less than the standard.

[c] Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

[d] National primary standards: the levels of air quality necessary, with an adequate margin of safety to protect the public health.

[e] National secondary standards: the levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

[f] On October 1, 2015, the primary and secondary NAAQS for O_3 were lowered from 0.075 ppm to 0.070 ppm.

[g] To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 parts per billion (ppb). Note that the national 1-hour standard is in units of ppb. California standards are in units of ppm. To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.

[h] On June 2, 2010, a new 1-hour SO_2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO_2 national standards (24-hour and annual) remain in effect until 1 year after an area is designated for the 2010 standard, except that in areas designated nonattainment of the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

[i] On December 14, 2012, the national annual $PM_{2.5}$ primary standard was lowered from 15 µg/m³ to 12.0 µg/m³. The existing national 24-hour $PM_{2.5}$ standards (primary and secondary) were retained at 35 µg/m³, as was the annual secondary standard of 15 µg/m³. The existing 24-hour PM_{10} standards (primary and secondary) of 150 µg/m³ also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.

[j] CARB has identified lead and vinyl chloride as TACs with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

[k] The national standard for lead was revised on October 15, 2008, to a rolling 3-month average. The 1978 lead standard (1.5 µg/m³ as a quarterly average) remains in effect until 1 year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.

2.2.3 Local

San Diego Air Pollution Control District

Although CARB is responsible for the regulation of mobile emission sources within the state, local air quality management districts and air pollution control districts are responsible for enforcing standards and regulating stationary sources. The project is located within the SDAB and is subject to SDAPCD guidelines and regulations. In San Diego County, O_3 and particulate matter are the pollutants of main concern, because exceedances of the CAAQS for those pollutants are experienced here in most years. For this reason, the SDAB has been designated as a nonattainment area for the state PM_{10}, $PM_{2.5}$, and O_3 (1-hour and 8-hour) standards. The SDAB is also designated as a federal O_3 marginal nonattainment area for the 2008 8-hour NAAQS for O_3.

SDAPCD and the San Diego Association of Governments (SANDAG) are responsible for developing and implementing the clean air plan for attainment and maintenance of the ambient air quality standards in the SDAB. The Regional Air Quality Strategy (RAQS) for the SDAB was initially adopted in 1991, and is updated every 3 years (most recently in 2016). The RAQS outlines SDAPCD's plans and control measures designed to attain the CAAQS for O_3. The RAQS relies on information from CARB and SANDAG, including mobile and area source emissions, as well as information regarding projected growth in San Diego County and the cities in the County, to project future emissions and then determine from that the strategies necessary for the reduction of emissions through regulatory controls. CARB mobile source emission projections and SANDAG growth projections are based

on population, vehicle trends, and land use plans developed by the County and the cities in the County as part of the development of their general plans.

The 8-Hour Ozone Attainment Plan for San Diego County indicates that local controls and state programs would allow the region to reach attainment of the federal 8-hour O_3 standard by 2018 (SDAPCD 2016). In this plan, SDAPCD relies on the RAQS to demonstrate how the region will comply with the federal O_3 standard. The RAQS details how the region will manage and reduce O_3 precursors (NO_x and VOCs) by identifying measures and regulations intended to reduce these contaminants. The control measures identified in the RAQS generally focus on stationary sources; however, the emissions inventories and projections in the RAQS address all potential sources, including those under the authority of CARB and EPA. Incentive programs for reduction of emissions from heavy-duty diesel vehicles, off-road equipment, and school buses are also established in the RAQS. In response to court decisions, some elements in the 8-hour Ozone Attainment Plan for San Diego County required updates. CARB staff prepared the 2018 Updates to the California State Implementation Plan to update SIP elements for nonattainment areas throughout the state as needed. The applicable attainment date for San Diego County is in 2032.

In December 2005, SDAPCD prepared a report titled "Measures to Reduce Particulate Matter in San Diego County" to address implementation of Senate Bill (SB) 656 in San Diego County (SB 656 required additional controls to reduce ambient concentrations of PM_{10} and $PM_{2.5}$). In the report, SDAPCD evaluates the implementation of source-control measures that would reduce particulate matter emissions associated with residential wood combustion.

As stated previously, SDAPCD is responsible for planning, implementing, and enforcing federal and state ambient standards in the SDAB. The following rules and regulations would apply to the project:

- **SDAPCD Regulation II: Permits; Rule 20.2: New Source Review Non-Major Stationary Sources.** Requires new or modified stationary source units (that are not major stationary sources) with the potential to emit 10 pounds per day or more of VOC, NO_x, SO_x, or PM_{10} to be equipped with best available control technology (BACT). For those units with a potential to emit above Air Quality Impact Assessments Trigger Levels, the units must demonstrate that such emissions would not violate or interfere with the attainment of any national air quality standard (SDAPCD 1998).
- **SDAPCD Regulation IV: Prohibitions; Rule 50: Visible Emissions.** Prohibits discharge into the atmosphere from any single source of emissions whatsoever any air contaminant for a period or periods aggregating more than 3 minutes in any period of 60 consecutive minutes that is darker in shade than that designated as Number 1 on the Ringelmann Chart, as published by the United States Bureau of Mines, or of such opacity as to obscure an observer's view to a degree greater than does smoke of a shade designated as Number 1 on the Ringelmann Chart (SDAPCD 1997).
- **SDAPCD Regulation IV: Prohibitions; Rule 51: Nuisance.** Prohibits the discharge, from any source, of such quantities of air contaminants or other materials that cause or have a tendency to cause injury, detriment, nuisance, annoyance to people and/or the public, or damage to any business or property (SDAPCD 1976).
- **SDAPCD Regulation IV: Prohibitions; Rule 55: Fugitive Dust.** Regulates fugitive dust emissions from any commercial construction or demolition activity capable of generating fugitive dust emissions, including active operations, open storage piles, and inactive disturbed areas, as well as track-out and carry-out onto paved roads beyond a project site (SDAPCD 2009).

- **SDAPCD Regulation IV: Prohibitions; Rule 67.0.1: Architectural Coatings.** Requires manufacturers, distributors, and end users of architectural and industrial maintenance coatings to reduce VOC emissions from the use of these coatings, primarily by placing limits on the VOC content of various coating categories (SDAPCD 2015.

City of San Marcos

The City's General Plan (City of San Marcos 2013a) includes various policies related to reducing Air Quality and GHG emissions. Applicable policies include the following:

Land Use and Community Design Element

Policy LU-2.1: Promote compact development patterns that reduce air pollution and automobile dependence and facilitate walking, bicycling, and transit use.

Policy LU-3.1: Require that new development and redevelopment incorporate connections and reduce barriers between neighborhoods, transit corridors, and activity centers within the City.

Mobility Element

Policy M-2.1: Work with new development to design roadways that minimize traffic volumes and/or speed, as appropriate within residential neighborhoods; while maintaining the City's desire to provide connectivity on the roadway network (City of San Marcos 2013a).

2.3 Regional and Local Air Quality

2.3.1 San Diego Air Basin Attainment Designation

Pursuant to the 1990 Clean Air Act amendments, EPA classifies air basins (or portions thereof) as "attainment" or "nonattainment" for each criteria air pollutant, based on whether the NAAQS have been achieved. Generally, if the recorded concentrations of a pollutant are lower than the standard, the area is classified as "attainment" for that pollutant. If an area exceeds the standard, the area is classified as "nonattainment" for that pollutant. As previously discussed, these standards are set by EPA or CARB for the maximum level of a given air pollutant that can exist in the outdoor air without unacceptable effects on human health or the public welfare. If there is not enough data available to determine whether the standard is exceeded in an area, the area is designated as "unclassified" or "unclassifiable." The designation of "unclassifiable/attainment" means that the area meets the standard or is expected to meet the standard despite a lack of monitoring data. Areas that achieve the standards after a nonattainment designation are re-designated as maintenance areas and must have approved maintenance plans to ensure continued attainment of the standards. The California Clean Air Act, like its federal counterpart, calls for the designation of areas as "attainment" or "nonattainment," but based on the CAAQS rather than the NAAQS. The attainment classifications for the criteria pollutants are outlined in Table 2.

Table 2. San Diego Air Basin Attainment Classification

Pollutant	Federal Designation	State Designation
O_3 (1-hour)	Attainment[a]	**Nonattainment**
O_3 (8-hour – 1997) (8-hour – 2008)	Attainment (maintenance) **Nonattainment (moderate)**	**Nonattainment**
NO_2	Unclassifiable/attainment	Attainment
CO	Attainment (maintenance)	Attainment
SO_2	Not designated[b]	Attainment
PM_{10}	Unclassifiable/attainment	**Nonattainment**
$PM_{2.5}$	Unclassifiable/attainment	**Nonattainment**
Lead	Unclassifiable/attainment	Attainment
Sulfates	No federal standard	Attainment
Hydrogen sulfide	No federal standard	Unclassified
Visibility-reducing particles	No federal standard	Unclassified
Vinyl chloride	No federal standard	No designation

Sources: EPA 2022b (federal); CARB 2022a (state).
Notes: O_3 = ozone; NO_2 = nitrogen dioxide; CO = carbon monoxide; SO_2 = sulfur dioxide; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter.
Attainment = meets the standards; attainment/maintenance = achieve the standards after a nonattainment designation; nonattainment = does not meet the standards; unclassified or unclassifiable = insufficient data to classify; unclassifiable/attainment = meets the standard or is expected to be meet the standard despite a lack of monitoring data.

[a] The federal 1-hour standard of 0.12 ppm was in effect from 1979 through June 15, 2005. The revoked standard is referenced here because it was employed for such a long period and because this benchmark is addressed in State Implementation Plans (SIPs).

[b] Federal designations for SO_2 are on hold by EPA; EPA expects to make the designations by December 2017 (EPA 2016c).

In summary, the SDAB is designated as a nonattainment area for the 2008 8-hour O_3 NAAQS. The SDAB is designated as a nonattainment area for O_3, PM_{10}, and $PM_{2.5}$ CAAQS. The portion of the SDAB where the project site is located is designated as attainment or unclassifiable/unclassified for all other criteria pollutants under the NAAQS and CAAQS.

2.3.2 Local Ambient Air Quality

As mentioned above, the SDAPCD operates a network of ambient air monitoring stations throughout San Diego County that measure ambient concentrations of pollutants and determine whether the ambient air quality meets the CAAQS and the NAAQS. The SDAPCD monitors air quality conditions at 11 locations throughout the SDAB. Camp Pendleton monitoring station is the closest to the project site for O_3 and NO_2. The Escondido – East Valley Parkway monitoring station ceased to collect data post-2015; thus, due to proximity to the site and similar geographic and climactic characteristics, the San Diego – 11403 Rancho Carmel Drive monitoring station concentrations are considered most representative for the project site. Data at this station also was available for CO. The El Cajon – 609 S 1st Street monitoring station was used for SO_2, PM_{10}, and $PM_{2.5}$. Ambient concentrations of pollutants from 2018 through 2020 are presented in Table 3. Air quality within the project region was in compliance with the CAAQS and NAAQS for NO_2, CO, SO_2, and PM_{10} (NAAQS only) during this monitoring period.

Table 3. Local Ambient Air Quality Data

Averaging Time	Unit	Agency/ Method	Ambient Air Quality Standard	Measured Concentration by Year			Exceedances by Year		
				2018	2019	2020	2018	2019	2020
Ozone (O_3) – Camp Pendleton									
Maximum 1-hour concentration	ppm	State	0.12	0.084	0.075	0.094	0	0	0
Maximum 8-hour concentration	ppm	State	0.070	0.069	0.065	0.074	0	0	3
		Federal	0.070	0.068	0.064	0.074	0	0	3
Nitrogen Dioxide (NO_2) – Camp Pendleton									
Maximum 1-hour concentration	ppm	State	0.18	0.048	0.053	0.058	0	0	0
		Federal	0.100	0.048	0.053	0.058	0	0	0
Annual concentration	ppm	State	0.030	—	0.005	0.006	—	—	—
		Federal	0.053	0.006	0.005	0.006	—	—	—
Carbon Monoxide (CO) – San Diego – 11403 Rancho Carmel Drive									
Maximum 1-hour concentration	ppm	State	20	1.9	4.1	3.3	0	0	0
		Federal	35	1.9	4.1	3.3	0	0	0
Maximum 8-hour concentration	ppm	State	9.0	1.4	2.5	1.7	0	0	0
		Federal	9	1.4	2.5	1.7	0	0	0
Sulfur Dioxide (SO_2) – El Cajon – Lexington Elementary School									
Maximum 1-hour concentration	ppm	Federal	0.075	0.003	0.0008	0.002	0	0	0
Maximum 24-hour concentration	ppm	Federal	0.14	0.0004	0.0003	0.0004	0	0	0
Annual concentration	ppm	Federal	0.030	0.0001	0.0001	0.0001	—	—	—
Coarse Particulate Matter (PM_{10})[a] – El Cajon – Lexington Elementary School									
Maximum 24-hour concentration	µg/m³	State	50	44.7	37.4	55.0	0.0 (0)	0.0 (0)	0.0 (0)
		Federal	150	43.0	38.7	55.0	0.0 (0)	0.0 (0)	0.0 (0)
Annual concentration	µg/m³	State	20	ND	ND	ND	—	—	—
Fine Particulate Matter ($PM_{2.5}$)[a] – El Cajon – Lexington Elementary School									
Maximum 24-hour concentration	µg/m³	Federal	35	36.2	23.8	38.2	—	—	—
Annual concentration	µg/m³	State	12	9.6	8.6	10.3	—	—	—
		Federal	12.0	9.6	8.6	10.3	—	—	—

Sources: CARB 2022b; EPA 2022b.

Notes: ppm = parts per million by volume; ND = insufficient data available to determine the value; — = not available; µg/m³ = micrograms per cubic meter.

Data taken from CARB iADAM (http://www.CARB.ca.gov/adam) and EPA AirData (http://www.epa.gov/airdata/) represent the highest concentrations experienced over a given year.

Daily exceedances for particulate matter are estimated days because PM_{10} and $PM_{2.5}$ are not monitored daily. All other criteria pollutants did not exceed federal or state standards during the years shown. There is no federal standard for 1-hour ozone, annual PM_{10}, or 24-hour SO_2, nor is there a state 24-hour standard for $PM_{2.5}$.
The Camp Pendleton monitoring station is located at 21441 W B Street, Camp Pendleton, California.
The San Diego – 11403 Rancho Carmel Drive monitoring station is located at 11403 Rancho Carmel Drive, San Diego, California.
The El Cajon-Lexington Elementary School monitoring station is located at 533 First Street, El Cajon, California.

[a] Measurements of PM_{10} and $PM_{2.5}$ are usually collected every 6 days and every 1 to 3 days, respectively. Number of days exceeding the standards is a mathematical estimate of the number of days concentrations would have been greater than the level of the standard had each day been monitored. The numbers in parentheses are the measured number of samples that exceeded the standard.

2.4 Significance Criteria and Methodology

2.4.1 Thresholds of Significance

Appendix G of the CEQA Guidelines (14 CCR 15000 et seq.) provides guidance for evaluating whether a development project may result in significant impacts. Based on Appendix G of the CEQA Guidelines, the project would have a significant impact on air quality if the project would:

1. Conflict with or obstruct implementation of the applicable air quality plan.
2. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard.
3. Expose sensitive receptors to substantial pollutant concentrations.
4. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

Appendix G of the CEQA Guidelines (14 CCR 15000 et seq.) indicates that, where available, the significance criteria established by the applicable air quality management district or pollution control district may be relied upon to determine whether the project would have a significant impact on air quality. For purposes of this EIR, reference has been made to thresholds established by SDAPCD in Rule 20.2 for permitted stationary sources. SDAPCD sets forth quantitative emission thresholds in Rule 20.2 below which a stationary source would not have a significant impact on ambient air quality. While the proposed project is a land use development project (and not a stationary source project), the Rule 20.2 thresholds provide a representative and relevant proxy for purposes of assessing project impacts. Therefore, project-related air quality impacts assessed in this EIR would be considered significant if any of the applicable significance thresholds developed by SDAPCD for Rule 20.2, as presented in Table 4, are exceeded. Emissions below the screening-level thresholds would not cause a significant impact. For nonattainment pollutants, if emissions exceed the thresholds shown in Table 4, a project could have the potential to result in a cumulatively considerable net increase in these pollutants and thus could have a significant impact on the ambient air quality.

Table 4. San Diego Air Pollution Control District Air Quality Significance Thresholds

Construction Emissions	
Pollutant	**Total Emissions (Pounds per Day)**
Respirable particulate matter (PM_{10})	100
Fine particulate matter ($PM_{2.5}$)	55
Oxides of nitrogen (NO_x)	250
Sulfur oxides (SO_x)	250

Table 4. San Diego Air Pollution Control District Air Quality Significance Thresholds

Construction Emissions			
Pollutant	Total Emissions (Pounds per Day)		
Carbon monoxide (CO)	550		
Volatile organic compounds (VOC)	137[a]		
Operational Emissions			
	Total Emissions		
Pollutant	Pounds per Hour	Pounds per Day	Tons per Year
Respirable particulate matter (PM_{10})	—	100	15
Fine particulate matter ($PM_{2.5}$)	—	55	10
Oxides of nitrogen (NO_x)	25	250	40
Sulfur oxides (SO_x)	25	250	40
Carbon monoxide (CO)	100	550	100
Lead and lead compounds	—	3.2	0.6
Volatile organic compounds (VOC)	—	137[a]	13.7

Source: SDAPCD Rules 1501 and 20.2(d)(2).

[a] VOC threshold based on South Coast Air Quality Management District (SCAQMD) levels per the SCAQMD and the Monterey Bay Air Pollution Control District, which have similar federal and state attainment status to San Diego.

2.4.2 Approach and Methodology

2.4.2.1 Construction

Emissions from construction of the project were estimated using the California Emissions Estimator Model (CalEEMod)[2] Version 2020.4.0.

For purposes of estimating project emissions, and based on information provided by the applicant and CalEEMod default values, it was estimated that construction of the project would commence in December 2023 and would last approximately 16 months, ending in March 2025. The analysis contained herein is based on the following parameters (duration of phases is approximate):

- Site preparation – 6 days (December 2023)
- Grading – 24 days (December 2023 – January 2024)
- Paving – 20 days (January 2024 – February 2024)
- Building construction – 262 days (February 2024 – February 2025)
- Architectural coating – 20 days (February 2025 – March 2025)

The construction equipment mix used for estimating the construction emissions of the project is based on CalEEMod default data and is shown in Table 5. For this analysis, it was estimated that heavy construction equipment would operate 5 days a week during project construction.

[2] CalEEMod is a statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria air pollutant and GHG emissions from a variety of land use projects.

Table 5. Construction Scenario Parameters

Construction Phase	One-Way Vehicle Trips			Equipment		
	Average Daily Worker Trips	Average Daily Vendor Truck Trips	Total Haul Truck Trips	Equipment Type	Quantity	Usage Hours
Site preparation	12	4	0	Rubber Tired Loaders	1	8
				Tractors/Loaders/ Backhoes	3	8
Grading	16	4	0	Graders	1	8
				Rubber Tired Dozers	1	8
				Scrapers	4	8
				Tractors/Loaders/ Backhoes	1	8
Paving	16	4	0	Pavers	2	8
				Paving Equipment	2	8
				Rollers	3	8
Building Construction	192	54	0	Welders	1	8
				Air Compressors	2	8
				Cranes	1	4
				Forklifts	2	8
				Generator Sets	1	8
				Skid Steer Loaders	1	4
				Tractors/Loaders/ Backhoes	1	4
Architectural coating	38	4	0	Air Compressors	1	6

Note: See Appendix A for details.

The equipment used in each phase as shown in Table 5 was based on the CalEEMod default equipment mix for each phase of construction. Construction-worker and vendor estimates by construction phase were generated by CalEEMod. Based on the project's grading plans, the project would be balanced on site. The applicant has committed to using offroad construction equipment with EPA Tier 4 Interim certification or better for equipment over 50 horsepower and electric equipment less than 50 horsepower[3].

Health Risk Assessment

As a precautionary measure, a health risk assessment (HRA) was performed to assess the impact of construction on sensitive receptors proximate to the project. This report includes an HRA associated with emissions from construction of the project based on the methodologies prescribed in the Office of Environmental Health Hazard Assessment (OEHHA) *Air Toxics Hot Spots Program Risk Assessment Guidelines – Guidance Manual for Preparation of*

[3] In the case that a piece of equipment is not available in Tier 4 Interim, the applicant may upgrade another piece of equipment to better than Tier 4 Interim (i.e. Tier 4 Final) to compensate for the piece of equipment with a lower tier.

Health Risk Assessments (OEHHA 2015). To implement the OEHHA Guidelines based on Project information, the SDAPCD has developed a three-tiered approach where each successive tier is progressively more refined, with fewer conservative assumptions. The SDAPCD *Supplemental Guidelines for Submission of Air Toxics "Hot Spots" Program Health Risk Assessments* provides guidance with which to perform HRAs within the SDAB (SDAPCD 2022).

Health effects from carcinogenic air toxics are usually described in terms of cancer risk. The SDAPCD recommends a carcinogenic (cancer) risk threshold of 10 in a million. Additionally, some TACs increase non-cancer health risk due to long-term (chronic) exposures. The Chronic Hazard Index is the sum of the individual substance chronic hazard indices for all TACs affecting the same target organ system. The SDAPCD recommends a Chronic Hazard Index significance threshold of 1.0 (project increment). The exhaust from diesel engines is a complex mixture of gases, vapors, and particles, many of which are known human carcinogens. DPM has established cancer risk factors and relative exposure values for long-term chronic health hazard impacts. No short-term, acute relative exposure level has been established for DPM; therefore, acute impacts of DPM are not addressed in this assessment. This HRA evaluated the risk to future residents from diesel emissions from exhaust from onsite construction equipment and diesel haul and vendor trucks.

The dispersion modeling of DPM was performed using the American Meteorological Society/EPA Regulatory Model (AERMOD), which is the model SDAPCD requires for atmospheric dispersion of emissions. AERMOD is a steady-state Gaussian plume model that incorporates air dispersion based on planetary boundary layer turbulence structure and scaling concepts, including treatment of surface and elevated sources, building downwash, and simple and complex terrain (EPA 2015). For the Project, AERMOD was run with all sources emitting unit emissions (1 gram per second) to obtain the "X/Q" values. X/Q is a dispersion factor that is the average effluent concentration normalized by source strength and is used as a way to simplify the representation of emissions from many sources. The X/Q values of ground-level concentrations were determined for construction emissions using AERMOD and the maximum concentrations determined for the 1-hour and Period averaging periods. Principal parameters of this modeling are presented in Table 6.

Table 6. AERMOD Principal Parameters

Parameter	Details
Meteorological Data	The latest 3-year meteorological data (2010–2012) for the Escondido Station (Station ID 3177) from SDAPCD were downloaded and then input to AERMOD. For cancer or chronic noncancer risk assessments, the average cancer risk of all years modeled was used.
Urban versus Rural Option	Urban areas typically have more surface roughness, as well as structures and low-albedo surfaces that absorb more sunlight—and thus more heat—relative to rural areas. However, based on the SDAPCD guidelines, the rural dispersion option was selected due to the Project's proximity to the ocean.
Terrain Characteristics	The terrain in the vicinity of the modeled Project site is generally flat. The elevation of the modeled site is about 575 feet above sea level. Digital elevation model files were imported into AERMOD so that complex terrain features were evaluated as appropriate.
Elevation Data	Digital elevation data were imported into AERMOD, and elevations were assigned to the emission sources and receptors. Digital elevation data were obtained through AERMOD View in the United States Geological Survey's National Elevation Dataset format with a 10-meter resolution.
Emission Sources and Release	Air dispersion modeling of DPM from construction equipment was conducted using emissions estimated using the CalEEMod, assuming emissions would occur 8

Table 6. AERMOD Principal Parameters

Parameter	Details
Parameters	hours per day, 5 days per week. The Project area was modeled as a series of volume sources.
Source Release Characterizations	Based on EPA methodology, the modeled line volume sources would result in a release height of 3.4 meters, a plume height of 6.8 meters, and a plume width of 8.6 meters for off-road equipment and diesel trucks (EPA 2015).
Discrete Receptors	A uniform Cartesian grid overlaying residential receptors in close proximity to the project with 20-meter resolution was placed. Additional discrete receptors were placed over residences not within the uniform Cartesian grid.

Note: See Appendix B.

Dispersion model plotfiles from AERMOD were then imported into CARB's Hotspots Analysis and Reporting Program Version 2 to determine health risk, which requires peak 1-hour emission rates and annual-averaged emission rates for all pollutants for each modeling source. For the residential health risk, the HRA assumes exposure would start in the third trimester of pregnancy. The results of the HRA are provided in Section 2.5, and detailed results and methodology are provided in Appendix B.

2.4.2.2 Operation

CalEEMod was used to estimate operational emissions from area sources, including emissions from consumer product use, architectural coatings, and landscape maintenance equipment. Emissions associated with natural gas usage in space heating and water heating are calculated in the building energy use module of CalEEMod, as described in the following text.

Area Sources

Consumer products are chemically formulated products used by household and institutional consumers, including detergents; cleaning compounds; polishes; floor finishes; cosmetics; personal care products; home, lawn, and garden products; disinfectants; sanitizers; aerosol paints; and automotive specialty products. Other paint products, furniture coatings, or architectural coatings are not considered consumer products (CAPCOA 2021). Consumer product VOC emissions are estimated in CalEEMod based on the floor area of residential buildings and on the default factor of pounds of VOC per building square foot per day. The CalEEMod default values for consumer products were modeled.

VOC off-gassing emissions result from evaporation of solvents contained in surface coatings, such as in paints and primers used during building maintenance. CalEEMod calculates the VOC evaporative emissions from application of surface coatings based on the VOC emission factor, the building square footage, the assumed fraction of surface area, and the reapplication rate. The VOC emission factor is based on the VOC content of the surface coatings, and SDAPCD's Rule 67.0.1 (Architectural Coatings) governs the VOC content for interior and exterior coatings (SDAPCD 2015). The model default reapplication rate of 10% of area per year is assumed. Consistent with CalEEMod defaults, it is assumed that the surface area for painting equals 2.7 times the floor square footage, with 75% assumed for interior coating and 25% assumed for exterior surface coating (CAPCOA 2021). Consistent with the architectural coatings used during the construction phase, the applicant will use architectural coatings with a VOC content of 50 grams per liter (g/L) for internal reapplication, and exterior architectural coatings would have a VOC content of 100 g/L for any reapplication during operation.

Landscape maintenance includes fuel combustion emissions from equipment such as lawn mowers, rototillers, shredders/grinders, blowers, trimmers, chainsaws, and hedge trimmers. The emissions associated from landscape equipment use are estimated based on CalEEMod default values for emission factors (grams per square foot of nonresidential building space per day) and number of summer days (when landscape maintenance would generally be performed) and winter days. Emissions associated with potential landscape maintenance equipment were included to conservatively capture potential project operational emission sources. As a project design feature, the project would not include wood burning stoves or fireplaces.

Energy Sources

As represented in CalEEMod, energy sources would include emissions associated with building electricity and natural gas usage. Electricity use would contribute indirectly to criteria air pollutant emissions; however, the emissions from electricity use are only quantified for GHGs in CalEEMod, since criteria pollutant emissions occur at the site of the power plant, which is typically off site.

Operational criteria air pollutant emissions from energy sources include natural gas combustion for appliances and space and water heating. The current Title 24, Part 6 standards, referred to as the 2019 Title 24 Building Energy Efficiency Standards, became effective on January 1, 2020. CalEEMod defaults were assumed for electricity and natural gas. The project is also designed to include energy star appliances.

Mobile Sources

The project would generate air quality emissions from mobile sources (vehicular traffic) as a result of the residents of the project. CalEEMod was used to estimate emissions from proposed vehicular sources (refer to Appendix A). The trip generation rates for the project residential land use were adjusted in CalEEMod to match the overall weekday daily trip rate and trip length based on the Traffic Impact Analysis (CR Associates 2022). CalEEMod default data, trip modes, fleet mix, and emissions factors were used for the model inputs. CalEEMod default vehicle emission factors and vehicle fleet mix for 2025, as based on the CARB EMFAC2017 model, were used to estimate emissions associated with vehicular sources. In accordance with 2019 CalGreen requirements, the project would install a listed raceway to accommodate a dedicated 208/240-volt branch circuit in each residential garage for future installation of an electric vehicle (EV) charger. No quantitative credit was taken for this requirement. The 2019 CalGreen Section 4.106.4.2.1 requires the installation of at least one EV space in common use parking. As such, the project is assume to install two EV charging stations in the common use parking.

Due to the projects location and design, the following reduction measures were estimated using a spreadsheet based model (see Appendix A for calculation details):

- CAPCOA Final Handbook: Increase Residential Density (T-1;
- CAPCOA Final Handbook: T-18 Provide Pedestrian Network Improvement;
- City of San Marcos CAP: Measure T-2 Require Electric Vehicle Charging Stations in New Development; and
- City of San Marcos CAP: Measure E-1 Require New Residential Developments to Install Alternatively-Fueled Water Heaters.

2.5 Impact Analysis

Threshold 1: Would the project conflict with or obstruct implementation of the applicable air quality plan?

As mentioned in Section 2.2, Regulatory Setting, the SDAPCD is responsible for developing and implementing the clean air plans for attainment and maintenance of the ambient air quality standards in the SDAB—specifically, the SIP and RAQS.[4] SANDAG is responsible for developing forecasts and data that are used by the SDAPCD in preparing the SIP and RAQS. The federal O_3 maintenance plan, which is part of the SIP, was adopted in 2012. The SIP includes a demonstration that current strategies and tactics will maintain acceptable air quality in the basin based on the NAAQS. The RAQS was initially adopted in 1991 and is updated every 3 years (most recently in 2020). The RAQS outlines SDAPCD's plans and control measures designed to attain the state air quality standards for O_3. The SIP and RAQS rely on information from CARB and SANDAG, including mobile and area source emissions, as well as information regarding projected growth in the County as a whole and the cities in San Diego County, to project future emissions and determine the strategies necessary for the reduction of emissions through regulatory controls. CARB mobile source emission projections and SANDAG growth projections are based on population, vehicle trends, and land use plans developed by the County and the cities in the County as part of development of their general plans.

Although the SDAPCD and City do not provide guidance regarding the analysis of impacts associated with air quality plan conformance, the County's Guidelines for Determining Significance and Report and Format and Content Requirements – Air Quality does discuss conformance with the RAQS (County of San Diego 2007). The guidance indicates that, if the project, in conjunction with other projects, contributes to growth projections that would not exceed SANDAG's growth projections for a city, the project would not be in conflict with the RAQS. If a project includes development that is greater than that anticipated in the local plan and SANDAG's growth projections, the project might be in conflict with the SIP and RAQS and may contribute to a potentially significant cumulative impact on air quality (County of San Diego 2007).

The project site is currently zoned for Commercial (C) use with an existing General Plan designation of Commercial and is within the City's General Plan Neighborhood College area. The project proposes a General Plan and Zoning Amendment to change the land use designation to Specific Plan Area (SPA). The City projects an increase of 3,170 housing units between 2020 and 2035 (SANDAG 2013), and the project would only account for 3.8% of the projected housing units to increase in the City between 2020 and 2035 in the SANDAG Series 13 forecast. The project's proposed GPA/Rezone would be within the growth projections for the City; thus, the project would result in regional growth that is accounted for within the RAQS. Furthermore, at a regional level, the growth is consistent with the underlying growth forecasts in the SIP and RAQS. Therefore, implementation of the proposed project would not conflict with the RAQS or SIP, and potential future development would be consistent with the growth in the region. Impacts would be **less than significant.**

[4] For the purpose of this discussion, the relevant federal air quality plan is the Ozone Maintenance Plan (SDAPCD 2020). The RAQS is the applicable plan for purposes of state air quality planning. Both plans reflect growth projections in the SDAB.

Threshold 2: Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

In analyzing cumulative impacts from a project, the analysis must specifically evaluate a project's contribution to the cumulative increase in pollutants for which the air basin is designated as nonattainment for the CAAQS and NAAQS. If a project does not exceed thresholds and is determined to have less-than-significant project-specific impacts, it may still contribute to a significant cumulative impact on air quality if the emissions from the project, in combination with the emissions from other proposed or reasonably foreseeable future projects, are in excess of established thresholds. However, a project would only be considered to have a significant cumulative impact if the project's contribution accounts for a significant proportion of the cumulative total emissions (i.e., it represents a "cumulatively considerable contribution" to the cumulative air quality impact).

Additionally, for the SDAB, the RAQS serves as the long-term regional air quality planning document for the purpose of assessing cumulative operational emissions to ensure that the SDAB continues to make progress toward NAAQS and CAAQS attainment status. As such, cumulative projects located in the San Diego region would have the potential to result in a cumulative impact to air quality if, in combination, they would conflict with or obstruct implementation of the RAQS. Similarly, individual projects that are inconsistent with the regional planning documents upon which the RAQS is based would have the potential to result in cumulative operational impacts if they represent development and population increases beyond regional projections.

The SDAB has been designated as a federal nonattainment area for O_3 and a state nonattainment area for O_3, PM_{10}, and $PM_{2.5}$. PM_{10} and $PM_{2.5}$ emissions associated with construction generally result in "near-field" impacts. The nonattainment status is the result of cumulative emissions from all sources of these air pollutants and their precursors within the SDAB. As discussed previously, the emissions of all criteria pollutants would be below the significance levels. Construction would be short term and temporary, and once construction is completed, construction-related emissions would cease. Operational emissions generated by the project would not exceed the significance thresholds for VOCs, NO_x, CO, SO_x, PM_{10}, or $PM_{2.5}$, and would not cause a significant impact. As such, the project would result in less-than-significant impacts to air quality relative to operational emissions.

Construction of the project would result in the temporary addition of pollutants to the local airshed caused by soil disturbance, fugitive dust emissions, and combustion pollutants from on-site construction equipment, as well as from off-site trucks hauling construction materials. Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of operation, and for dust, the prevailing weather conditions. Therefore, such emissions levels can only be estimated, with a corresponding uncertainty in precise ambient air quality impacts. Fugitive dust (PM_{10} and $PM_{2.5}$) emissions would primarily result from grading and site preparation activities. NO_x and CO emissions would primarily result from the use of construction equipment and motor vehicles.

Construction emissions were calculated using CalEEMod for the estimated worst-case day over the construction period associated with each phase and reported as the maximum daily emissions estimated during each year of construction (2023 through 2025). Construction schedule assumptions, including phase type, duration, and sequencing, were based on information provided by the applicant and is intended to represent a reasonable scenario based on the best information available. A detailed depiction of the construction schedule—including information regarding phasing, equipment used during each phase, haul trucks, vendor trucks, and worker vehicles—is included in Section 2.4.2.1, Construction, of this report. The information contained in Appendix A (CalEEMod Output Files) was used for the CalEEMod inputs.

Implementation of the project would generate temporary air pollutant emissions from entrained dust, off-road equipment, vehicle emissions, architectural coatings, and asphalt pavement application. Entrained dust results from the exposure of earth surfaces to wind from the direct disturbance and movement of soil, resulting in PM_{10} and $PM_{2.5}$ emissions. The project is subject to SDAPCD Rule 55, Fugitive Dust Control. This rule requires that the project take steps to restrict visible emissions of fugitive dust beyond the property line. Compliance with Rule 55 would limit fugitive dust (PM_{10} and $PM_{2.5}$) that may be generated during grading and construction activities. To account for dust control measures in the calculations, it was assumed that the active sites would be watered at least two times daily, resulting in an approximately 55% reduction of PM. Compliance with Rule 55 would be required as a standard condition of project approval or for issuance of a grading permit.

Exhaust from internal combustion engines used by construction equipment, hauling trucks (dump trucks), vendor trucks (delivery trucks), and worker vehicles would result in temporary emissions of NO_x, VOC, CO, SO_x, PM_{10}, and $PM_{2.5}$. Application of architectural coatings, such as exterior/interior paint and other finishes, would also produce VOC emissions; however, the contractor is required to procure architectural coatings from a supplier in compliance with the requirements of SDAPCD Rule 67.0.1, Architectural Coatings. This rule requires manufacturers, distributors, and end users of architectural and industrial maintenance coatings to reduce VOC emissions from the use of these coatings, primarily by placing limits on the VOC content of various coating categories (SDAPCD 2015). The project would comply with SDAPCD Rule 67.0.1 through the incorporation of low-VOC architectural coatings. The VOC content assumed for the analysis was 50 g/L for interior coatings and 100 g/L for exterior coatings.

Table 7 shows the estimated maximum daily construction emissions associated with the construction of the project. Details of the emissions calculations are provided in Appendix A of this document.

Table 7. Estimated Maximum Daily Construction Emissions

Year	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	Pounds per Day					
2023	1.36	21.59	43.15	0.08	5.39	1.92
2024	1.36	21.59	43.12	0.08	5.39	1.92
2025	48.50	11.21	19.58	0.05	2.02	0.08
Maximum daily emissions	**48.50**	**21.59**	**43.15**	**0.08**	**5.39**	**1.92**
Emission threshold	*75*	*250*	*550*	*250*	*100*	*55*
Threshold exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

Notes: VOC = volatile organic compound; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM_{10} = particulate matter with an aerodynamic diameter equal to or less than 10 microns; $PM_{2.5}$ = particulate matter with an aerodynamic diameter equal to or less than 2.5 microns.
See Appendix A for output files and modeling details.
The values shown are the maximum summer or winter daily emissions results from CalEEMod and provided in Appendix A. The maximum emissions assumes compliance with SDAPCD Rule 67.0.1, Architectural Coatings, and SDAPCD Rule 55, Fugitive Dust Control.

As shown in Table 7, daily construction emissions would not exceed the significance thresholds for VOC, NO_x, CO, SO_x, PM_{10}, or $PM_{2.5}$.

Following the completion of construction activities, the project would generate VOC, NO_x, CO, SO_x, PM_{10}, and $PM_{2.5}$ emissions from mobile sources, including vehicular traffic generated by residents of the project; area sources, including the use of landscaping equipment and consumer products; and from architectural coatings.

Table 8 presents the maximum daily emissions associated with the operation of the project after all construction has been completed. The values shown for motor vehicles and area sources are the maximum summer or winter daily emissions results from CalEEMod.

Table 8. Estimated Project Maximum Daily Operational Emissions

Emission Source	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	pounds per day					
Area	3.17	0.11	9.89	0.00	0.06	0.06
Energy	0.03	0.22	0.09	0.00	0.02	0.02
Mobile	2.03	1.77	15.18	0.03	3.02	0.82
Total	**5.23**	**2.10**	**25.16**	**0.03**	**3.10**	**0.90**
Emission threshold	*55*	*250*	*550*	*250*	*100*	*55*
Threshold exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

Notes: VOC = volatile organic compound; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM_{10} = particulate matter with an aerodynamic diameter equal to or less than 10 microns; $PM_{2.5}$ = particulate matter with an aerodynamic diameter equal to or less than 2.5 microns.
See Appendix A for output files and modeling details.

As shown in Table 8, the daily operational emissions from the project would not exceed the significance thresholds for VOC, NO_x, CO, SO_x, PM_{10}, or $PM_{2.5}$.

Regarding long-term cumulative operational emissions in relation to consistency with local air quality plans, the SIP and RAQS serve as the primary air quality planning documents for the state and SDAB, respectively. The SIP and RAQS rely on SANDAG growth projections based on population, vehicle trends, and land use plans developed by the cities and the County as part of the development of their general plans. Development that is consistent with the growth anticipated by local plans would be consistent with the SIP and RAQS and would result in emissions that are accounted for. Projects that conform to the permitted land use, or result in a less emissions-intensive use, and are therefore accounted for in the SIP and RAQS, would not be considered to result in cumulatively considerable impacts from operational emissions. As stated previously, the project would result in fewer emissions than buildout of the existing permitted land use that was anticipated by the RAQS and therefore would not result in significant regional emissions that are not accounted for within the RAQS. As a result, the project would not result in a cumulatively considerable contribution to regional O_3 concentrations or other criteria pollutant emissions. Therefore, the project's cumulative impacts would be **less than significant**.

Threshold 3: Would the project expose sensitive receptors to substantial pollutant concentrations?

Air quality varies as a direct function of the amount of pollutants emitted into the atmosphere, the size and topography of the air basin, and the prevailing meteorological conditions. Air quality problems arise when the rate of pollutant emissions exceeds the rate of dispersion. Reduced visibility, eye irritation, and adverse health impacts upon those persons termed "sensitive receptors" are the most serious hazards of existing air quality conditions in the area. Some land uses are considered more sensitive to changes in air quality than others, depending on the population groups and the activities involved. People most likely to be affected by air pollution,

as identified by CARB, include children, the elderly, athletes, and people with cardiovascular and chronic respiratory diseases; however, for the purposes of this analysis, residents are also considered sensitive receptors. As such, sensitive receptors include residences, schools, playgrounds, childcare centers, athletic facilities, long-term healthcare facilities, rehabilitation centers, convalescent centers, and retirement homes.

Health Impacts of Toxic Air Contaminants

In addition to impacts from criteria pollutants, project impacts may include emissions of pollutants identified by the state and federal government as TACs or hazardous air pollutants. State law has established the framework for California's TAC identification and control program, which is generally more stringent than the federal program and aimed at TACs that are a problem in California. The state has formally identified more than 200 substances as TACs, including the federal hazardous air pollutants, and is adopting appropriate control measures for sources of these TACs. The greatest potential for TAC emissions during construction would be diesel particulate emissions from heavy-duty equipment operations and heavy-duty trucks, and the associated health impacts to sensitive receptors. The following measures are required by state law to reduce diesel particulate emissions:

- Fleet owners of mobile construction equipment are subject to the CARB Regulation for In-use Off-road Diesel Vehicles (Title 13 California Code of Regulations, Chapter 9, Section 2449), the purpose of which is to reduce DPM and criteria pollutant emissions from in-use (existing) off-road diesel-fueled vehicles.
- All commercial diesel vehicles are subject to Title 13, Section 2485 of the California Code of Regulations, limiting engine idling time. Idling of heavy-duty diesel construction equipment and trucks during loading and unloading shall be limited to 5 minutes; electric auxiliary power units should be used whenever possible.

The greatest potential for TAC emissions during construction would be DPM emissions from heavy-duty equipment operations and heavy-duty trucks during construction of the project and the associated health impacts to sensitive receptors.

However, as a precautionary measure, an HRA was performed to evaluate the risk from diesel exhaust emissions on existing sensitive receptors and future onsite receptors from construction activities. The HRA methodology was described in Section 2.4.2.1, and the detailed assessment is provided in Appendix B. Table 9 summarizes the results of the HRA for proposed project construction.

Table 9. Construction Activity Health Risk Assessment Results

Impact Parameter	Units	Project Impact	CEQA Threshold	Level of Significance
Cancer Risk	Per Million	5.9	10.0	Less than Significant
HIC	Not Applicable	0.005	1.0	Less than Significant

Source: Appendix B.
Notes: CEQA = California Environmental Quality Act; HIC = Chronic Hazard Index.

The results of the HRA demonstrate that the TAC exposure from construction diesel exhaust emissions would result in cancer risk on site below the 10 in 1 million threshold, as well as Chronic Hazard Index less than 1.0. Therefore, TAC emissions from construction of the proposed project would not expose sensitive receptors to substantial pollutant concentrations and would result in a **less than significant** impact. Upon completion of construction, the project would not generate substantial TAC emissions. As such, impacts would be **less than significant** during operation.

Health Impacts of Carbon Monoxide

Exposure to high concentrations of CO can result in dizziness, fatigue, chest pain, headaches, and impairment of central nervous system functions. Mobile-source impacts, including those related to CO, occur on two scales. Regionally, project-related construction travel would add to regional trip generation and increase the vehicle miles traveled within the local airshed and the SDAB. Locally, construction traffic would be added to the roadway system in the vicinity of the project site. Although the SDAB is currently an attainment area for CO, there is a potential for the formation of microscale CO "hotspots" to occur immediately around points of congested traffic. Hotspots can form if such traffic occurs during periods of poor atmospheric ventilation, is composed of a large number of vehicles cold-started and operating at pollution-inefficient speeds, and/or is operating on roadways already crowded with non-project traffic. Because of continued improvement in vehicular emissions at a rate faster than the rate of vehicle growth and/or congestion, the potential for CO hotspots in the SDAB is steadily decreasing. The SDAB is a CO maintenance area (western and central part of the SDAB only).

The Governor's Office of Planning and Research and the California Natural Resources Agency have issued new CEQA Guidelines for analyzing transportation impacts. By July 1, 2020, all CEQA lead agencies must analyze a project's transportation impacts using vehicle-miles traveled. Vehicle-miles traveled measures the distances vehicles will travel to and from a project, rather than congestion levels at intersections (LOS, graded on a scale of A–F). To account for this shift from LOS to vehicle-miles traveled – such that vehicle congestion is no longer modeled and available – but to nonetheless evaluate the potential for CO hotspots for the hypothetical development scenario, this SCEA utilizes CO modeling analyses performed by the South Coast Air Quality Management District (SCAQMD) relative to 1-hour and 8-hour concentrations as follows.

The SCAQMD conducted CO modeling for the 2003 Air Quality Management Plan (Appendix V of SCAQMD 2003) for the four worst-case intersections in the South Coast Air Basin: (1) Wilshire Boulevard and Veteran Avenue, (2) Sunset Boulevard and Highland Avenue, (3) La Cienega Boulevard and Century Boulevard, and (4) Long Beach Boulevard and Imperial Highway. At the time the 2003 Air Quality Management Plan was prepared, the intersection of Wilshire Boulevard and Veteran Avenue was the most congested intersection in Los Angeles County, with an average daily traffic volume of about 100,000 vehicles per day. Using CO emission factors for 2002, the peak modeled CO 1-hour concentration was estimated to be 4.6 ppm at the intersection of Wilshire Boulevard and Veteran Avenue.

A daily traffic volume of 100,000 vehicles (as considered in the SCAQMD modeling) as a result of the proposed project, would be at least double the traffic volumes of nearby intersections (CR Associates 2022). However, if "peak" modeled 1-hour concentration from SCAQMD's analysis of 100,000 vehicle traffic volumes of the 4.6 ppm were added to the maximum 1-hour CO concentration from 2018 through 2020 at the San Diego – 11403 Rancho Carmel Drive monitoring station (see Table 3, Local Ambient Air Quality Data) of 4.1 ppm (in 2019), the 1-hour CO concentration in the project area would total 8.7 ppm. This "worst case scenario" – modeling at least double the traffic compared to that experienced in the proposed project area – would still result in 1-hour CO concentrations well below the CAAQS 1-hour CO threshold of 20 ppm.

Concerning 8-hour concentrations, SCAQMD modeled future year 8-hour CO concentrations at the Central Los Angeles monitoring site of 4.6 ppm in 2020. Adding the 4.6 ppm to the maximum 8-hour CO concentration from 2018 through 2020 at the San Diego – 11403 Rancho Carmel Drive monitoring station of 2.5 ppm (in 2019) would result in a total 8-hour CO concentration of 7.1 ppm. Again, this "worst case scenario" 8-hour CO

concentration assuming traffic counts far above that experienced in the proposed project area would still be well below the CAAQS 8-hour threshold of 9.0 ppm.

Said another way, CO concentrations at congested intersections would not exceed the 1-hour or 8-hour CO CAAQS unless projected daily traffic would cause area traffic volumes to exceed 100,000 vehicles per day. The proposed project would not increase daily traffic volumes at any study intersection to more than 100,000 vehicles per day (CR Associates 2022). Therefore, the proposed project is not anticipated to create a CO hotspot. As such, impacts to sensitive receptors with regard to potential CO hotspots resulting from the project and hypothetical development scenario's contribution to cumulative traffic-related air quality impacts would be less than significant.

Health Impacts of Criteria Air Pollutants

Construction and operation of the project would not result in emissions that exceed the SDAPCD significance thresholds for any criteria air pollutants including VOC, NO_x, CO, SO_x, PM_{10}, or $PM_{2.5}$. Regarding VOCs, some VOCs would be associated with motor vehicles and construction equipment, while others are associated with architectural coatings, the emissions of which would not result in the exceedances of the SDAPCD significance thresholds as shown in Table 3, Local Ambient Air Quality Data. Generally, the VOCs in architectural coatings are of relatively low toxicity. Additionally, the project would use low-VOC architectural coatings that would comply with SDAPCD Rule 67.0.1, which restricts the VOC content of coatings for both construction and operational applications (SDAPCD 2015).

In addition, VOCs and NO_x are precursors to O_3, for which the SDAB is designated as nonattainment with respect to the NAAQS and CAAQS (the SDAB is designated by the EPA as an attainment area for the 1-hour O_3 NAAQS standard). The health effects associated with O_3, as discussed in Section 2.2, are generally associated with reduced lung function. The contribution of VOCs and NO_x to regional ambient O_3 concentrations is the result of complex photochemistry. The increases in O_3 concentrations in the SDAB due to O_3 precursor emissions tend to be found downwind from the source location to allow time for the photochemical reactions to occur. However, the potential for exacerbating excessive O_3 concentrations would also depend on the time of year that the VOC emissions would occur because exceedances of the O_3 ambient air quality standards tend to occur between April and October when solar radiation is highest.

The holistic effect of a single project's emissions of O_3 precursors is speculative due to the lack of quantitative methods to assess this impact. Nonetheless, the VOC and NO_x emissions associated with project construction could minimally contribute to regional O_3 concentrations and the associated health impacts. Due to the minimal contribution during construction and operation health impacts would be considered less than significant.

Similar to O_3, construction of the project would not exceed the SDAPCD significance thresholds for PM_{10} or $PM_{2.5}$ and would not contribute to exceedances of the NAAQS and CAAQS for particulate matter. Due to the minimal contribution of particulate matter during construction and operation, health impacts would be considered less than significant.

Regarding nitrogen dioxide, according to the construction emissions analysis, construction of the project would not contribute to exceedances of the NAAQS and CAAQS for NO_2. As described in Section 2.2, NO_2 and NO_x health impacts are associated with respiratory irritation, which may be experienced by nearby receptors during the periods of heaviest use of off-road construction equipment. Off-road construction equipment would be operating

at various portions of the site and would not be concentrated in one portion of the site at any one time. Construction of the project would not require any stationary emission sources that would create substantial, localized NO_x impacts. Therefore, health impacts would be considered less than significant.

In summary, construction and operation of the project would not result in exceedances SDAPCD significance thresholds for criteria pollutants. The VOC and NO_x emissions, as described previously, would minimally contribute to regional O_3 concentrations and the associated health effects. In addition to O_3, NO_x emissions would not contribute to potential exceedances of the NAAQS and CAAQS for NO_2. As shown in Table 3, the existing NO_2 concentrations in the area are well below the NAAQS and CAAQS standards. Thus, the project's operational NO_x emissions are not expected to result in exceedances of the NO_2 standards or contribute to the associated health effects. PM_{10} and $PM_{2.5}$ would not contribute to potential exceedances of the NAAQS and CAAQS and would not obstruct the SDAB from coming into attainment for these pollutants and would not contribute to significant health effects associated with particulates. Therefore, health impacts associated with criteria air pollutants would be considered **less than significant**.

Valley Fever Exposure

As discussed in Section 2.1.4, Pollutants and Effects, Valley Fever is not highly endemic to San Diego County, and within San Diego County, the incidence rate in the project area is below the County average and the statewide average. Construction of the project would comply with SDAPCD Rule 55, which limits the amount of fugitive dust generated during construction. Strategies the Project would implement to comply with SDAPCD Rule 55 and control dust include watering two times per day and limiting speed on unpaved roads to 15 miles per hour.

Based on the low incidence rate of Coccidioidomycosis in San Diego County, and the project's implementation of dust control strategies, it is not anticipated that earth-moving activities during project construction would result in exposure of nearby sensitive receptors to Valley Fever. Therefore, the project would have a **less than significant** impact with respect to Valley Fever exposure for sensitive receptors.

Threshold 4: Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Odors would be generated from vehicles and/or equipment exhaust emissions during construction of the project. Odors produced during construction would be attributable to concentrations of unburned hydrocarbons from tailpipes of construction equipment and architectural coatings. Such odors would disperse rapidly from the project site and generally occur at magnitudes that would not affect substantial numbers of people. Therefore, impacts associated with odors during construction would be considered **less than significant**.

Land uses and industrial operations associated with odor complaints include agricultural uses, wastewater treatment plants, food-processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding (CARB 2005). The project would not engage in any of these activities. Moreover, typical odors generated from operation of the project would primarily include vehicle exhaust generated by residents, as well as through the periodic use of landscaping or maintenance equipment. Therefore, the project would result in an odor impact that is considered to be **less than significant**.

2.6 Mitigation Measures

The project would not result in significant impacts; therefore, no mitigation is required.

3 Greenhouse Gas Emissions

3.1 Environmental Setting

3.1.1 Climate Change Overview

Climate change refers to any significant change in measures of climate, such as temperature, precipitation, or wind patterns, lasting for an extended period of time (decades or longer). The Earth's temperature depends on the balance between energy entering and leaving the planet's system. Many factors, both natural and human, can cause changes in Earth's energy balance, including variations in the sun's energy reaching Earth, changes in the reflectivity of Earth's atmosphere and surface, and changes in the greenhouse effect, which affects the amount of heat retained by Earth's atmosphere (EPA 2017a).

The greenhouse effect is the trapping and build-up of heat in the atmosphere (troposphere) near the Earth's surface. The greenhouse effect traps heat in the troposphere through a threefold process as follows: Short-wave radiation emitted by the Sun is absorbed by the Earth; the Earth emits a portion of this energy in the form of long-wave radiation; and GHGs in the upper atmosphere absorb this long-wave radiation and emit it into space and toward the Earth. The greenhouse effect is a natural process that contributes to regulating the Earth's temperature and creates a pleasant, livable environment on the Earth. Human activities that emit additional GHGs to the atmosphere increase the amount of infrared radiation that gets absorbed before escaping into space, thus enhancing the greenhouse effect and causing the Earth's surface temperature to rise.

The scientific record of the Earth's climate shows that the climate system varies naturally over a wide range of time scales and that in general, climate changes prior to the Industrial Revolution in the 1700s can be explained by natural causes, such as changes in solar energy, volcanic eruptions, and natural changes in GHG concentrations. Recent climate changes, in particular the warming observed over the past century, however, cannot be explained by natural causes alone. Rather, it is extremely likely that human activities have been the dominant cause of that warming since the mid-twentieth century and is the most significant driver of observed climate change (IPCC 2013; EPA 2017a). Human influence on the climate system is evident from the increasing GHG concentrations in the atmosphere, positive radiative forcing, observed warming, and improved understanding of the climate system (IPCC 2013). The atmospheric concentrations of GHGs have increased to levels unprecedented in the last 800,000 years, primarily from fossil fuel emissions and secondarily from emissions associated with land use changes (IPCC 2013). Continued emissions of GHGs will cause further warming and changes in all components of the climate system, which is discussed further in Section 3.1.5, Potential Effects of Climate Change.

3.1.2 Greenhouse Gases and other Climate Forcing Substances

A GHG is any gas that absorbs infrared radiation in the atmosphere; in other words, GHGs trap heat in the atmosphere. GHGs include, but are not limited to, carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), O_3, water vapor, hydrofluorocarbons (HFCs), hydrochlorofluorocarbons (HCFCs), perfluorocarbons (PFCs), and sulfur

hexafluoride (SF_6).[5] Some GHGs, such as CO_2, CH_4, and N_2O, occur naturally and are emitted to the atmosphere through natural processes and human activities. Of these gases, CO_2 and CH_4 are emitted in the greatest quantities from human activities. Manufactured GHGs, which have a much greater heat-absorption potential than CO_2, include fluorinated gases, such as HFCs, HCFCs, PFCs, and SF_6, which are associated with certain industrial products and processes. A summary of the most common GHGs and their sources is included in the following text.[6] Also included is a discussion of other climate forcing substances.

Carbon Dioxide. CO_2 is a naturally occurring gas and a by-product of human activities and is the principal anthropogenic GHG that affects the Earth's radiative balance. Natural sources of CO_2 include respiration of bacteria, plants, animals, and fungus; evaporation from oceans; volcanic out-gassing; and decomposition of dead organic matter. Human activities that generate CO_2 are from the combustion of fuels such as coal, oil, natural gas, and wood and changes in land use.

Methane. CH_4 is produced through both natural and human activities. CH_4 is a flammable gas and is the main component of natural gas. Methane is produced through anaerobic (without oxygen) decomposition of waste in landfills, flooded rice fields, animal digestion, decomposition of animal wastes, production and distribution of natural gas and petroleum, coal production, and incomplete fossil fuel combustion.

Nitrous Oxide. N_2O is produced through natural and human activities, mainly through agricultural activities and natural biological processes, although fuel burning and other processes also create N_2O. Sources of N_2O include soil cultivation practices (microbial processes in soil and water), especially the use of commercial and organic fertilizers, manure management, industrial processes (such as in nitric acid production, nylon production, and fossil-fuel-fired power plants), vehicle emissions, and using N_2O as a propellant (such as in rockets, racecars, and aerosol sprays).

Fluorinated Gases. Fluorinated gases (also referred to as F-gases) are powerful synthetic GHGs emitted from many industrial processes. Fluorinated gases are commonly used as substitutes for stratospheric ozone-depleting substances (e.g., CFCs, HCFCs, and halons). The most prevalent fluorinated gases include the following:

- **Hydrofluorocarbons:** HFCs are compounds containing only hydrogen, fluorine, and carbon atoms. HFCs are synthetic chemicals used as alternatives to ozone-depleting substances in serving many industrial, commercial, and personal needs. HFCs are emitted as by-products of industrial processes and are used in manufacturing.
- **Perfluorocarbons:** PFCs are a group of human-made chemicals composed of carbon and fluorine only. These chemicals were introduced as alternatives, with HFCs, to the ozone depleting substances. The two main sources of PFCs are primary aluminum production and semiconductor manufacturing. Since PFCs have stable molecular structures and do not break down through the chemical processes in the lower atmosphere, these chemicals have long lifetimes, ranging between 10,000 and 50,000 years.

[5] California Health and Safety Code, Section 38505, identifies seven GHGs that CARB is responsible for monitoring and regulating to reduce emissions: CO_2, CH_4, N_2O, SF_6, HFCs, PFCs, and nitrogen trifluoride (NF_3).

[6] The descriptions of GHGs are summarized from IPCC Second Assessment Report (IPCC 1995), IPCC Fourth Assessment Report (IPCC 2007), CARB's Glossary of Terms Used in GHG Inventories (CARB 2015a), and EPA's Glossary of Climate Change Terms (EPA 2016d).

- **Sulfur Hexafluoride:** SF_6 is a colorless gas soluble in alcohol and ether and slightly soluble in water. SF_6 is used for insulation in electric power transmission and distribution equipment, semiconductor manufacturing, the magnesium industry, and as a tracer gas for leak detection.
- **Nitrogen Trifluoride:** Nitrogen trifluoride (NF_3) is used in the manufacture of a variety of electronics, including semiconductors and flat panel displays.

Chlorofluorocarbons. CFCs are synthetic chemicals that have been used as cleaning solvents, refrigerants, and aerosol propellants. CFCs are chemically unreactive in the lower atmosphere (troposphere) and the production of CFCs was prohibited in 1987 due to the chemical destruction of stratospheric O_3.

Hydrochlorofluorocarbons. HCFCs are a large group of compounds, whose structure is very close to that of CFCs—containing hydrogen, fluorine, chlorine, and carbon atoms—but including one or more hydrogen atoms. Like HFCs, HCFCs are used in refrigerants and propellants. HCFCs were also used in place of CFCs for some applications; however, their use in general is being phased out.

Black Carbon. Black carbon is a component of fine particulate matter, which has been identified as a leading environmental risk factor for premature death. It is produced from the incomplete combustion of fossil fuels and biomass burning, particularly from older diesel engines and forest fires. Black carbon warms the atmosphere by absorbing solar radiation, influences cloud formation, and darkens the surface of snow and ice, which accelerates heat absorption and melting. Black carbon is a short-lived species that varies spatially, which makes it difficult to quantify the global warming potential. DPM emissions are a major source of black carbon and are TACs that have been regulated and controlled in California for several decades to protect public health. In relation to declining DPM from CARB's regulations pertaining to diesel engines, diesel fuels, and burning activities, CARB estimates that annual black carbon emissions in California have reduced by 70% between 1990 and 2010, with 95% control expected by 2020 (CARB 2014b).

Water Vapor. The primary source of water vapor is evaporation from the ocean, with additional vapor generated by sublimation (change from solid to gas) from ice and snow, evaporation from other water bodies, and transpiration from plant leaves. Water vapor is the most important, abundant, and variable GHG in the atmosphere and maintains a climate necessary for life.

Ozone. Tropospheric O_3, which is created by photochemical reactions involving gases from both natural sources and human activities, acts as a GHG. Stratospheric O_3, which is created by the interaction between solar ultraviolet radiation and molecular oxygen (O_2), plays a decisive role in the stratospheric radiative balance. Depletion of stratospheric O_3, due to chemical reactions that may be enhanced by climate change, results in an increased ground-level flux of ultraviolet-B radiation.

Aerosols. Aerosols are suspensions of particulate matter in a gas emitted into the air through burning biomass (plant material) and fossil fuels. Aerosols can warm the atmosphere by absorbing and emitting heat and can cool the atmosphere by reflecting light.

3.1.3 Global Warming Potential

Gases in the atmosphere can contribute to climate change both directly and indirectly. Direct effects occur when the gas itself absorbs radiation. Indirect radiative forcing occurs when chemical transformations of the substance produce other GHGs, when a gas influences the atmospheric lifetimes of other gases, and/or when a gas affects

atmospheric processes that alter the radiative balance of the Earth (e.g., affect cloud formation or albedo) (EPA 2017b). The Intergovernmental Panel on Climate Change (IPCC) developed the global warming potential (GWP) concept to compare the ability of each GHG to trap heat in the atmosphere relative to another gas. The GWP of a GHG is defined as the ratio of the time-integrated radiative forcing from the instantaneous release of 1 kilogram of a trace substance relative to that of 1 kilogram of a reference gas (IPCC 2014). The reference gas used is CO_2; therefore, GWP-weighted emissions are measured in MT CO_2e.

The CalEEMod (Version 2020.4.0) assumes that the GWP for CH_4 is 25 (so emissions of 1 MT of CH_4 are equivalent to emissions of 25 MT of CO_2), and the GWP for N_2O is 298, based on the IPCC Fourth Assessment Report (IPCC 2007).

3.1.4 Sources of Greenhouse Gas Emissions

Anthropogenic GHG emissions worldwide in 2019 (the most recent year for which data is available) totaled approximately 52.4 million metric tons (MMT) of CO_2e, excluding land use change and forestry (PBL 2020). Six countries—China, the United States, the Russian Federation, India, Japan, and Brazil—and the European community accounted for approximately 62% of the total global emissions, or approximately 32.5 MMT CO_2e (PBL 2020).

Per the EPA Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990–2019, total United States GHG emissions were approximately 6,558.3 MMT CO_2e in 2019 (EPA 2021). Overall, from 1990 to 2019, total emissions of CO2 increased by 142.4 MMT CO_2e (2.8%), while total emissions of CH_4 decreased by 117.2 MMT CO_2e (15.1%) and emissions of N_2O increased by 4.5 MMT CO_2e (1.0%). During the same period, aggregate weighted emissions of hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF_6), and nitrogen trifluoride (NF_3) rose by 86.0 MMT CO_2e (86.3%). From 1990 to 2019, HFCs increased by 128.1 MMT CO_2e (275.4%), PFCs decreased by 19.8 MMT CO_2e (81.5%), SF_6 decreased by 22.9 MMT CO_2e (79.5%), and NF_3 increased by 0.6 MMT CO_2e (1,162.7%).

According to California's 2000–2019 GHG emissions inventory (2021 edition), California emitted 418.2 MMT CO_2e in 2019, including emissions resulting from out-of-state electrical generation (CARB 2021). The sources of GHG emissions in California include transportation, industrial uses, electric power production from both in-state and out-of-state sources, commercial and residential uses, agriculture, high-GWP substances, and recycling and waste. The California GHG emission source categories and their relative contributions in 2019 are shown in Table 10.

Table 10. Greenhouse Gas Emissions Sources in California

Source Category	Annual GHG Emissions (MMT CO_2e)	Percent of Total[a]
Transportation	166.1	40%
Industrial uses	88.2	21%
Electricity generation[b]	58.8	14%
Residential and commercial uses	43.8	10%
Agriculture	31.8	8%
High global warming potential substances	20.6	5%
Recycling and waste	8.9	2%
Totals	**418.2**	**100%**

Source: CARB 2021.

Notes: GHG = greenhouse gas; MMT CO_2e = million metric tons of carbon dioxide equivalent per year.
Emissions reflect 2019 California GHG inventory.
[a] Percentage of total has been rounded and total may not sum due to rounding.
[b] Includes emissions associated with imported electricity, which account for 21.7 MMT CO_2e.

The City prepared a GHG emissions inventory for year 2012 in the 2020 CAP. The emissions by source category are shown in Table 11.

Table 11. Greenhouse Gas Emissions Sources in San Marcos

Source Category	Annual GHG Emissions (MT CO_2e)	Percent of Total[a]
On-Road Transportation	322,000	54%
Electricity	162,000	27%
Natural Gas	75,000	12%
Solid Waste	15,000	3%
Off-Road Transportation	14,000	2%
Water	9,000	1%
Wastewater	3,000	1%
Totals	**599,000**	**100%**

Source: City of San Marcos 2013b.
Notes: GHG = greenhouse gas; MT CO_2e = metric tons of carbon dioxide equivalent per year.
Emissions reflect the City's 2012 GHG inventory.
[a] Percentage of total has been rounded and total may not sum due to rounding.

3.1.5 Potential Effects of Climate Change

Globally, climate change has the potential to affect numerous environmental resources through uncertain impacts related to future air temperatures and precipitation patterns. The 2014 IPCC Synthesis Report indicated that warming of the climate system is unequivocal, and many of the observed changes since the 1950s are unprecedented. Signs that global climate change has occurred include warming of the atmosphere and ocean, diminished amounts of snow and ice have, and rising sea levels (IPCC 2014).

In California, climate change impacts have the potential to affect sea level rise, agriculture, snowpack and water supply, forestry, wildfire risk, public health, and electricity demand and supply (CCCC 2006). The primary effect of global climate change has been a 0.2°C (0.36°F) rise in average global tropospheric temperature per decade, determined from meteorological measurements worldwide between 1990 and 2005. Scientific modeling predicts that continued emissions of GHGs at or above current rates would induce more extreme climate changes during the twenty-first century than were observed during the twentieth century. A warming of about 0.2°C (0.36°F) per decade is projected, and there are identifiable signs that global warming could be taking place.

Although climate change is driven by global atmospheric conditions, climate change impacts are felt locally. A scientific consensus confirms that climate change is already affecting California. The average temperatures in California have increased, leading to more extreme hot days and fewer cold nights; shifts in the water cycle have been observed, with less winter precipitation falling as snow, and both snowmelt and rainwater running off earlier in the year; sea levels have risen; and wildland fires are becoming more frequent and intense due to dry seasons that start earlier and end later (CAT 2010).

An increase in annual average temperature is a reasonably foreseeable effect of climate change. Observed changes over the last several decades across the western United States reveal clear signals of climate change. Statewide average temperatures increased by about 1.7°F from 1895 to 2011, and warming has been greatest in the Sierra Nevada (CCCC 2012). By 2050, California is projected to warm by approximately 2.7°F above 2000 averages, a threefold increase in the rate of warming over the last century. By 2100, average temperatures could increase by 4.1°F to 8.6°F, depending on emissions levels. Springtime warming—a critical influence on snowmelt—will be particularly pronounced. Summer temperatures will rise more than winter temperatures, and the increases will be greater in inland California, compared to the coast. Heat waves will be more frequent, hotter, and longer. There will be fewer extremely cold nights (CCCC 2012). A decline of Sierra Nevada snowpack, which accounts for approximately half of the surface water storage in California, by 30% to as much as 90% is predicted over the next 100 years (CAT 2006).

Model projections for precipitation over California continue to show the Mediterranean pattern of wet winters and dry summers with seasonal, year-to-year, and decade-to-decade variability. For the first time, however, several of the improved climate models shift toward drier conditions by the mid-to-late twenty-first century in Central California, and most notably, in Southern California. By the late century, all projections show drying, and half of them suggest 30-year average precipitation will decline by over 10% below the historical average (CCCC 2012).

3.2 Regulatory Setting

3.2.1 Federal

Infrastructure Investment and Jobs Act. On November 6, 2021, Congress passed the Bipartisan Infrastructure Deal (Infrastructure Investment and Jobs Act), a once-in-a-generation investment in our nation's infrastructure and competitiveness. This Bipartisan Infrastructure Deal will rebuild America's roads, bridges and rails, expand access to clean drinking water, ensure every American has access to high-speed internet, tackle the climate crisis, advance environmental justice, and invest in communities that have too often been left behind. The legislation will help ease inflationary pressures and strengthen supply chains by making long overdue improvements for our nation's ports, airports, rail, and roads. It will drive the creation of good-paying union jobs and grow the economy sustainably and equitably so that everyone gets ahead for decades to come. Combined with the President's Build Back Framework, it will add on average 1.5 million jobs per year for the next 10 years. It will improve transportation options for millions of Americans to reduce energy use and GHG emissions. It will increase investment in electric vehicle chargers and renewable energy production.

Executive Order on Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability. President Biden will sign an executive order that demonstrates how the United States will leverage its scale and procurement power to lead by example in tackling the climate crisis. The executive order will reduce emissions across federal operations, invest in American clean energy industries and manufacturing, and create clean, healthy, and resilient communities. The President's executive order directs the federal government to use its scale and procurement power to achieve five ambitious goals:

- 100 percent carbon pollution-free electricity (CFE) by 2030, at least half of which will be locally supplied clean energy to meet 24/7 demand;

- 100 percent zero-emission vehicle (ZEV) acquisitions by 2035, including 100 percent zero-emission light-duty vehicle acquisitions by 2027;
- Net-zero emissions from federal procurement no later than 2050, including a Buy Clean policy to promote use of construction materials with lower embodied emissions;
- A net-zero emissions building portfolio by 2045, including a 50 percent emissions reduction by 2032; and
- Net-zero emissions from overall federal operations by 2050, including a 65 percent emissions reduction by 2030.

Massachusetts v. EPA. In *Massachusetts v. EPA* (April 2007), the U.S. Supreme Court directed the EPA administrator to determine whether GHG emissions from new motor vehicles cause or contribute to air pollution that may reasonably be anticipated to endanger public health or welfare, or whether the science is too uncertain to make a reasoned decision. In December 2009, the administrator signed a final rule with the following two distinct findings regarding GHGs under Section 202(a) of the federal Clean Air Act:

- The Administrator found that elevated concentrations of GHGs—CO_2, CH_4, N_2O, HFCs, PFCs, and SF_6—in the atmosphere threaten the public health and welfare of current and future generations. This is the "endangerment finding."
- The Administrator further found the combined emissions of GHGs—CO_2, CH_4, N_2O, and HFCs—from new motor vehicles and new motor vehicle engines contribute to the GHG air pollution that endangers public health and welfare. This is the "cause or contribute finding."

These two findings were necessary to establish the foundation for regulation of GHGs from new motor vehicles as air pollutants under the Clean Air Act.

Energy Independence and Security Act. The Energy Independence and Security Act of 2007 (December 2007), among other key measures, would do the following, which would aid in the reduction of national GHG emissions:

1. Increase the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard requiring fuel producers to use at least 36 billion gallons of biofuel in 2022.
2. Set a target of 35 miles per gallon for the combined fleet of cars and light trucks by model year 2020 and direct National Highway Traffic Safety Administration (NHTSA) to establish a fuel economy program for medium- and heavy-duty trucks and create a separate fuel economy standard for work trucks.
3. Prescribe or revise standards affecting regional efficiency for heating and cooling products and procedures for new or amended standards, energy conservation, energy efficiency labeling for consumer electronic products, residential boiler efficiency, electric motor efficiency, and home appliances.

Federal Vehicle Standards.

In August 2016, EPA and NHTSA announced the adoption of the phase two program related to the fuel economy and GHG standards for medium- and heavy-duty trucks. The phase two program will apply to vehicles with model year 2018–2027 for certain trailers, and model years 2021–2027 for semi-trucks, large pickup trucks, vans, and all types and sizes of buses and work trucks. The final standards are expected to lower CO_2 emissions by

approximately 1.1 billion MT and reduce oil consumption by up to 2 billion barrels over the lifetime of the vehicles sold under the program (EPA and NHTSA 2016).

On September 27, 2019, EPA and NHTSA published the "Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule Part One: One National Program." (84 Fed. Reg. 51,310), which became effective November 26, 2019. The Part One Rule revokes California's authority to set its own GHG emissions standards and set zero-emission vehicle mandates in California. The Part One Rule also impacted some of the underlying assumptions in the CARB EMFAC2014 and EMFAC2017 models for criteria air pollutant emissions from gasoline light-duty vehicles, which CARB released off-model adjustment factors for EMFAC's criteria air pollutants estimation on November 20, 2019, primarily for use in federal Clean Air Act conformity demonstration analyses. CARB expects Part Two of these regulations to be adopted by the EPA and NHTSA later in the fall of 2019. However, because CARB does not know the full impacts of these rules until Part Two is released, no off-model adjustments factors are available for GHG emissions at this time. In addition, the EMFAC off-model adjustments have not yet been incorporated into CalEEMod. This issue is evolving as California and 22 other states, as well as the District of Columbia and two cities, filed suit against the EPA over the vehicle waiver revocation on November 15, 2019 and a petition for reconsideration of the rule was filed on November 26, 2019 by California and 22 other states, the District of Columbia, and four cities. On April 22, 2021, NHTSA issued a notice of proposed rulemaking that would repeal those portions of SAFE 1 (including the regulatory text and interpretive statements in the preamble) that found California's GHG and ZEV mandates preempted by EPCA. One day after NHTSA issued its notice, EPA announced its parallel action on SAFE 1. On December 21, 2021, after reviewing all the public comments submitted on NHTSA's April 2021 Notice of Proposed Rulemaking, NHTSA finalizes the CAFE Preemption rulemaking to withdraw its portions of the so-called SAFE I Rule.

3.2.2 State

The statewide GHG emissions regulatory framework is summarized below by category: state climate change targets, building energy, renewable energy and energy procurement, mobile sources, solid waste, water, and other state regulations and goals. The following text describes executive orders, legislation, regulations, and other plans and policies that would directly or indirectly reduce GHG emissions and/or address climate change issues.

State Climate Change Targets

Executive Order S-3-05. Executive Order (EO) S-3-05 (June 2005) established the following statewide goals: GHG emissions should be reduced to 2000 levels by 2010, GHG emissions should be reduced to 1990 levels by 2020, and GHG emissions should be reduced to 80% below 1990 levels by 2050.

Assembly Bill 32. In furtherance of the goals established in EO S-3-05, the legislature enacted AB 32 (Núñez and Pavley). The bill is referred to as the California Global Warming Solutions Act of 2006 (September 27, 2006). AB 32 provided initial direction on creating a comprehensive multiyear program to limit California's GHG emissions at 1990 levels by 2020 and initiate the transformations required to achieve the state's long-range climate objectives.

Executive Order B-55-18. EO B-55-18 (September 2018) establishes a statewide policy for the state to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net negative emissions thereafter. The goal is an addition to the existing statewide targets of reducing the state's GHG emissions. CARB will work with

relevant state agencies to ensure that future scoping plans identify and recommend measures to achieve the carbon neutrality goal.

California Air Resources Board's Climate Change Scoping Plan. One specific requirement of AB 32 was for CARB to prepare a scoping plan for achieving the maximum technologically feasible and cost-effective GHG emission reductions by 2020 (Health and Safety Code Section 38561[a]), and to update the plan at least once every 5 years. In 2008, CARB approved the first scoping plan. The Climate Change Scoping Plan: A Framework for Change (Scoping Plan) included a mix of recommended strategies that combined direct regulations, market-based approaches, voluntary measures, policies, and other emission reduction programs calculated to meet the 2020 statewide GHG emissions limit and initiate the transformations needed to achieve the state's long-range climate objectives. The key elements of the Scoping Plan include the following (CARB 2008):

1. Expanding and strengthening existing energy efficiency programs, as well as building and appliance standards.
2. Achieving a statewide renewable energy mix of 33%.
3. Developing a California cap-and-trade program that links with other Western Climate Initiative partner programs to create a regional market system and caps sources contributing 85% of California's GHG emissions.
4. Establishing targets for transportation-related GHG emissions for regions throughout California, and pursuing policies and incentives to achieve those targets.
5. Adopting and implementing measures pursuant to existing state laws and policies, including California's clean car standards, goods movement measures, and the Low Carbon Fuel Standard (17 CCR 95480 et seq.).
6. Creating targeted fees, including a public goods charge on water use, fees on high GWP gases, and a fee to fund the administrative costs of the State of California's long-term commitment to AB 32 implementation.

The Scoping Plan also identified local governments as essential partners in achieving California's goals to reduce GHG emissions because they have broad influence and, in some cases, exclusive authority over activities that contribute to significant direct and indirect GHG emissions through their planning and permitting processes, local ordinances, outreach and education efforts, and municipal operations. Specifically, the Scoping Plan encouraged local governments to adopt a reduction goal for municipal operations, and for community emissions to reduce GHGs by approximately 15% from then levels (2008) by 2020. Many local governments developed community-scale local GHG reduction plans based on this Scoping Plan recommendation.

In 2014, CARB approved the first update to the Scoping Plan. The First Update to the Climate Change Scoping Plan: Building on the Framework (First Update) defined the state's GHG emission reduction priorities for the next 5 years, and laid the groundwork to start the transition to the post-2020 goals set forth in EO S-3-05 and EO B-16-2012. The First Update concluded that California is on track to meet the 2020 target but recommended a 2030 mid-term GHG reduction target be established to ensure a continuum of action to reduce emissions. The First Update recommended a mix of technologies in key economic sectors to reduce emissions through 2050, including energy demand reduction through efficiency and activity changes; large-scale electrification of on-road vehicles, buildings, and industrial machinery; decarbonizing electricity and fuel supplies; and the rapid market penetration of efficient and clean energy technologies. As part of the First Update, CARB recalculated the state's 1990 emissions level, using more recent GWPs identified by the IPCC, from 427 MMT CO_2e to 431 MMT CO_2e (CARB 2014).

In 2015, as directed by EO B-30-15 (discussed below), CARB began working on an update to the Scoping Plan to incorporate the 2030 target of 40% below 1990 levels by 2030 to keep California on its trajectory toward meeting or exceeding the long-term goal of reducing GHG emissions to 80% below 1990 levels by 2050 as set forth in EO S-3-05. The governor called on California to pursue a new and ambitious set of strategies, in line with the five climate change pillars from his inaugural address, to reduce GHG emissions and prepare for the unavoidable impacts of climate change. In the summer of 2016, the legislature affirmed the importance of addressing climate change through passage of SB 32.

In December 2017, CARB adopted California's 2017 Climate Change Scoping Plan (2017 Scoping Plan) for public review and comment (CARB 2017b). The 2017 Scoping Plan builds on the successful framework established in the initial Scoping Plan and First Update while identifying new, technologically feasible and cost-effective strategies that will serve as the framework to achieve the 2030 GHG target as established by SB 32 and define the state's climate change priorities to 2030 and beyond. The strategies' commitments include implementing renewable energy and energy efficiency strategies (including the mandates of SB 350), increasing stringency of the Low Carbon Fuel Standard, implementing measures identified in the Mobile Source and Freight Strategies, implementing measures identified in the proposed Short-Lived Climate Pollutant Reduction Strategy, and increasing stringency of SB 375 targets. To fill the gap in additional reductions needed to achieve the 2030 target, it recommends continuing the Cap-and-Trade Program.

For local governments, the 2017 Scoping Plan replaced the initial Scoping Plan's 15% reduction goal with a recommendation to aim for a community-wide goal of no more than 6 MT CO_2e per capita by 2030, and no more than 2 MT CO_2e per capita by 2050, which are consistent with the state's long-term goals. These goals are also consistent with the Under 2 Memorandum of Understanding (Under 2 2016) and the Paris Agreement, which are developed around the scientifically based levels necessary to limit global warming to below 2°C. The 2017 Scoping Plan recognized the benefits of local government GHG planning (e.g., through CAPs) and provided more information regarding tools CARB is working on to support those efforts. It also recognized the CEQA streamlining provisions for project-level review where there is a legally adequate CAP.

The Scoping Plan recommends strategies for implementation at the statewide level to meet the goals of AB 32, SB 32, and the executive orders, and establishes an overall framework for the measures that will be adopted to reduce California's GHG emissions. A project is considered consistent with the statutes and executive orders if it meets the general policies in reducing GHG emissions to facilitate the achievement of the state's goals and does not impede attainment of those goals. A project would be consistent if it will further the objectives and not obstruct their attainment.

CARB presently is preparing the *2022 Scoping Plan Update*, which will assess progress towards achievement of the state's 2030 reduction target and lay out a path for the state's achievement of carbon neutrality by 2045. CARB has held a number of public workshops to provide information on the plan update and solicit feedback from stakeholders. A draft plan has not yet been released for public review and comment.

Executive Order B-30-15. EO B-30-15 (April 2015) identified an interim GHG reduction target in support of targets previously identified under EO S-3-05 and AB 32. EO B-30-15 specifically set an interim target goal of reducing statewide GHG emissions to 40% below 1990 levels by 2030 to keep California on its trajectory toward meeting or exceeding the long-term goal of reducing statewide GHG emissions to 80% below 1990 levels by 2050, as set forth in EO S-3-05. To facilitate achievement of this goal, EO B-30-15 called for an update to CARB's Scoping Plan to express the 2030 target in terms of MMT CO_2e. The executive order also called for state agencies to continue

to develop and implement GHG emissions reduction programs in support of the reduction targets. Sector-specific agencies in transportation, energy, water, and forestry were required to prepare GHG reduction plans by September 2015, followed by a report on action taken in relation to these plans in June 2016. EO B-30-15 did not require local agencies to take any action to meet the new interim GHG reduction target.

Senate Bill 32 and Assembly Bill 197. SB 32 and AB 197 (enacted in 2016) are companion bills that set a new statewide GHG reduction targets, made changes to CARB's membership and increased legislative oversight of CARB's climate change-based activities, and expanded dissemination of GHG and other air-quality-related emissions data to enhance transparency and accountability. More specifically, SB 32 codified the 2030 emissions reduction goal of EO B-30-15 by requiring CARB to ensure that statewide GHG emissions are reduced to 40% below 1990 levels by 2030. AB 197 established the Joint Legislative Committee on Climate Change Policies, consisting of at least three members of the Senate and three members of the Assembly to provide ongoing oversight over implementation of the state's climate policies. AB 197 also added two members of the Legislature to CARB as nonvoting members; requires CARB to make available and update (at least annually via its website) emissions data for GHGs, criteria air pollutants, and TACs from reporting facilities; and requires CARB to identify specific information for GHG emissions reduction measures when updating the Scoping Plan.

Senate Bill 605 and Senate Bill 1383. SB 605 (2014) required CARB to complete a comprehensive strategy to reduce emissions of short-lived climate pollutants in the state, and SB 1383 (2016) required CARB to approve and implement that strategy by January 1, 2018. SB 1383 also established specific targets for the reduction of short-lived climate pollutants (40% below 2013 levels by 2030 for CH_4 and HFCs, and 50% below 2013 levels by 2030 for anthropogenic black carbon), and provided direction for reductions from dairy and livestock operations and landfills. The Short-Lived Climate Pollutants Reduction Strategy was approved by CARB in March 2017, and lays out a range of options to reduce short-lived climate pollutant emissions in California, including regulations, incentives, and other market-supporting activities.

Building Energy

Title 24, Part 6. Title 24 of the California Code of Regulations was established in 1978 and serves to enhance and regulate California's building standards. Although not initially promulgated to reduce GHG emissions, Part 6 of Title 24 specifically established Building Energy Efficiency Standards that are designed to ensure new and existing buildings in California achieve energy efficiency and preserve outdoor and indoor environmental quality. These energy efficiency standards are reviewed every few years by the Building Standards Commission and CEC, and revised if necessary (California Public Resources Code [PRC] Section 25402[b][1]). The regulations receive input from members of industry and the public, with the goal of "reducing of wasteful, uneconomic, inefficient, or unnecessary consumption of energy" (PRC Section 25402). These regulations are carefully scrutinized and analyzed for technological and economic feasibility (PRC Section 25402[d]) and cost effectiveness (PRC Sections 25402[b][2] and [b][3]). As a result, these standards save energy, increase electricity supply reliability, increase indoor comfort, avoid the need to construct new power plants, and help preserve the environment.

The 2019 Title 24 standards are the currently applicable building energy efficiency standards, and became effective on January 1, 2020. The 2019 Title 24 Building Energy Efficiency Standards will further reduce energy used and associated GHG emissions compared to prior standards. In general, single-family residences built to the 2019 standards are anticipated to use approximately 7% less energy due to energy efficiency measures than those built to the 2016 standards; once rooftop solar electricity generation is factored in, single-family residences built under the 2019 standards will use approximately 53% less energy than those under the 2016 standards (CEC 2018). Nonresidential buildings built

to the 2019 standards are anticipated to use an estimated 30% less energy than those built to the 2016 standards (CEC 2018). The project is subject to the nonresidential standards due to the number of stories. The project's apartments and affordable flats are subject to the nonresidential standards while the rowhomes and villas are subject to the residential standards.

On August 11, 2021, the CEC adopted the 2022 Energy Code. In December 2021, it was approved by the California Building Standards Commission for inclusion into the California Building Standards Code. The 2022 Energy Code encourages efficient electric heat pumps, establishes electric-ready requirements for new homes, expands solar photovoltaic and battery storage standards, strengthens ventilation standards, and more. Buildings whose permit applications are applied for on or after January 1, 2023, must comply with the 2022 Energy Code.

Title 24, Part 11. In addition to the CEC's efforts, in 2008, the California Building Standards Commission adopted the nation's first green building standards. The California Green Building Standards Code (Part 11 of Title 24) is commonly referred to as California's Green Building Standards (CALGreen), and establishes minimum mandatory standards and voluntary standards pertaining to the planning and design of sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and interior air quality. The CALGreen standards took effect in January 2011 and instituted mandatory minimum environmental performance standards for all ground-up, new construction of commercial, low-rise residential and state-owned buildings, schools, and hospitals. The CALGreen 2019 standards, which are the current standards, became effective January 1, 2020.

Title 20. Title 20 of the California Code of Regulations requires manufacturers of appliances to meet state and federal standards for energy and water efficiency. Performance of appliances must be certified through the CEC to demonstrate compliance with standards. New appliances regulated under Title 20 include refrigerators, refrigerator-freezers, and freezers; room air conditioners and room air-conditioning heat pumps; central air conditioners; spot air conditioners; vented gas space heaters; gas pool heaters; plumbing fittings and plumbing fixtures; fluorescent lamp ballasts; lamps; emergency lighting; traffic signal modules; dishwaters; clothes washers and dryers; cooking products; electric motors; low voltage dry-type distribution transformers; power supplies; televisions and consumer audio and video equipment; and battery charger systems. Title 20 presents protocols for testing for each type of appliance covered under the regulations, and appliances must meet the standards for energy performance, energy design, water performance, and water design. Title 20 contains three types of standards for appliances: federal and state standards for federally regulated appliances, state standards for federally regulated appliances, and state standards for non-federally regulated appliances.

Assembly Bill 1109. Enacted in 2007, AB 1109 required the CEC to adopt minimum energy efficiency standards for general-purpose lighting to reduce electricity consumption by 50% for indoor residential lighting and by 25% for indoor commercial lighting.

SB 1. SB 1 (Murray) (August 2006) established a $3 billion rebate program to support the goal of the state to install rooftop solar energy systems with a generation capacity of 3,000 megawatts through 2016. SB 1 added sections to the Public Resources Code, including Chapter 8.8 (California Solar Initiative), that require building projects applying for ratepayer-funded incentives for photovoltaic systems to meet minimum energy efficiency levels and performance requirements. Section 25780 established that it is a goal of the state to establish a self-sufficient solar industry. The goals included establishing solar energy systems as a viable mainstream option for homes and businesses within 10 years of adoption, and placing solar energy systems on 50% of new

homes within 13 years of adoption. SB 1, also termed "Go Solar California," was previously titled "Million Solar Roofs."

California AB 1470 (Solar Water Heating). This bill established the Solar Water Heating and Efficiency Act of 2007. AB 1470 makes findings and declarations of the Legislature relating to the promotion of solar water heating systems and other technologies that reduce natural gas demand. AB 1470 defines several terms for purposes of the act. The bill required a commission to evaluate the data available from a specified pilot program, and to design and implement a program of incentives for the installation of 200,000 solar water heating systems in homes and businesses throughout the state by 2017.

Renewable Energy and Energy Procurement. SB 1078 (2002) established the Renewables Portfolio Standard (RPS) program, which requires an annual increase in renewable generation by the utilities. Initially, the RPS required utilities to obtain 20% of their power from renewable sources by 2010. SB X1-2 (2011) subsequently expanded the RPS by establishing that 33% of the total electricity sold to retail customers in California per year by December 31, 2020, and in subsequent years, be secured from qualifying renewable energy sources. SB 350 (2015) further expanded the RPS by establishing that 50% of the total electricity sold to retail customers in California per year by December 31, 2030, be secured from qualifying renewable energy sources. And SB 100 (2018) further accelerated the RPS, requiring achievement of a 50% RPS by December 31, 2026, and a 60% RPS by December 31, 2030. SB 100 also established a new state policy goal that calls for eligible renewable energy resources and zero-carbon resources to supply 100% of electricity retail sales and 100% of electricity procured to serve all state agencies by December 31, 2045.

Under the program, a renewable electrical generation facility is one that uses biomass, solar thermal, photovoltaic, wind, geothermal, fuel cells using renewable fuels, small hydroelectric generation of 30 megawatts or less, digester gas, municipal solid waste conversion, landfill gas, ocean wave, ocean thermal, or tidal current, and that meets other specified requirements with respect to its location.

Mobile Sources

CARB's Mobile Source Strategy. On May 16, 2016, CARB released the 2016 Mobile Source Strategy that demonstrates how the state can simultaneously meet air quality standards, achieve GHG emission reduction targets, decrease health risk from transportation emissions, and reduce petroleum consumption over the next fifteen years. The actions contained in the 2016 Mobile Source Strategy will deliver broad environmental and public health benefits, as well as support much needed efforts to modernize and upgrade transportation infrastructure, enhance system-wide efficiency and mobility options, and promote clean economic growth in the mobile sector. The 2016 Mobile Source Strategy would also result in a 45 percent reduction in GHG emissions, and a 50 percent reduction in the consumption of petroleum-based fuels (CARB 2016).

On October 28, 2021, CARB received and heard the 2020 Mobile Source Strategy, which continues and builds upon the foundation established by the 2016 Mobile Source Strategy. The 2020 Mobile Source Strategy, if implemented, would achieve a 76 percent reduction in GHG emissions from 2020 levels from mobile sources by 2045, as largely attributable to transitioning towards a zero-emissions fleet. Moving forward, CARB anticipates that the programs and concepts in the 2020 Mobile Source Strategy will be incorporated into other aspects of CARB's regulatory and planning frameworks.

State Vehicle Standards. AB 1493 (July 2002) was enacted in response to the transportation sector accounting for more than one-half of California's CO_2 emissions. AB 1493 required CARB to set GHG emission standards for

passenger vehicles, light-duty trucks, and other vehicles determined by the state board to be vehicles that are primarily used for noncommercial personal transportation in the state. AB 1493 required that CARB set GHG emission standards for motor vehicles manufactured in 2009 and all subsequent model years. CARB adopted the standards in September 2004.

As explained under the "Federal Vehicle Standards" description above, the EPA and NHTSA approved the SAFE Vehicles Rule Part One and Two, which revoked California's authority to set its own GHG emissions standards and set zero-emission vehicle mandates in California. Because the EPA rule is the subject of pending legal challenges, and because President Biden issued an executive order to review Part One and Part Two, this analysis used the best available information at this time, as set forth in EMFAC and assumed in CalEEMod.

The Advanced Clean Cars program (January 2012) is an emissions-control program for model years 2015 through 2025. The program combines the control of smog- and soot-causing pollutants and GHG emissions into a single coordinated package. The package includes elements to reduce smog-forming pollution, reduce GHG emissions, promote clean cars, and provide the fuels for clean cars. To improve air quality, CARB implemented new emission standards to reduce smog-forming emissions beginning with 2015 model year vehicles. It is estimated that by 2025, cars will emit 75% less smog-forming pollution than the average new car sold in 2012. To reduce GHG emissions, CARB, in conjunction with the EPA and NHTSA, adopted new GHG standards for model year 2017 to 2025 vehicles; the new standards are estimated to reduce GHG emissions by 34% in 2025. The zero-emissions vehicle (ZEV) program will act as the focused technology of the Advanced Clean Cars program by requiring manufacturers to produce increasing numbers of ZEVs and plug-in hybrid electric vehicles in the 2018 to 2025 model years.

Executive Order S-1-07. Issued on January 18, 2007, EO S-1-07 sets a declining Low Carbon Fuel Standard for GHG emissions measured in CO_2e grams per unit of fuel energy sold in California. The initial target of the Low Carbon Fuel Standard was to reduce the carbon intensity of California passenger vehicle fuels by at least 10% by 2020. The Low Carbon Fuel Standard was subsequently amended in 2018 to require a 20% reduction in carbon intensity by 2030. This new requirement aligns with the California's overall 2030 target of reducing climate changing emissions to 40% below 1990 levels by 2030, set by SB 32. CARB has adopted implementing regulations for both the 10% and 20% carbon intensity reduction targets.

Senate Bill 375. SB 375 (2008) addresses GHG emissions associated with the transportation sector through regional transportation and sustainability plans. SB 375 required CARB to adopt regional GHG reduction targets for the automobile and light-truck sector for 2020 and 2035. Regional metropolitan planning organizations are then responsible for preparing a Sustainable Communities Strategy (SCS) within their Regional Transportation Plan (RTP). The goal of the SCS is to establish a forecasted development pattern for the region that, after considering transportation measures and policies, will achieve, if feasible, the GHG reduction targets. If an SCS is unable to achieve the GHG reduction target, a metropolitan planning organization must prepare an Alternative Planning Strategy demonstrating how the GHG reduction target would be achieved through alternative development patterns, infrastructure, or additional transportation measures or policies.

Pursuant to California Government Code Section 65080(b)(2)(K), an SCS does not regulate the use of land; supersede the land use authority of cities and counties; or require that a city's or county's land use policies and regulations, including those in a general plan, be consistent with it. Nonetheless, SB 375 makes regional and local planning agencies responsible for developing those strategies as part of the federally required metropolitan transportation planning process and the state-mandated housing element process.

In 2010, CARB adopted the SB 375 targets for the regional metropolitan planning organizations. The targets adopted for SANDAG in 2010 are a 7% reduction in per-capita passenger-vehicle GHG emissions by 2020 and a 13% reduction by 2035, measured relative to 2005 GHG emissions. In 2018, CARB adopted the second round of SB 375 reduction targets, and increased SANDAG's 2020 target to a 15% reduction in per-capita passenger-vehicle GHG emissions, and the 2035 target to a 19% reduction using the same 2005 baseline.

Senate Bill 350. In 2015, SB 350 – the Clean Energy and Pollution Reduction Act – was enacted into law. As one of its elements, SB 350 establishes a statewide policy for widespread electrification of the transportation sector, recognizing that such electrification is required for achievement of the state's 2030 and 2050 reduction targets (see California Public Utilities Code, Section 740.12).

AB 1236. AB 1236 (October 2015) (Chiu) required a city, county, or city and county to approve an application for the installation of electric vehicle charging stations, as defined, through the issuance of specified permits unless the city or county makes specified written findings based on substantial evidence in the record that the proposed installation would have a specific, adverse impact upon the public health or safety, and there is no feasible method to satisfactorily mitigate or avoid the specific, adverse impact. AB 1236 provided for appeal of that decision to the planning commission, as specified. The bill provided that the implementation of consistent statewide standards to achieve the timely and cost-effective installation of electric vehicle charging stations is a matter of statewide concern. The bill required electric vehicle charging stations to meet specified standards. AB 1236 required a city, county, or city and county with a population of 200,000 or more residents to adopt an ordinance, by September 30, 2016, that created an expedited and streamlined permitting process for electric vehicle charging stations. The bill also required a city, county, or city and county with a population of fewer than 200,000 residents to adopt this ordinance by September 30, 2017.

Executive Order B-16-12. EO B-16-12 (2012) directs state entities under the Governor's direction and control to support and facilitate development and distribution ZEVs. On a statewide basis, EO B-16-12 also establishes a GHG emissions reduction target from the transportation sector equaling 80% less than 1990 levels by 2050. In furtherance of this executive order, the Governor convened an Interagency Working Group on ZEVs that has published multiple reports regarding the progress. It ordered CARB, CEC, the California Public Utilities Commission, and other relevant agencies to work with the Plug-In Electric Vehicle Collaborative and the California Fuel Cell Partnership to establish benchmarks to help achieve goals by 2015, 2020, and 2025. This directive did not apply to vehicles that have special performance requirements necessary for the protection of the public safety and welfare.

Executive Order N-79-20. EO N-79-20 (2020) sets the goal for the State that 100 percent of in-state sales of new passenger cars and trucks will be zero-emission by 2035. EO-N-79-20 also sets goals for transition to 100 percent zero emission all medium- and heavy-duty vehicles by 2045, zero emission drayage trucks by 2035, and zero emission off-road vehicles and equipment by 2035, where feasible. Among other directives to further this executive order, for passenger cars and trucks, the Governor directed CARB to develop and propose regulations requiring increasing volumes of new zero-emission vehicles sold in the State towards the target of 100 percent of in-state sales by 2035. The Governor also directed the Governor's Office of Business and Economic Development to develop a Zero-Emissions Vehicle Market Development Strategy, which was completed in February 2021[7]. The executive order also directs updates and assessments to ensure zero-emission vehicle infrastructure is in place to support the levels of electric vehicle adoption required by the order.

[7] https://static.business.ca.gov/wp-content/uploads/2021/02/ZEV_Strategy_Feb2021.pdf

Small Offroad Engines

The CARB approved a measure on December 9, 2021 that will require most newly manufactured small off-road engines such as those found in leaf blowers, lawn mowers and other equipment be zero emission starting in 2024. Portable generators, including those in recreational vehicles, would be required to meet more stringent standards in 2024 and meet zero-emission standards starting in 2028.

Solid Waste

AB 939 and AB 341. In 1989, AB 939, known as the Integrated Waste Management Act (PRC Sections 40000 et seq.), was passed because of the increase in waste stream and decrease in landfill capacity. The statute established the California Integrated Waste Management Board, which oversees a disposal reporting system. AB 939 mandated a reduction of waste being disposed of where jurisdictions were required to meet diversion goals of all solid waste through source reduction, recycling, and composting activities of 25% by 1995 and 50% by 2000.

AB 341 (Chapter 476, Statutes of 2011 [Chesbro]) amended the California Integrated Waste Management Act of 1989 to include a provision declaring that it is the policy goal of the state that not less than 75% of solid waste generated be source-reduced, recycled, or composted by 2020, and annually thereafter. In addition, AB 341 required the California Department of Resources Recycling and Recovery (CalRecycle) to develop strategies to achieve the state's policy goal. CalRecycle conducted several general stakeholder workshops and several focused workshops, and in August 2015 published a discussion document titled AB 341 Report to the Legislature, which identified five priority strategies that CalRecycle believed would assist the state in reaching the 75% goal by 2020, legislative and regulatory recommendations, and an evaluation of program effectiveness (CalRecycle 2012).

SB 1383. Beginning in 2022, SB 1383 requires every jurisdiction to provide organic waste collection services to all residents and businesses. Jurisdictions can select from a variety of organic waste collection services to match their unique communities and local infrastructure, while producing clean streams of organic feedstock that can be recycled into high-quality, marketable recycled products, including compost, renewable natural gas, electricity, and paper. Jurisdictions will educate all residents and businesses about collection requirements, including what materials to put in curbside bins. Education to residents and businesses may vary by jurisdiction and educational content may be provided electronically, through hard copy materials, or through direct outreach.

Water

Executive Order B-29-15. In response to the ongoing drought in California, EO B-29-15 (April 2015) set a goal of achieving a statewide reduction in potable urban water usage of 25% relative to water use in 2013. The term of the executive order extended through February 28, 2016, although many of the directives have since become permanent water-efficiency standards and requirements. The executive order includes specific directives that set strict limits on water usage in the state. In response to EO B-29-15, the California Department of Water Resources modified and adopted a revised version of the Model Water Efficient Landscape Ordinance that, among other changes, significantly increased the requirements for landscape water use efficiency and broadened its applicability to include new development projects with smaller landscape areas.

EO B-37-16. Issued May 2016, EO B-37-16 directed the State Water Resources Control Board to adjust emergency water conservation regulations through the end of January 2017 to reflect differing water supply

conditions across the state. The State Water Resources Control Board also developed a proposal to achieve a mandatory reduction of potable urban water usage that builds off the mandatory 25% reduction called for in EO B-29-15. The State Water Resources Control Board and Department of Water Resources will develop new, permanent water use targets that build on the existing state law requirements that the state achieve 20% reduction in urban water usage by 2020. EO B-37-16 also specifies that the State Water Resources Control Board permanently prohibit water-wasting practices such as hosing off sidewalks, driveways, and other hardscapes; washing automobiles with hoses not equipped with a shut-off nozzle; using non-recirculated water in fountains and other decorative water features; watering lawns in a manner that causes runoff, or within 48 hours after measurable precipitation; and irrigating ornamental turf on public street medians.

Other State Regulations and Goals

SB 97. SB 97 (Dutton) (August 2007) directed the Governor's Office of Planning and Research to develop guidelines under CEQA for the mitigation of GHG emissions. The California Natural Resources Agency (CNRA) then adopted the CEQA Guidelines amendments in December 2009, which became effective in March 2010. The CEQA Guidelines were subsequently amended in 2018, which changes became effective on December 28, 2018.

Under the amended CEQA Guidelines, a lead agency has the discretion to determine whether to use a quantitative or qualitative analysis or apply performance standards to determine the significance of GHG emissions resulting from a particular project (14 CCR 15064.4[a]). The CEQA Guidelines provide that a lead agency should also consider the extent to which a project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions (14 CCR 15064.4[b]). The CEQA Guidelines also allow a lead agency to consider feasible means of mitigating the significant effects of GHG emissions, including reductions in emissions through the implementation of project features; off-site measures, including offsets that are not otherwise required; measures in an existing plan or mitigation program; measures that sequester GHGs; etc. (14 CRR 15126.4[c]). The adopted amendments do not establish a GHG emissions threshold, instead allowing a lead agency to develop, adopt, and apply its own thresholds of significance or those developed by other agencies or experts (14 CCR 15064.7). The CEQA Guidelines also permit using environmental standards – i.e., an applicable and relevant quantitative, qualitative or performance requirement found in an ordinance, resolution, rule, regulation, order, plan or other environmental requirement that has been adopted for the purpose of environmental protection – as a threshold of significance to promote consistency in significance determinations (14 CCR 15064.7 [d]).

With respect to GHG emissions, the CEQA Guidelines state in Section 15064.4(a) that lead agencies should "make a good faith effort, to the extent possible on scientific and factual data, to describe, calculate or estimate" GHG emissions. The CEQA Guidelines note that an agency may identify emissions by either quantifying the emissions resulting from a project or by relying on "qualitative analysis or other performance-based standards" (14 CCR 15064.4[a]). Section 15064.4(b) states that the lead agency should focus on the reasonably foreseeable incremental contribution of the project's emissions to the effects of climate change. The analysis should consider a timeframe appropriate for the project, and must reasonably reflect evolving scientific knowledge and state regulatory schemes (14 CCR 15064.4[b]).

Section 15183.5 of the CEQA Guidelines allows agencies to tier from qualified GHG reduction plans developed in accordance with subsection (b). Specifically, the GHG reduction plan must quantify greenhouse gas emissions, both existing and projected over a specified time period, resulting from activities within a defined geographic area; establish a level, based on substantial evidence, below which the contribution to greenhouse gas emissions

from activities covered by the plan would not be cumulatively considerable; identify and analyze the greenhouse gas emissions resulting from specific actions or categories of actions anticipated within the geographic area; specify measures or a group of measures, including performance standards, that substantial evidence demonstrates, if implemented on a project-by-project basis, would collectively achieve the specified emissions level; establish a mechanism to monitor the plan's progress toward achieving the level and to require amendment if the plan is not achieving specified levels; and be adopted in a public process following environmental review.

Executive Order S-13-08. EO Order S-13-08 (November 2008) is intended to hasten California's response to the impacts of global climate change, particularly sea-level rise. Therefore, the executive order directs state agencies to take specified actions to assess and plan for such impacts. The final 2009 California Climate Adaptation Strategy report was issued in December 2009 (CNRA 2009b), an update, Safeguarding California: Reducing Climate Risk, followed in July 2014 (CNRA 2014) as well as in 2018, Safeguarding California Plan: 2018 Update California's Climate Adaptation Strategy (CNRA 2018). The draft 2021 California Climate Adaptation Strategy was released for public comment on October 18, 2021 and closed on November 17, 2021. To assess the state's vulnerability, the report summarizes key climate change impacts to the state for the following areas: agriculture, biodiversity and habitat, emergency management, energy, forestry, ocean and coastal ecosystems and resources, public health, transportation, and water.

3.2.3 Local

SANDAG RTP/SCS

SANDAG completed and adopted its 2050 RTP/SCS in October 2011. In November 2011, CARB, by resolution, accepted SANDAG's GHG emissions quantification analysis and determination that, if implemented, the SCS would achieve CARB's 2020 and 2035 GHG emissions reduction targets for the region.

In October 2015, SANDAG adopted San Diego Forward: The Regional Plan (SANDAG 2015). Like the 2050 RTP/SCS, San Diego Forward: Regional Plan meets CARB's 2020 and 2035 reduction targets for the region (SANDAG 2015). In December 2015, CARB, by resolution, accepted SANDAG's GHG emissions quantification analysis and determination that, if implemented, the SCS would achieve CARB's 2020 and 2035 GHG emissions reduction targets for the region.

The 2021 Regional Plan, adopted by SANDAG on December 10, 2021, provides a long-term blueprint for the San Diego region that seeks to meet regulatory requirements, address traffic congestion, and create equal access to jobs, education, healthcare, and other community resources (SANDAG 2021). The plan is the result of years of planning, data analysis, and community engagement to reimagine the San Diego region with a transformative transportation system, a sustainable pattern of growth and development, and innovative demand and management strategies.

The 2021 Regional Plan includes a Sustainable Communities Strategy (SCS), as required by California Senate Bill 375 (Steinberg, 2008) (SB 375), for the San Diego region. This SCS describes coordinated transportation and land use planning that exceeds the state's target for reducing per capita GHG emissions set by CARB. The state-mandated target is a 19% reduction—compared with 2005—in per capita GHG emissions from cars and light-duty trucks by 2035. The 2021 Regional Plan achieves a 20% reduction by then.

The 2021 Regional Plan also puts forth a forecasted development pattern that is driven by regional goals for sustainability, mobility, housing affordability, and economic prosperity.

City of San Marcos Climate Action Plan. The City adopted its currently applicable CAP on December 8, 2020 (City of San Marcos 2020b). The CAP acts as a roadmap to address challenges of climate change within the City. The CAP builds on the efforts and strategies identified in the City's 2013 CAP and establishes GHG emission reduction targets and identifies achievable, locally based actions to reduce GHG emissions from municipal and community activities. The CAP includes a baseline GHG emissions inventory for 2012, GHG emissions forecasts for 2020 and 2030, local GHG emissions reduction strategies and measures to help the City achieve the 2030 target, climate adaptation measures for the City, and implementation and monitoring mechanisms to ensure the City's measures and targets are achieved. The CAP establishes GHG emissions reduction goals of 4% below 2012 levels by 2020 and 42% below 2012 levels by 2030 (City of San Marcos 2020b).

The CAP was prepared in accordance with the requirements within CEQA Guidelines Section 15183.5, and the CAP Consistency Checklist is used in this analysis to evaluate the proposed project's significance with respect to GHG emissions. As provided in the Checklist, projects that are consistent with the CAP "may rely on the CAP for the cumulative impact analysis of GHG emissions" and "may be determined not to be cumulatively considerable" (City of San Marcos 2020b)

City of San Marcos General Plan. The City's General Plan (City of San Marcos 2012) includes various policies related to reducing GHG emissions. Applicable policies include the following:

Land Use and Community Design Element

Goal LU-1: Achieve a balanced distribution and compatible mix of land uses to meet the present and future needs of all residents and the business community.

Policy LU-1.1: Ensure that adjacent land uses complement one another by considering compatibility of activities, development patterns and architectural character elements and access to various mobility choices.

Goal LU-2 Promote development standards and land use patterns that encourage long-term environmental sustainability.

Policy LU-2.1: Promote compact development patterns that reduce air pollution and automobile dependence and facilitate walking, bicycling, and transit use.

Policy LU-2.3: Require the incorporation of green building practices, technologies, and strategies into development projects per code standards

Policy LU-2.5: Promote landscaping (e.g., native, drought tolerant plants) that minimizes demands on water supply.

Policy LU-2.7: Promote the instillation of trees to reduce the urban heat-island effect and green infrastructure to reduce storm water runoff.

Policy LU-3.1: Require that new development and redevelopment incorporate connections and reduce barriers between neighborhoods, transit corridors, and activity centers within the City.

Mobility Element

Policy M-1.3: Require new developments to prepare and implement Transportation Demand Management (TDM) programs to minimize vehicle trip generation and promote alternative modes of travel within the City.

Goal M-3: Promote and encourage use of alternative transportation modes, including transit, bicycles, neighborhood electric vehicles (NEVs), and walking, within the City.

Policy M-3.1: Develop an integrated, multimodal circulation system that accommodates transit, bicycles, pedestrians, and vehicles; provides opportunities to reduce air pollution and GHG emissions; and reinforces the role of the street as a public space that unites the City.

Conservation and Open Space Element

Goal COS-4: Improve regional air quality and reduce greenhouse gas emissions that contribute to climate change.

Policy COS-4.5: Encourage energy conservation and the use of alternative energy sources within the community.

Policy COS-4.6: Promote efficient use of energy and conservation of available resources in the design, construction, maintenance and operation of public and private facilities, infrastructure and equipment.

As detailed in response to Threshold #2 below, the project would be consistent with the applicable goals and policies pertaining to greenhouse gasses.

3.3 Significance Criteria and Methodology

3.3.1 Thresholds of Significance

The State of California has developed guidelines to address the significance of greenhouse gas emissions impacts that are contained in Appendix G of the CEQA Guidelines (14 CCR 15000 et seq.). Appendix G provides that a project would have a significant environmental impact if it would:

1. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment
2. Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

Neither the State of California nor the SDAPCD has adopted emission-based thresholds of significance for GHG emissions under CEQA.

The CEQA Guidelines provide that in determining the significance of impacts from GHG emissions, an agency may consider the extent to which the project complies with a local plan for the reduction or mitigation of GHG emissions. (See CEQA Guidelines Sections 15064.4(b)(3), 15183.5.). As indicated above, the City has adopted such a plan. Accordingly, for purposes of GHG Threshold 1, the project's GHG emissions are assessed by evaluating the project's consistency with the CAP, which is discussed below in detail.

For purposes of GHG Threshold 2, the project is assessed based on its potential to conflict with the City's CAP, SANDAG's Regional Plan, and CARB's Scoping Plan. The Regional Plan and Scoping Plan goals and measures are analyzed against the project as part of the consistency analysis. The potential for the project to conflict with these plans is addressed in detail below.

City of San Marcos Climate Action Plan Significance Criteria

The City adopted an updated CAP on December 8, 2020. The CAP outlines strategies and measures that the City will undertake to achieve its proportional share of State GHG emissions reduction targets. The CAP is a plan for the reduction of GHG emissions in accordance with California Environmental Quality Act (CEQA) Guidelines Section 15183.5. Pursuant to CEQA Guidelines Sections 15064(h)(3), 15130(d), and 15183(b), a project's incremental contribution to a cumulative GHG emissions effect may be determined not to be cumulatively considerable if it complies with the requirements of the CAP. The City has also developed a CAP Consistency Checklist (Checklist), in conjunction with the CAP, to provide a streamlined review process for proposed new development projects that are subject to discretionary review and trigger environmental review pursuant to CEQA. A GHG screening threshold of 500 MT CO_2e per year is established for new development projects in order to determine if a project would need to demonstrate consistency with the CAP through the Checklist. Projects that are projected to emit fewer than 500 MT CO_2e annually would not make a considerable contribution to the cumulative impact of climate change and would not need to provide additional analysis to demonstrate consistency with the CAP. For proposed projects at or above the screening threshold of 500 MT CO_2e, applicants are required to complete the CAP Consistency Checklist, which is meant to provide a streamlined review process for proposed new development projects that are subject to discretionary review and require environmental review pursuant to CEQA. A properly completed Checklist documents how a proposed project complies with the CAP, and in so doing, demonstrates that the project's contribution to climate change impacts is not cumulatively considerable. The City also developed a service population threshold for the CAP to show that projects are consistent with GHG reduction measures. The City determined that a GHG threshold of 2.1 MT CO_2e per service population per year (SP/yr) would be consistent with GHG emissions within the CAP.

3.3.2 Approach and Methodology

3.3.2.1 Construction

CalEEMod Version 2020.4.0 was used to estimate potential project-generated GHG emissions during construction. Construction of the project would result in GHG emissions primarily associated with use of off-road construction equipment, on-road hauling and vendor (material delivery) trucks, and worker vehicles. All details for construction criteria air pollutants discussed in Section 2.4.2, Approach and Methodology (including Section 2.4.2.1, Construction), are also applicable for the estimation of construction-related GHG emissions. As such, see Section 2.4.2.1 for a discussion of project-generated construction emissions calculation methodology and assumptions.

Existing Land Use Designation

To compare the GHG emissions intensity of the proposed project and the land use built under the existing land use designation, the following section summarizes the construction methodology for the existing land use designation. Construction assumptions, including timing, phasing, equipment type and quantity, and worker and

vendor truck trips, were based on the maximum allowed buildout of the existing land use designation for the site. For the Commercial (C) zoning, consistent with existing land use alternative, it would include a 69,000 square feet of grocery store and gas station uses, as well as 23,000 square feet of office space. This alternative would include 276 parking spaces. An assumption of 10 fueling positions (5 pumps) was made for calculation purposes.

Default values provided by CalEEMod were used where zoning information was not available. For purposes of estimating GHG emissions, it was assumed that construction of the land use built under the existing land use designation would commence in December 2023[8] and would end in December 2024. Construction of the land use built under the existing land use designation is anticipated to occur in five phases. Accordingly, five phases consisting of site preparation, grading, building construction, paving, and architectural coating were assumed. The analysis contained herein is based on the following assumptions (the duration of phases is approximate):

- Site Preparation: 1 week (December 2023)
- Grading: 1 week (December 2023)
- Building Construction: 11 months (December 2023 – November 2024)
- Paving: 1 month (November 2024)
- Architectural Coating: 1 month (December 2024)

The construction equipment mix used for estimating the construction emissions of the existing land use designation is based on CalEEMod defaults and is shown in Table 12, Construction Scenario Assumptions – Existing Land Use Designation. For worker and vendor truck trips, the default CalEEMod assumptions for one-way trips were rounded up to the nearest even number to account for whole round trips. For this analysis, it was generally assumed that heavy construction equipment would operate 5 days a week (22 days per month) during project construction. Grading activities were anticipated to be minimal for the land use built under the existing land use designation; therefore, no haul trucks would be required to import or export material.

Table 12. Construction Scenario Assumptions – Existing Land Use Designation

Construction Phase	One-Way Trips			Equipment	Quantity	Hours Per Day
	Daily Workers	Daily Vendor Trucks	Total Haul Trucks			
Site Preparation	18	0	0	Rubber Tired Dozers	3	8
				Tractors/Loaders/Backhoes	4	8
Grading	16	0	0	Excavators	1	8
				Graders	1	8
				Rubber Tired Dozers	1	8
				Tractors/Loaders/Backhoes	3	8
Building Construction	76	34	0	Cranes	1	7
				Forklifts	3	8

[8] The analysis assumes a construction start date of June 2023, which represents the earliest date construction would initiate (although unlikely). Assuming the earliest start date for construction represents the worst-case scenario for emissions because equipment and vehicle emission factors for later years would be slightly less due to more stringent standards for in-use off-road equipment and heavy-duty trucks, as well as fleet turnover replacing older equipment and vehicles in later years.

Table 12. Construction Scenario Assumptions – Existing Land Use Designation

Construction Phase	One-Way Trips			Equipment	Quantity	Hours Per Day
	Daily Workers	Daily Vendor Trucks	Total Haul Trucks			
				Generator Sets	1	8
				Tractors/Loaders/Backhoes	3	7
				Welders	1	8
Paving	20	0	0	Cement and Mortar Mixers	2	6
				Pavers	1	8
				Paving Equipment	2	6
				Rollers	2	6
				Tractors/Loaders/Backhoes	1	8
Architectural Coating	16	0	0	Air Compressors	1	6

Note: See Appendix A.

3.3.2.2 Operation

Existing Land Use Designation

Similar to construction, emissions from the operational phase of the existing land use designation and project were estimated using CalEEMod. Operational year 2030 was assumed consistent with Appendix D of the City's CAP (City of San Marcos 2020).

Area Sources

CalEEMod was used to estimate operational emissions from area sources, including emissions from landscape maintenance equipment. Emissions associated with natural gas usage in space heating and water heating were calculated in the building energy use module of CalEEMod, as described in the following text.

Landscape maintenance includes fuel combustion emissions from equipment such as lawn mowers, rototillers, shredders/grinders, blowers, trimmers, chainsaws, and hedge trimmers. The emissions associated with landscape equipment use were estimated based on CalEEMod default values for emission factors (grams per square foot of building space per day) and number of summer days (when landscape maintenance would generally be performed) and winter days. Based on CalEEMod defaults for the County, the average annual number of summer days is estimated at 180 days (CAPCOA 2021).

Energy Sources

CalEEMod default values for electricity use and natural gas consumption for each land use type (industrial park) were applied for the existing land use designation. The energy use from commercial and industrial land uses is calculated in CalEEMod based on the Commercial End-Use Survey (CAPCOA 2021). Energy use in buildings (both natural gas and electricity) is divided by CalEEMod into end-use categories subject to Title 24 requirements (end uses associated with the building envelope, such as the HVAC system, water heating system, and integrated

lighting) and those not subject to Title 24 requirements (such as appliances, electronics, and miscellaneous "plug-in" uses).

Operational GHG emissions from energy sources include natural gas combustion for appliances and space and water heating. The current Title 24, Part 6 standards, referred to as the 2019 Title 24 Building Energy Efficiency Standards, became effective on January 1, 2020. The current version of CalEEMod assumes compliance with the 2019 Title 24 Building Energy Efficiency Standards (CAPCOA 2021).

CalEEMod default energy intensity factors (CO_2, CH_4, and N_2O mass emissions per kilowatt hour) for SDG&E were based on the value for SDG&E's energy mix in 2021. As explained in Section 3.2.2, SB X1-2 established a target of 33% from renewable energy sources for all electricity providers in California by 2020, and SB 350 calls for further development of renewable energy, with a target of 50% by 2030. SB 100 revised this target to 60% by 2030. Consistent with the City's CAP, the GHG intensity for 2030 was assumed to be 44 pounds per megawatt-hour for SDG&E (City of San Marcos 2020). In accordance with the City's CAP Measure E-2, the existing land use designation was assumed to install 2 watts of solar photovoltaics for every square food of gross floor area. This resulted in 184 kilowatts of solar. The production of the solar photovoltaic system was estimated using the National Renewable Energy Laboratories (NREL)'s PVWatts calculator (NREL 2022).

Mobile Sources

The land use built under the existing land use designation would generate GHG emissions from mobile sources (vehicular traffic) as a result of trucks, customers, and employee vehicles. CalEEMod was used to estimate emissions from proposed vehicular sources (refer to Appendix A). CalEEMod default data, including trip rates, trip modes, trip lengths, fleet mix, and emissions factors, were used for the model inputs. CalEEMod default vehicle emission factors and vehicle fleet mix for 2030, as based on CARB's EMFAC2017 model, were used to estimate emissions associated with vehicular sources. Consistent with Measure T-2 of the City's CAP, 5% of the proposed parking spaces (14) were assumed to be EV charging stations.

Solid Waste

The land use built under the existing land use designation would generate solid waste and therefore would result in CO_2e emissions associated with landfill off-gassing. CalEEMod default values were used to estimate GHG emissions associated with solid waste.

Water and Wastewater

Supply, conveyance, treatment, and distribution of water for the land use built under the existing land use designation require the use of electricity, which result in associated indirect GHG emissions. Similarly, wastewater generated by the land use built under the existing land use designation requires the use of electricity for conveyance and treatment, along with GHG emissions generated during wastewater treatment. Water consumption estimates for both indoor and outdoor water use relied on CalEEMod default assumptions.

Proposed Project

CalEEMod Version 2020.4.0 was used to estimate potential project-generated operational GHG emissions from vehicular sources, area sources (natural gas combustion and landscape maintenance), electrical generation (including electrical generation associated with water supply and wastewater treatment), and solid waste.

Emissions from each category—area sources, energy sources, mobile sources, solid waste, and water supply and wastewater treatment—are discussed in the following text with respect to the project. For additional details, see Section 2.4.2.2, Operation, for a discussion of operational emission calculation methodology and assumptions, specifically for area, energy (natural gas), and mobile sources. Consistent with Appendix D of the City's CAP, Operational Year 2030 was assumed consistent with the CAP horizon year (City of San Marcos 2013b).

Area Sources

CalEEMod was used to estimate GHG emissions from the project's area sources, which include operation of gasoline-powered landscape maintenance equipment, which produce minimal GHG emissions. See Section 2.4.2.2 for a discussion of landscaping equipment emissions calculations. Consumer product use and architectural coatings result in VOC emissions, which are analyzed in air quality analysis only, and little to no GHG emissions. No wood hearths or stoves would be included in the project design; therefore, they were not included in the CalEEMod analysis. It should be noted that CalEEMod 2020.4.0 does not account for the recent SORE regulations and thus is considered conservative.

Energy Sources

Operational GHG emissions from energy sources would include natural gas combustion for appliances and space heating. The current Title 24, Part 6 standards, referred to as the 2019 Title 24 Building Energy Efficiency Standards, became effective on January 1, 2020. The current version of CalEEMod assumes compliance with the 2019 Title 24 Building Energy Efficiency Standards (CAPCOA 2021). This is conservative and does not reflect the building standards in 2030 as building standards decrease energy use over time.

CalEEMod default energy intensity factors (CO_2, CH_4, and N_2O mass emissions per kilowatt hour) for SDG&E are based on the value for SDG&E's energy mix in 2021. As explained in Section 3.2.2, SB X1-2 established a target of 33% from renewable energy sources for all electricity providers in California by 2020, and SB 350 calls for further development of renewable energy, with a target of 50% by 2030. SB 100 updated this goal with a 60% renewable energy target by 2030. Consistent with the City's CAP, the GHG intensity for 2030 was assumed to be 44 pounds per megawatt-hour for SDG&E (City of San Marcos 2020).

As discussed in Section 2.4.2.2, the project would include alternatively fueled water heaters in accordance with the City's CAP Measure E-1. When using the CAP's GHG reduction methodology as shown in Appendix A, the net GHG reduction (emissions avoided from natural gas minus emissions from electricity) would be 84 MT CO_2e per year. However, this exceeds the total GHG emissions from natural gas from the project as estimated in CalEEMod. Therefore, using the Energy Information Administration's estimate of 46% of residential natural gas use being attributed to water heating, this amount was applied to the CalEEMod GHG estimate to account for the reduction from alternatively fueled water heaters (EIA 2015).

Mobile Sources (Motor Vehicles)

CalEEMod was used to estimate mobile source emissions from the project. See Section 2.4.2.2 for a discussion of mobile source emissions calculations. The operational year was adjusted to 2030 consistent with the City's CAP Guidance Appendix D (City of San Marcos 2020).

Solid Waste

The project would generate solid waste and therefore would result in CO_2e emissions associated with landfill off-gassing. CalEEMod default values for solid waste generation were used to estimate GHG emissions associated with solid waste.

Water and Wastewater

Supply, conveyance, treatment, and distribution of water for the project require the use of electricity, which would result in associated indirect GHG emissions. Similarly, wastewater generated by the project requires the use of electricity for conveyance and treatment, along with GHG emissions generated during wastewater treatment. Water consumption estimates for both indoor and outdoor water use and associated electricity consumption from water use and wastewater generation were estimated using CalEEMod default values. The project is designed to include low-flow fixtures and water-efficient irrigation systems consistent with CAP measure W-1.

3.4 Impact Analysis

This section evaluates the GHG emissions impacts associated with the project. The significance criteria described in Section 3.3.1, Thresholds of Significance, were used to evaluate impacts associated with the construction and operation of the project.

Threshold 1: Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Threshold 2: Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

City of San Marcos' Climate Action Plan Consistency

This section first presents a comparison of the existing land use designation GHG emissions and compares them to the projects. This section then evaluates the proposed project's impacts to GHG in accordance with the City's 2020 CAP Consistency Checklist. As discussed in Section 3.3.1, the City's numerical GHG threshold of 2.1 MT/SP/yr is used to evaluate the projects consistency with the City's CAP and determine its impact with respect to GHG emissions. The projects construction and operational GHG emissions are quantified below in accordance with the methodology presented in Section 3.3.2 and compared to the City's threshold.

Existing Land Use Designation

Construction Emissions

Construction of the existing land use designation would result in GHG emissions that are primarily associated with use of off-road construction equipment, on-road vendor trucks, and worker vehicles. CalEEMod was used to calculate the GHG emissions based on the construction scenario described in Section 3.3.2.1, Construction, and Appendix A. Construction of the existing land use designation is anticipated to commence in December 2023, lasting a total of approximately 11 months. On-site sources of GHG emissions include off-road equipment and off-

site sources include on-road vehicles (haul trucks, vendor trucks, and worker vehicles). Table 13 presents construction emissions for the existing land use designation from on-site and off-site emission sources.

Table 13. Estimated Annual Construction GHG Emissions – Existing Land Use Designation

Year	CO_2	CH_4	N_2O	CO_2e
	Metric Tons			
2023	33.41	0.01	0.00	33.76
2024	402.57	0.07	0.01	407.95
			Total	441.71
			Emissions amortized over 30 years	14.72

Notes: CO_2 = carbon dioxide; CH_4 = methane; N_2O = nitrous oxide; CO_2e = carbon dioxide equivalent.
See Appendix A for complete results.

As shown in Table 13, the estimated total GHG emissions during construction of the existing land use designation would be approximately 442 MT CO_2e. Construction GHG emissions of the existing land use designation amortized over 30 years would be 15 MT CO_2e per year. Amortized construction emissions are added to operational emissions to be compared to the proposed project for this assessment.

Operational Emissions

Operation of the existing land use designation would generate GHG emissions through area sources; motor vehicle trips to and from the project site; energy use (natural gas and generation of electricity consumed by the existing land use designation); solid waste disposal; and generation of electricity associated with water supply, treatment, and distribution and wastewater treatment. CalEEMod was used to calculate the annual GHG emissions based on the operational assumptions described in Section 3.3.2.2, Operation. The estimated operational emissions of the existing land use designation are presented in Table 14.

Table 14. Estimated Annual Operational GHG Emissions – Existing Land Use Designation

Emission Source	CO_2	CH_4	N_2O	CO_2e
	Metric Tons			
Area	0.01	0.00	0.00	0.01
Energy	167.08	0.00	0.00	167.78
Mobile[1]	3,181.44	0.31	0.19	3,245.70
Waste	84.43	4.99	0.00	209.18
Water	6.47	0.33	0.01	17.10
			Total	3,639.77
			Amortized construction emissions	14.72
			Total with amortized construction emissions	3,654.49

Notes: CO_2 = carbon dioxide; CH_4 = methane; N_2O = nitrous oxide; CO_2e = carbon dioxide equivalent.
[1] Mobile emissions include reductions from EV charging stations.
See Appendix A for complete results.

As shown in Table 14, estimated annual GHG emissions from the existing land use designation would be approximately 3,640 MT CO_2e per year. With amortized construction emissions, the annual operational emissions would be 3,655 MT CO_2e per year.

Proposed Project

Construction Emissions

Construction of the proposed project would result in GHG emissions that are primarily associated with use of off-road construction equipment, on-road vendor trucks, and worker vehicles. Table 15 presents construction emissions for the proposed project from construction-related sources.

Table 15. Estimated Annual Construction GHG Emissions – Proposed Project

Year	CO_2	CH_4	N_2O	CO_2e
	Metric Tons			
2023	57.99	0.02	0.00	58.49
2024	549.96	0.06	0.02	558.00
2025	66.17	0.01	0.00	67.14
			Total	683.63
			Emissions amortized over 30 years	22.79

Notes: CO_2 = carbon dioxide; CH_4 = methane; N_2O = nitrous oxide; CO_2e = carbon dioxide equivalent.
See Appendix A for complete results.

As shown in Table 15, the estimated total GHG emissions during construction of the proposed project would be approximately 684 MT CO_2e. Construction GHG emissions amortized over 30 years would be 23 MT CO_2e per year. Amortized construction emissions are added to operational emissions to be compared to the City's threshold.

Operational Emissions

Operation of the proposed project would generate GHG emissions through area sources; motor vehicle trips to and from the project site; energy use (natural gas and generation of electricity consumed by the project); solid waste disposal; and generation of electricity associated with water supply, treatment, and distribution and wastewater treatment. The estimated operational emissions of the proposed project are presented in Table 16.

Table 16. Estimated Annual Operational GHG Emissions – Proposed Project

Emission Source	CO_2	CH_4	N_2O	CO_2e
	Metric Tons			
Area	1.46	0.00	0.00	1.49
Energy	36.62	0.00	0.00	36.77
Mobile[1]	517.81	0.04	0.03	526.46
Waste	11.26	0.67	0.00	27.91
Water	5.48	0.20	0.00	12.01

Table 16. Estimated Annual Operational GHG Emissions – Proposed Project

Emission Source	CO_2	CH_4	N_2O	CO_2e
	Metric Tons			
Total				604.64
Amortized construction emissions				22.79
Total with amortized construction emissions				627.43

Notes: CO_2 = carbon dioxide; CH_4 = methane; N_2O = nitrous oxide; CO_2e = carbon dioxide equivalent.
See Appendix A for complete results.
[1] Includes reduction from EV chargers as discussed in Section 2.4.2.2.

As shown in Table 16, estimated annual GHG emissions from the proposed project would be approximately 605 MT CO_2e per year. With amortized construction emissions, the annual operational emissions would be 627 MT CO_2e per year. This would be less than the existing designated land use estimate of 3,655 MT CO_2e per year.

Service Population

Using the land use by Master Geographic Reference Area (MGRA) file obtained from the SANDAG activity based reginal travel demand model, the number of multi-family households and corresponding household population within the City of San Marcos was reviewed. The values for the base year (2016) of the 2021 Regional Plan and the Series 14 land use forecast were used. It was found that the average household size for multi-family households in San Marcos is approximately 3.4 (SANDAG 2022). Using this household ratio of 3.4, development of 120 residential dwelling units at the project site would generate approximately 408 people.

Summary

As outlined above, the proposed project would result in an estimated 627 MT CO_2e per year, including amortized construction GHG emissions. With an estimated service population of 408 persons, the project would result in 1.5 MT CO_2e/SP/yr. The project would result in GHG emissions that would not exceed the City's significance threshold of 2.1 MT CO_2e/SP/yr. Therefore, implementation of the proposed project would be consistent with the City's 2020 CAP and impacts to GHG emissions would be **less than significant**.

Consistency with Statewide Greenhouse Gas Reduction Strategies

The project's consistency with statewide GHG reduction strategies is summarized in detail in Table 17 through consideration of the project's various construction and operational components and their relationship to specified laws and regulations designed to reduce GHG emissions from such components.

Table 17. Relevant Greenhouse Gas-Related Laws and Regulations

Project Component	Applicable Laws/ Regulations	GHG Reduction Measures Required for Project
Building Components/Facility Operations		
Roofs/Ceilings/Insulation	CALGreen Code (Title 24, Part 11)	The proposed project must comply with efficiency standards regarding roofing, ceilings, and insulation. For

Table 17. Relevant Greenhouse Gas-Related Laws and Regulations

Project Component	Applicable Laws/ Regulations	GHG Reduction Measures Required for Project
	California Energy Code (Title 24, Part 6)	example: Roofs/Ceilings: New construction must reduce roof heat island effects per CALGreen Code Section 106.11.2, which requires use of roofing materials having a minimum aged solar reflectance, thermal emittance complying with Section A5.106.11.2.2 and A5.106.11.2.3 or a minimum aged Solar Reflectance Index as specified in Tables A5.106.11.2.2, or A5.106.11.2.3. Roofing materials must also meet solar reflectance and thermal emittance standards contained in Title 20 Standards. Roof/Ceiling Insulation: There are also requirements for the installation of roofing and ceiling insulation. (See Title 24, Part 6 Compliance Manual at Section 3.2.2.)
Flooring	CALGreen Code	The proposed project must comply with efficiency standards regarding flooring materials. For example, for 80% of floor area receiving "resilient flooring," the flooring must meet applicable installation and material requirements contained in CALGreen Code Section 5.504.4.6.
Window and Doors (Fenestration)	California Energy Code	The proposed project must comply with fenestration efficiency requirements. For example, the choice of windows, glazed doors, and any skylights for the project must conform to energy consumption requirements affecting size, orientation, and types of fenestration products used. (See Title 24, Part 6 Compliance Manual, Section 3.3.)
Building Walls/Insulation	CALGreen Code California Energy Code	The proposed project must comply with efficiency requirements for building walls and insulation. Exterior Walls: Must meet requirements in current edition of California Energy Code, and comply with Sections A5.106.7.1 or A5.106.7.2 of CALGreen Code for wall surfaces, as well as Section 5.407.1, which required weather-resistant exterior wall and foundation envelope as required by California Building Code Section 1403.2. Construction must also meet requirements contained in Title 24, Part 6, which vary by material of the exterior walls. (See Title 24, Part 6 Compliance Manual, Part 3.2.3.) Demising (Interior) Walls: Mandatory insulation requirements for demising walls (which separate conditioned from non-conditions space) differ by the type of wall material used. (*Id*. at 3.2.4.) Door Insulation: There are mandatory requirements for air infiltration rates to improve insulation efficiency; they

Table 17. Relevant Greenhouse Gas-Related Laws and Regulations

Project Component	Applicable Laws/ Regulations	GHG Reduction Measures Required for Project
		differ according to the type of door. (*Id*. at 3.2.5.) Flooring Insulation: There are mandatory requirements for insulation that depend on the material and location of the flooring. (*Id*. at 3.2.6.)
Finish Materials	CALGreen Code	The proposed project must comply with pollutant control requirements for finish materials. For example, materials including adhesives, sealants, caulks, paints and coatings, carpet systems, and composite wood products must meet requirements in CALGreen Code to ensure pollutant control. (CALGreen Code Section 5.504.4.)
Wet Appliances (Toilets/Faucets/Urinals, Dishwasher/Clothes Washer, Spa and Pool/Water Heater)	CALGreen Code California Energy Code Appliance Efficiency Regulations (Title 20 Standards)	Wet appliances associated with the proposed project must meet various efficiency requirements. For example: Spa and Pool: Use associated with the project is subject to appliance efficiency requirements for service water heating systems and equipment, spa and pool heating systems and equipment. (Title 24, Part 6, Sections 110.3, 110.4, 110.5; Title 20 Standards, Sections 1605.1(g), 1605.3(g); see also California Energy Code.) Toilets/Faucets/Urinals: Use associated with the project is subject to new maximum rates for toilets, urinals, and faucets effective January 1, 2016: ▪ Showerheads maximum flow rate 2.5 gpm at 80 psi ▪ Wash fountains 2.2 x (rim space in inches/20) gpm at 60 psi ▪ Metering faucets 0.25 gallons/cycle ▪ Lavatory faucets and aerators 1.2 gpm at 60 psi ▪ Kitchen faucets and aerators 1.8 gpm with optional temporary flow of 2.2 gpm at 60 psi ▪ Public lavatory faucets 0.5 gpm at 60 psi ▪ Trough-type urinals 16 inches length ▪ Wall mounted urinals 0.125 gallons per flush ▪ Other urinals 0.5 gallons per flush (Title 20 Standards, Sections 1605.1(h),(i) 1065.3(h),(i).) Water Heaters: Use associated with the project is subject to appliance efficiency requirements for water heaters. (Title 20 Standards, Sections 1605.1(f), 1605.3(f).) Dishwasher/Clothes Washer: Use associated with the project is subject to appliance efficiency requirements for dishwashers and clothes washers. (Title 20 Standards, Sections 1605.1(o),(p),(q), 1605.3(o),(p),(q).)
Dry Appliances (Refrigerator/Freezer, Heater/ Air Conditioner, Clothes Dryer)	Title 20 Standards CALGreen Code	Dry appliances associated with the proposed project must meet various efficiency requirements. For example: Refrigerator/Freezer: Use associated with the proposed

Table 17. Relevant Greenhouse Gas-Related Laws and Regulations

Project Component	Applicable Laws/ Regulations	GHG Reduction Measures Required for Project
		project is subject to appliance efficiency requirements for refrigerators and freezers. (Title 20 Standards, Sections 1605.1(a), 1605.3(a).) Heater/Air Conditioner: Use associated with the proposed project is subject to appliance efficiency requirements for heaters and air conditioners. (Title 20 Standards, Sections 1605.1(b),(c),(d),(e), 1605.3(b),(c),(d),(e) as applicable.) Clothes Dryer: Use associated with the proposed project is subject to appliance efficiency requirements for clothes dryers. (Title 20 Standards, Section 1605.1(q).)
	CALGreen Code	Installations of HVAC, refrigeration and fire suppression equipment must comply with CALGreen Code Sections 5.508.1.1 and 508.1.2, which prohibits CFCs, halons, and certain HCFCs and HFCs.
Lighting	Title 20 Standards	Lighting associated with the proposed project will be subject to energy efficiency requirements contained in Title 20 Standards. General Lighting: Indoor and outdoor lighting associated with the proposed project must comply with applicable appliance efficiency regulations (Title 20 Standards, Sections 1605.1(j),(k),(n), 1605.3(j),(k),(n).) Emergency lighting and self-contained lighting: the proposes project must also comply with applicable appliance efficiency regulations (Title 20 Standards, Sections 1605.1(l), 1605.3(l).) Traffic Signal Lighting: For any necessary proposed project improvements involving traffic lighting, traffic signal modules and traffic signal lamps will need to comply with applicable appliance efficiency regulations (Title 20 Standards, Sections 1605.1(m), 1605.3(m).)
	California Energy Code	Lighting associated with a use implementing the proposed project will also be subject to energy efficiency requirements contained in Title 24, Part 6, which contains energy standards for non-residential indoor lighting and outdoor lighting. (See Title 24 Part 6 Compliance Manual, at Sections 5, 6.) Mandatory lighting controls for indoor lighting include, for example, regulations for automatic shut-off, automatic daytime controls, demand responsive controls, and certificates of installation. (Id. at Section 5.) Regulations for outdoor lighting include, for example, creation of lighting zones, lighting power requirements, a hardscape lighting power allowance, requirements for outdoor

Table 17. Relevant Greenhouse Gas-Related Laws and Regulations

Project Component	Applicable Laws/ Regulations	GHG Reduction Measures Required for Project
		incandescent and luminaire lighting, and lighting control functionality. (Id. at Section 6.)
	AB 1109	Lighting associated with implementing the proposed project will be subject to energy efficiency requirements adopted pursuant to AB 1109. Enacted in 2007, AB 1109 required the CEC to adopt minimum energy efficiency standards for general purpose lighting, to reduce electricity consumption 50% for indoor residential lighting and 25% for indoor commercial lighting.
Bicycle and Vehicle Parking	CALGreen Code	A use implementing the proposed project will be required to provide compliant bicycle parking, fuel-efficient vehicle parking, and electric vehicle charging spaces (CALGreen Code Sections 5.106.4, 5.106.5.1, 5.106.5.3)
	California Energy Code	The proposed project is also subject to parking requirements contained in Title 24, Party 6. For example, parking capacity is to meet but not exceed minimum local zoning requirements, and the project should employ approved strategies to reduce parking capacity (Title 24, Part 6, section 106.6)
Landscaping	CALGreen Code	The CALGreen Code requires and has further voluntary provisions for: ▪ -A water budget for landscape irrigation use; ▪ For new water service, separate meters or submeters must be installed for indoor and outdoor potable water use for landscaped areas of 1,000-5,000 square feet; ▪ -Provide water-efficient landscape design that reduces use of potable water beyond initial requirements for plant installation and establishment
	Model Water Efficient Landscaping Ordinance	The model ordinance promotes efficient landscaping in new developments and establishes an outdoor water budget for new and renovated landscaped areas that are 500 square feet or larger. (CCR, Title 23, Division 2, Chapter 2.7.)
	Cap-and-Trade Program	Transportation fuels used in landscape maintenance equipment (e.g., gasoline) would be subject to the Cap-and-Trade Program. Fuel refineries and suppliers are subject to the Cap-and-Trade requirements. (See “Energy Use,” below.)
Refrigerants	CARB Management of High GWP	Any refrigerants associated with the project will be subject to CARB standards. CARB’s Regulation for the Management of High GWP Refrigerants for Stationary Sources 1) reduces

Table 17. Relevant Greenhouse Gas-Related Laws and Regulations

Project Component	Applicable Laws/ Regulations	GHG Reduction Measures Required for Project
	Refrigerants for Stationary Sources	emissions of high-GWP refrigerants from leaky stationary, non-residential refrigeration equipment; 2) reduces emissions resulting from the installation and servicing of stationary refrigeration and air conditioning appliances using high-GWP refrigerants; and 3) requires verification GHG emission reductions. (CCR, Title 17, Division 3, Chapter 1, Subchapter 10, Article 4, Subarticle 5.1, Section 95380 et seq.)
Consumer Products	CARB High GWP GHGs in Consumer Products	All consumer products associated with the project will be subject to CARB standards. CARB's consumer products regulations set VOC limits for numerous categories of consumer products, and limits the reactivity of the ingredients used in numerous categories of aerosol coating products (CCR, Title 17, Division 3, Chapter 1, Subchapter 8.5.)
Construction		
Use of Off-Road Diesel Engines, Vehicles, and Equipment	CARB In-Use Off-Road Diesel Vehicle Regulation	Any relevant vehicle or machine use associated with the project will be subject to CARB standards. The CARB In-Use-Off-Road Diesel Vehicle Regulation applies to certain off-road diesel engines, vehicles, or equipment greater than 25 horsepower. The regulation: 1) imposes limits on idling, requires a written idling policy, and requires a disclosure when selling vehicles; 2) requires all vehicles to be reported to CARB (using the Diesel Off-Road Online Reporting System) and labeled; 3) restricts the adding of older vehicles into fleets starting on January 1, 2014; and 4) requires fleets to reduce their emissions by retiring, replacing, or repowering older engines, or installing Verified Diesel Emission Control Strategies (i.e., exhaust retrofits). The requirements and compliance dates of the Off-Road regulation vary by fleet size, as defined by the regulation.
	Cap-and-Trade Program	Transportation fuels (e.g., gasoline) used in equipment operation would be subject to the Cap-and-Trade Program. Fuel refineries and suppliers are subject to the Cap-and-Trade requirements. (See "Energy Use," below.)
Greening New Construction	CALGreen Code	All new construction must comply with CALGreen Code, as discussed in more detail throughout this table. Adoption of the mandatory CALGreen Code standards for construction has been essential for improving the overall environmental performance of new buildings; it also sets voluntary targets for builders to exceed the mandatory requirements.
Construction Waste	CALGreen Code	The proposed project will be subject to CALGreen Code requirements for construction waste reduction, disposal,

Table 17. Relevant Greenhouse Gas-Related Laws and Regulations

Project Component	Applicable Laws/ Regulations	GHG Reduction Measures Required for Project
		and recycling, such as a requirement to recycle and/or salvage for reuse a minimum of 50% of the non-hazardous construction waste in accordance with Section 5.408.1.1, 5.408.1.2, or 5.408.1.3; or meet a local construction and demolition waste management ordinance, whichever is more stringent.
Solid Waste		
Solid Waste Management	Landfill Methane Control Measure	Waste associated with a use implementing the proposed project will be disposed per state requirements for landfills, material recovery facilities, and transfer stations. Per the statewide GHG emissions inventory, the largest emissions from waste management sectors come from landfills, and are in the form of CH_4. In 2010, CARB adopted a regulation that reduces emissions from methane in landfills, primarily by requiring owners and operators of certain uncontrolled municipal solid waste landfills to install gas collection and control systems, and requires existing and newly installed gas and control systems to operate in an optimal manner. The regulation allows local air districts to voluntarily enter into a memorandum of understanding with CARB to implement and enforce the regulation and to assess fees to cover costs of implementation.
	Mandatory Commercial Recycling (AB 341)	AB 341 will require a use implementing the proposed project, if it generates four cubic yards or more of commercial solid waste per week, to arrange for recycling services, using one of the following: self-haul; subscribe to a hauler(s); arranging for pickup of recyclable materials; subscribing to a recycling service that may include mixed waste processing that yields diversion results comparable to source separation. The project will also be subject to local commercial solid waste recycling program required to be implemented by each jurisdiction under AB 341.
	CALGreen Code	The proposed project will be subject to CALGreen Code requirement to provide areas that serve the entire building and are identified for the depositing, storage and collection of nonhazardous materials for recycling (CALGreen Code Section 5.410.1)
Energy Use		
Electricity/Natural Gas Generation	Cap-and-Trade Program	Electricity and natural gas generated and/or imported into the state which may be used for the proposed project will be subject to the Cap-and-Trade Program. The rules came into effect on January 1, 2013, applying to large electric power plants and large industrial plants.

Table 17. Relevant Greenhouse Gas-Related Laws and Regulations

Project Component	Applicable Laws/ Regulations	GHG Reduction Measures Required for Project
		In 2015, importers and distributors of fossil fuels were added to the Cap-and-Trade Program in the second phase. Specifically, on January 1, 2015, cap-and-trade compliance obligations were phased in for suppliers of natural gas, reformulated gasoline blendstock for oxygenate blending (RBOB), distillate fuel oils, and liquefied petroleum gas that meet or exceed specified emissions thresholds. The threshold that triggers a cap-and-trade compliance obligation for a fuel supplier is 25,000 metric tons or more of CO_2e annually from the GHG emissions that would result from full combustion or oxidation of quantities of fuels (including natural gas, RBOB, distillate fuel oil, liquefied petroleum gas, and blended fuels that contain these fuels) imported and/or delivered to California.
Renewable Energy	California RPS (SB X1-2, SB 350, and SB 100)	Energy providers to the proposed project will be required to comply with RPS set by SB X1 2, SB 350, and SB 100. SB X1 2 requires investor-owned utilities, publicly-owned utilities, and electric service providers to increase purchases of renewable energy such that at least 33% of retail sales are procured from renewable energy resources by December 31, 2020. In the interim, each entity was required to procure an average of 20% of renewable energy for the period of January 1, 2011 through December 31, 2013; and will be required to procure an average of 25% by December 31, 2016, and 33% by 2020. SB 350 requires retail sellers and publicly owned utilities to procure 50% of their electricity from eligible renewable energy resources by 2030. SB 100 increased the standards set forth in SB 350 establishing that 44% of the total electricity sold to retail customers in California per year by December 31, 2024, 52% by December 31, 2027, and 60% by December 31, 2030, be secured from qualifying renewable energy sources. SB 100 states that it is the policy of the state that eligible renewable energy resources and zero-carbon resources supply 100% of the retail sales of electricity to California by 2045.
	Million Solar Roofs Program (SB 1)	The project will participate in California's energy market by pre-wiring roofs for future installation of solar, which is affected by implementation of the Million Solar Roofs Program. As part of Governor Schwarzenegger's Million Solar Roofs

Table 17. Relevant Greenhouse Gas-Related Laws and Regulations

Project Component	Applicable Laws/ Regulations	GHG Reduction Measures Required for Project
		Program, California has set a goal to install 3,000 megawatts of new, solar capacity through 2016. The Million Solar Roofs Program is a ratepayer-financed incentive program aimed at transforming the market for rooftop solar systems by driving down costs over time.
	California Solar Initiative- Thermal Program	The proposed project will derive energy from California's energy market, which is affected by implementation of the California Solar Initiative -Thermal Program. The program offers cash rebates of up to $4,366 on solar water heating systems for single-family residential customers. Multifamily and Commercial properties qualify for rebates of up to $800,000 on solar water heating systems and eligible solar pool heating systems qualify for rebates of up to $500,000. Funding for the California Solar Initiative-Thermal program comes from ratepayers of Pacific Gas & Electric, SCE, Southern California Gas Company, and San Diego Gas & Electric. The rebate program is overseen by the CPUC as part of the California Solar Initiative.
	Waste Heat and Carbon Emissions Reduction Act (AB 1613, AB 2791)	The proposed project will derive energy from California's energy market, which is affected by implementation of the Waste Heat and Carbon Emissions Reduction Act. Originally enacted in 2007 and amended in 2008, this act directed the CEC, CPUC, and CARB to implement a program that would encourage the development of new combined heat and power systems in California with a generating capacity of not more than 20 megawatts, to increase combined heat and power use by 30,000 gigawatt-hour. The CPUC publicly owned electric utilities, and CEC duly established policies and procedures for the purchase of electricity from eligible combined heat and power systems. CEC guidelines require combined heat and power systems to be designed to reduce waste energy; have a minimum efficiency of 60%; have NO_x emissions of no more than 0.07 pounds per megawatt-hour; be sized to meet eligible customer generation thermal load; operate continuously in a manner that meets expected thermal load and optimizes efficient use of waste heat; and be cost effective, technologically feasible, and environmentally beneficial.
Vehicular/Mobile Sources		
General	SB 375 and SANDAG RTP/SCS	The proposed project complies with, and is subject to, the SANDAG adopted RTP/SCS, which CARB approved as meeting its regional GHG targets in 2016. The most recent plan was adopted in December 2021, but CARB

Table 17. Relevant Greenhouse Gas-Related Laws and Regulations

Project Component	Applicable Laws/ Regulations	GHG Reduction Measures Required for Project
		has not accepted it as of this writing. See discussion below.
Fuel	Low Carbon Fuel Standard (LCFS)/ EO S-01-07	Auto trips associated with the proposed project will be subject to LCFS (EO S-01-07), which requires a 20% or greater reduction in the average fuel carbon intensity by 2030 with a 2010 baseline for transportation fuels in California regulated by CARB. The program establishes a strong framework to promote the low carbon fuel adoption necessary to achieve statewide GHG reduction goals.
	Cap-and-Trade Program	Gasoline used for proposed project implementation will be subject to the Cap-and-Trade Program. The rules came into effect on January 1, 2013, applying to large electric power plants and large industrial plants. In 2015, importers and distributors of fossil fuels were added to the Cap-and-Trade Program in the second phase. Specifically, on January 1, 2015, cap-and-trade compliance obligations were phased in for suppliers of natural gas, RBOB, distillate fuel oils, and liquefied petroleum gas that meet or exceed specified emissions thresholds. The threshold that triggers a cap-and-trade compliance obligation for a fuel supplier is 25,000 MT or more of CO_2e annually from the GHG emissions that would result from full combustion or oxidation of quantities of fuels (including natural gas, RBOB, distillate fuel oil, liquefied petroleum gas, and blended fuels that contain these fuels) imported and/or delivered to California.
Light-Duty Vehicles	AB 1493 (or the Pavley Standard)	Cars that drive to and from the proposed project will be subject to AB 1493, which directed CARB to adopt a regulation requiring the maximum feasible and cost-effective reduction of GHG emissions from new passenger vehicles. Pursuant to AB 1493, CARB adopted regulations that establish a declining fleet average standard for CO_2, CH_4, N_2O, and HFCs (air conditioner refrigerants) in new passenger vehicles and light-duty trucks beginning with the 2009 model year and phased-in through the 2016 model year. These standards are divided into those applicable to lighter and those applicable to heavier portions of the passenger vehicle fleet. The regulations will reduce “upstream” smog-forming emissions from refining, marketing, and distribution of fuel.

Table 17. Relevant Greenhouse Gas-Related Laws and Regulations

Project Component	Applicable Laws/ Regulations	GHG Reduction Measures Required for Project
	Advanced Clean Car and ZEV Programs	Cars that drive to and from the proposed project will be subject to the Advanced Clean Car and ZEV Programs. In January 2012, CARB approved a new emissions-control program for model years 2017 through 2025. The program combines the control of smog, soot and global warming gases and requirements for greater numbers of zero-emission vehicles into a single package of standards called Advanced Clean Cars. By 2025, new automobiles will emit 34% fewer global warming gases and 75% fewer smog-forming emissions. The ZEV program will act as the focused technology of the Advanced Clean Cars program by requiring manufacturers to produce increasing numbers of ZEVs and plug-in hybrid electric vehicles in the 2018-2025 model years.
	Tire Inflation Regulation	Cars that drive to and from the proposed project will be subject to the CARB Tire Inflation Regulation, which took effect on September 1, 2010, and applies to vehicles with a gross vehicle weight rating of 10,000 pounds or less. Under this regulation, automotive service providers must, inter alia, check and inflate each vehicle's tires to the recommended tire pressure rating, with air or nitrogen, as appropriate, at the time of performing any automotive maintenance or repair service, and to keep a copy of the service invoice for a minimum of three years, and make the vehicle service invoice available to the CARB, or its authorized representative upon request.
	EPA and NHTSA GHG and CAFE Standards	Mobile sources that travel to and from the proposed project would be subject to EPA and NHTSA GHG and CAFE standards for passenger cars, light-duty trucks, and medium-duty passenger vehicles. (75 FR 25324–25728 and 77 FR 62624–63200.)
Water Use		
Water Use Efficiency	Emergency State Water Board Regulations	Water use associated with the proposed project will be subject to emergency regulations. On May 18, 2016, partially in response to EO B-27-16, the State Water Board adopted emergency water use regulations (CCR, title 23, Section 864.5 and amended and re-adopted Sections 863, 864, 865, and 866). The regulation directs the State Water Board, Department of Water Resources, and CPUC to implement rates and pricing structures to incentivize water conservation, and calls upon

Table 17. Relevant Greenhouse Gas-Related Laws and Regulations

Project Component	Applicable Laws/ Regulations	GHG Reduction Measures Required for Project
		water suppliers, homeowners' associations, California businesses, landlords and tenants, and wholesale water agencies to take stronger conservation measures.
	EO B-37-16	Water use associated with the proposed project will be subject to Emergency EO B-37-16, issued May 9, 2016, which directs the State Water Resources Control Board to adjust emergency water conservation regulations through the end of January, 2017 to reflect differing water supply conditions across the state. The Water Board must also develop a proposal to achieve a mandatory reduction of potable urban water usage that builds off the mandatory 25% reduction called for in EO B-29-15. The Water Board and Department of Water Resources will develop new, permanent water use targets to which the project will be subject. The Water Board will permanently prohibit water-wasting practices such as hosing off sidewalks, driveways, and other hardscapes; washing automobiles with hoses not equipped with a shut-off nozzle; using non-recirculated water in a fountain or other decorative water feature; watering lawns in a manner that causes runoff, or within 48 hours after measurable precipitation; and irrigating ornamental turf on public street medians.
	EO B-40-17	EO B-40-17 lifted the drought emergency in all California counties except Fresno, Kings, Tulare, and Tuolumne. It also rescinds EO B-29-15, but expressly states that EO B-37-16 remains in effect and directs the State Water Resources Control Board to continue development of permanent prohibitions on wasteful water use to which the proposed project will be subject.
	SB X7-7	Water provided to the proposed project will be affected by SB X7-7's requirements for water suppliers. SB X7-7, or the Water Conservation Act of 2009, requires all water suppliers to increase water use efficiency. It also requires, among other things, that the Department of Water Resources, in consultation with other state agencies, develop a single standardized water use reporting form, which would be used by both urban and agricultural water agencies.
	CALGreen Code	The proposed project is subject to CALGreen Code's water efficiency standards, including a required 20% mandatory reduction in indoor water use. (CALGreen Code, Division 4.3.)
	California Water	Development and approval of the proposed project

Table 17. Relevant Greenhouse Gas-Related Laws and Regulations

Project Component	Applicable Laws/ Regulations	GHG Reduction Measures Required for Project
	Code, Division 6, Part 2.10, Sections 10910–10915.	would require the development of a project-specific Water Supply Assessment assessing the projects water demand and its inclusion within the City's urban water management plan.
	Cap-and-Trade Program	Electricity usage associated with water and wastewater supply, treatment and distribution would be subject to the Cap-and-Trade Program.
	California RPS (SB X1-2, SB 350, SB 100)	Electricity usage associated with water and wastewater supply, treatment and distribution associated with the project will be required to comply with RPS set by SB X1-2, SB 350, and SB 100.

Notes: AB = Assembly Bill; CARB = California Air Resources Board; CEC = California Energy Commission; CFC = chlorofluorocarbon; CH_4 = methane; CO_2 = carbon dioxide; CO_2e = carbon dioxide equivalent; CPUC = California Public Utilities Commission; EO = Executive Order; EPA = Environmental Protection Agency; GHG = greenhouse gas; GWP = global warming potential; HCFC = hydrochlorofluorocarbon; HFC = hydrofluorocarbon; gpm = gallons per minute; MT = metric tons; N_2O = nitrous oxide; NHTSA = National Highway Traffic Safety Administration; PM = particulate matter; RPS = Renewable Portfolio Standard; RTP/SCS = Regional Transportation Plan/Sustainable Communities Strategy; SB = Senate Bill; SANDAG = San Diego Association of Governments; VOC = volatile organic compound; ZEV = zero emission vehicle

As shown, the project would be consistent with and would not conflict with the applicable GHG-reducing strategies of the state that implicate the project's construction and operational components.

In addition, CARB notes in the First Update that "California is on track to meet the near-term 2020 GHG limit and is well positioned to maintain and continue reductions beyond 2020 as required by AB 32" (CARB 2014). The project would help support achievement of the near-term 2020 goal (as codified in AB 32), the interim 2030 goal (as codified in SB 32) and the long-term, carbon neutrality 2045 goal (as set forth in EO B-55-18) by being infill development with access to multi-modal transportation options and incorporating design features such as electric vehicle charging stations, bicycle infrastructure, transportation demand management, electric water heaters, smart landscaping irrigation, and an urban tree canopy.

Consistency with SANDAG's RTP/SCS

At the regional level, SANDAG's RTP/SCS has been adopted for the purpose of reducing GHG emissions attributable to passenger vehicles in the San Diego region. In December 2021, SANDAG adopted its RTP/SCS (The 2021 Regional Plan), which shows the San Diego region reduced per capita CO_2 emissions by 17.9% in 2020 compared to 2005 baseline, which exceeds the 2020 target set for SANDAG of 15% reduction. Implementation of the RTP/SCS is estimated to result in a 20% CO_2 emissions reduction for cars and light-duty trucks by 2035, exceeding the 19% target from 2005 levels set by CARB. The RTP/SCS does not regulate land use or supersede the exercise of land use authority by SANDAG's member jurisdictions, but it is a relevant regional reference document for purposes of evaluating the intersection of land use and transportation patterns and the corresponding GHG emissions.

For purposes of the RTP/SCS consistency evaluation, the proposed project would increase access to transit because it is located approximately 0.3 mile from the Palomar College Sprinter station, and two bus stops are

located in front of the project site off Mission Road.[9] The project site's proximity to State Route 78 further allows for easy regional connectivity to employment centers, shopping areas, and recreation opportunities. Furthermore, the project would be consistent with the City's CAP. These measures would further reduce the project's GHG emissions from vehicle trips, increase access to transit, and encourage alternative modes of transportation. The proposed density, land use type, and location are consistent with the SANDAG's RTP/SCS, which increases access to transit and promotes regional connectivity to employment centers, shopping areas, and recreation opportunities. The features mentioned above would help facilitate alternative transit usage and reduce the overall vehicle trips, thereby reducing the project's regional GHG emissions.

Based on the considerations outlined above, the proposed project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs, and potential impacts would be **less than significant** and no mitigation measure is required.

3.5 Mitigation Measures

The project would not result in significant impacts; therefore, no mitigation is required.

[9] The City uses the North County Transit District (NCTD) for Coaster rail service, Sprinter light rail service, and Breeze bus service for connections throughout the County of San Diego. Sprinter service operates between Escondido and Oceanside with connections to Interstate 5 and the Coaster rail service operating out of the City of Oceanside. The NCTD operates the Palomar College Sprinter, which is within a short walk from the project area. In addition, a bus stop is located in front of the project site. Connections to Orange County can be made via the Metrolink in the City of Oceanside. Similarly, connections to Riverside Transit Authority buses can be made via the transit station in Oceanside and Escondido. Both the Metrolink connection in Oceanside and the Riverside Transit Authority Bus connection in Oceanside and Escondido are accessible through Sprinter light rail service. These public transit options will offer residents of the project area quick access to a variety of alternative modes of transportation.

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5 List of Preparers

Adam Poll, Senior Air Quality Specialist

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Appendix A
CalEEMod Output Files

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Gran Vista Specific Plan

San Diego County APCD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	2.14	Acre	2.14	93,218.40	0
Parking Lot	20.00	Space	0.18	8,000.00	0
City Park	3.40	Acre	3.40	148,104.00	0
Condo/Townhouse High Rise	120.00	Dwelling Unit	1.88	120,000.00	343

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2025
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	539.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Based on site plan for project.

Construction Phase - Based on applicant provided information.

Off-road Equipment - Based on applicant provided information.

Off-road Equipment - Based on applicant provided information.

Off-road Equipment - Based on applicant provided information.

Off-road Equipment - Based on applicant provided information.

Off-road Equipment - Based on applicant provided information.

Trips and VMT - Based on applicant provided information.

Gran Vista Specific Plan - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

On-road Fugitive Dust - CalEEmod defaults.

Grading - CalEEmod defaults.

Architectural Coating - Low-VOC content coatings to be used onsite.

Vehicle Trips - Based on traffic assessment for project.

Road Dust - CalEEmod defaults.

Woodstoves - No wood or natural gas.

Consumer Products - CalEEmod defaults.

Area Coating - Low-VOC coatings to be used.

Landscape Equipment - CalEEmod defaults.

Energy Use - CalEEMod defaults.

Water And Wastewater - CalEEmod defaults.

Solid Waste - CalEEmod defaults.

Construction Off-road Equipment Mitigation - In accordance with SDAPCD Rule 55. Applicant has committed to Tier 4 Interim equipment over 50 horsepower, electric under 50 horsepower.

Mobile Land Use Mitigation -

Area Mitigation - Low-VOC architectural coatings and no hearths.

Energy Mitigation - Energy star appliances

Water Mitigation - low-flow fixtures and water-efficient irrigation

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	100.00
tblArchitecturalCoating	EF_Parking	250.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Parking	250	100
tblAreaCoating	Area_EF_Residential_Exterior	250	100
tblAreaCoating	Area_EF_Residential_Interior	250	50
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblAreaMitigation	UseLowVOCPaintParkingValue	250	100

Gran Vista Specific Plan - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	250	100
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	250	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	FuelType	Diesel	Electrical
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim

Gran Vista Specific Plan - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstructionPhase	NumDays	230.00	262.00
tblConstructionPhase	NumDays	20.00	24.00
tblConstructionPhase	NumDays	10.00	6.00
tblConstructionPhase	PhaseEndDate	1/23/2025	3/10/2025
tblConstructionPhase	PhaseEndDate	11/28/2024	2/10/2025
tblConstructionPhase	PhaseEndDate	12/26/2024	2/8/2024
tblConstructionPhase	PhaseEndDate	12/14/2023	12/8/2023
tblConstructionPhase	PhaseStartDate	12/27/2024	2/11/2025
tblConstructionPhase	PhaseStartDate	1/12/2024	2/9/2024
tblConstructionPhase	PhaseStartDate	12/15/2023	12/9/2023
tblConstructionPhase	PhaseStartDate	11/29/2024	1/12/2024
tblFireplaces	FireplaceDayYear	82.00	0.00
tblFireplaces	FireplaceHourDay	3.00	0.00
tblFireplaces	FireplaceWoodMass	3,078.40	0.00
tblFireplaces	NumberGas	66.00	0.00
tblFireplaces	NumberNoFireplace	12.00	0.00
tblFireplaces	NumberWood	42.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	3.00
tblOffRoadEquipment	UsageHours	7.00	4.00

Gran Vista Specific Plan - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblOffRoadEquipment	UsageHours	7.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	WorkerTripNumber	10.00	12.00
tblTripsAndVMT	WorkerTripNumber	18.00	16.00
tblTripsAndVMT	WorkerTripNumber	18.00	16.00
tblTripsAndVMT	WorkerTripNumber	191.00	192.00
tblVehicleTrips	DV_TP	11.00	0.00
tblVehicleTrips	HO_TL	7.50	0.00
tblVehicleTrips	HO_TTP	39.60	0.00
tblVehicleTrips	HS_TL	7.30	0.00
tblVehicleTrips	HS_TTP	18.80	0.00
tblVehicleTrips	HW_TL	10.80	6.58
tblVehicleTrips	HW_TTP	41.60	100.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	86.00	100.00
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	ST_TR	4.91	8.00
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	SU_TR	4.09	8.00
tblVehicleTrips	WD_TR	0.78	0.00
tblVehicleTrips	WD_TR	5.44	8.00
tblWoodstoves	NumberCatalytic	6.00	0.00
tblWoodstoves	NumberNoncatalytic	6.00	0.00
tblWoodstoves	WoodstoveDayYear	82.00	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.0 Emissions Summary

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	4.4151	46.6481	32.0241	0.0810	11.4831	1.8484	13.3315	3.9254	1.7006	5.6260	0.0000	7,855.7526	7,855.7526	2.4800	0.0157	7,922.4399
2024	4.2795	43.7091	31.3097	0.0809	11.4831	1.7408	13.2239	3.9254	1.6016	5.5270	0.0000	7,846.0538	7,846.0538	2.4784	0.2026	7,912.5769
2025	48.6039	13.6184	19.9009	0.0493	1.9430	0.4895	2.4324	0.5237	0.4727	0.9964	0.0000	4,874.1354	4,874.1354	0.4207	0.1973	4,943.4443
Maximum	**48.6039**	**46.6481**	**32.0241**	**0.0810**	**11.4831**	**1.8484**	**13.3315**	**3.9254**	**1.7006**	**5.6260**	**0.0000**	**7,855.7526**	**7,855.7526**	**2.4800**	**0.2026**	**7,922.4399**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	1.3599	21.5772	43.1463	0.0810	5.2546	0.1310	5.3856	1.7899	0.1309	1.9208	0.0000	7,855.7526	7,855.7526	2.4800	0.0157	7,922.4399
2024	1.3571	21.5733	43.1191	0.0809	5.2546	0.1310	5.3856	1.7899	0.1309	1.9208	0.0000	7,846.0538	7,846.0538	2.4784	0.2026	7,912.5769
2025	48.4876	11.0781	19.5829	0.0467	1.9430	0.0772	2.0202	0.5237	0.0760	0.5996	0.0000	4,666.6576	4,666.6576	0.4010	0.1973	4,735.4737
Maximum	**48.4876**	**21.5772**	**43.1463**	**0.0810**	**5.2546**	**0.1310**	**5.3856**	**1.7899**	**0.1309**	**1.9208**	**0.0000**	**7,855.7526**	**7,855.7526**	**2.4800**	**0.2026**	**7,922.4399**

Gran Vista Specific Plan - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	10.64	47.84	-27.17	1.21	50.01	91.69	55.87	51.00	91.05	63.45	0.00	1.01	1.01	0.37	0.00	1.00

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.1736	0.1140	9.8934	5.2000e-004		0.0549	0.0549		0.0549	0.0549	0.0000	17.8319	17.8319	0.0171	0.0000	18.2590
Energy	0.0258	0.2205	0.0938	1.4100e-003		0.0178	0.0178		0.0178	0.0178		281.4266	281.4266	5.3900e-003	5.1600e-003	283.0990
Mobile	2.4482	2.3053	20.6088	0.0447	4.8402	0.0338	4.8740	1.2893	0.0315	1.3208		4,552.9624	4,552.9624	0.3159	0.1979	4,619.8263
Total	**5.6476**	**2.6397**	**30.5960**	**0.0466**	**4.8402**	**0.1065**	**4.9467**	**1.2893**	**0.1042**	**1.3935**	**0.0000**	**4,852.2208**	**4,852.2208**	**0.3384**	**0.2030**	**4,921.1842**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.1736	0.1140	9.8934	5.2000e-004		0.0549	0.0549		0.0549	0.0549	0.0000	17.8319	17.8319	0.0171	0.0000	18.2590
Energy	0.0258	0.2205	0.0938	1.4100e-003		0.0178	0.0178		0.0178	0.0178		281.4266	281.4266	5.3900e-003	5.1600e-003	283.0990
Mobile	2.0278	1.6251	14.3162	0.0281	2.9954	0.0223	3.0176	0.7979	0.0208	0.8187		2,866.4734	2,866.4734	0.2320	0.1415	2,914.4261
Total	**5.2272**	**1.9595**	**24.3034**	**0.0301**	**2.9954**	**0.0950**	**3.0903**	**0.7979**	**0.0935**	**0.8914**	**0.0000**	**3,165.7319**	**3,165.7319**	**0.2545**	**0.1466**	**3,215.7840**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	7.44	25.77	20.57	35.51	38.11	10.81	37.53	38.11	10.31	36.04	0.00	34.76	34.76	24.79	27.79	34.65

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	12/1/2023	12/8/2023	5	6	
2	Grading	Grading	12/9/2023	1/11/2024	5	24	
3	Building Construction	Building Construction	2/9/2024	2/10/2025	5	262	
4	Paving	Paving	1/12/2024	2/8/2024	5	20	
5	Architectural Coating	Architectural Coating	2/11/2025	3/10/2025	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 120

Acres of Paving: 2.32

Residential Indoor: 243,000; Residential Outdoor: 81,000; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 6,073 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	0	8.00	247	0.40
Site Preparation	Rubber Tired Loaders	1	8.00	203	0.36
Site Preparation	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Grading	Excavators	0	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Grading	Scrapers	4	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Air Compressors	2	8.00	78	0.48
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Skid Steer Loaders	1	4.00	65	0.37
Building Construction	Tractors/Loaders/Backhoes	1	4.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	3	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	4	12.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	7	16.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	192.00	54.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	16.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	38.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Alternative Fuel for Construction Equipment

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.7246	7.2617	8.2037	0.0156		0.3163	0.3163		0.2910	0.2910		1,510.2906	1,510.2906	0.4885		1,522.5021
Total	**0.7246**	**7.2617**	**8.2037**	**0.0156**	**0.0000**	**0.3163**	**0.3163**	**0.0000**	**0.2910**	**0.2910**		**1,510.2906**	**1,510.2906**	**0.4885**		**1,522.5021**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.7800e-003	0.1715	0.0618	8.2000e-004	0.0271	1.0400e-003	0.0281	7.8000e-003	1.0000e-003	8.8000e-003		88.4188	88.4188	2.6800e-003	0.0128	92.3009
Worker	0.0328	0.0204	0.2880	8.7000e-004	0.0986	5.3000e-004	0.0991	0.0262	4.9000e-004	0.0266		88.0397	88.0397	2.3900e-003	2.1900e-003	88.7534
Total	**0.0376**	**0.1918**	**0.3498**	**1.6900e-003**	**0.1257**	**1.5700e-003**	**0.1273**	**0.0340**	**1.4900e-003**	**0.0354**		**176.4585**	**176.4585**	**5.0700e-003**	**0.0150**	**181.0542**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Site Preparation - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.3120	5.7265	10.3774	0.0156		0.0255	0.0255		0.0255	0.0255	0.0000	1,510.2906	1,510.2906	0.4885		1,522.5021
Total	**0.3120**	**5.7265**	**10.3774**	**0.0156**	**0.0000**	**0.0255**	**0.0255**	**0.0000**	**0.0255**	**0.0255**	**0.0000**	**1,510.2906**	**1,510.2906**	**0.4885**		**1,522.5021**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.7800e-003	0.1715	0.0618	8.2000e-004	0.0271	1.0400e-003	0.0281	7.8000e-003	1.0000e-003	8.8000e-003		88.4188	88.4188	2.6800e-003	0.0128	92.3009
Worker	0.0328	0.0204	0.2880	8.7000e-004	0.0986	5.3000e-004	0.0991	0.0262	4.9000e-004	0.0266		88.0397	88.0397	2.3900e-003	2.1900e-003	88.7534
Total	**0.0376**	**0.1918**	**0.3498**	**1.6900e-003**	**0.1257**	**1.5700e-003**	**0.1273**	**0.0340**	**1.4900e-003**	**0.0354**		**176.4585**	**176.4585**	**5.0700e-003**	**0.0150**	**181.0542**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					11.3246	0.0000	11.3246	3.8828	0.0000	3.8828			0.0000			0.0000
Off-Road	4.3666	46.4495	31.5784	0.0790		1.8467	1.8467		1.6989	1.6989		7,649.9476	7,649.9476	2.4742		7,711.8013
Total	**4.3666**	**46.4495**	**31.5784**	**0.0790**	**11.3246**	**1.8467**	**13.1712**	**3.8828**	**1.6989**	**5.5817**		**7,649.9476**	**7,649.9476**	**2.4742**		**7,711.8013**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.7800e-003	0.1715	0.0618	8.2000e-004	0.0271	1.0400e-003	0.0281	7.8000e-003	1.0000e-003	8.8000e-003		88.4188	88.4188	2.6800e-003	0.0128	92.3009
Worker	0.0437	0.0272	0.3840	1.1600e-003	0.1314	7.0000e-004	0.1321	0.0349	6.5000e-004	0.0355		117.3863	117.3863	3.1800e-003	2.9300e-003	118.3378
Total	**0.0485**	**0.1986**	**0.4458**	**1.9800e-003**	**0.1585**	**1.7400e-003**	**0.1603**	**0.0427**	**1.6500e-003**	**0.0443**		**205.8050**	**205.8050**	**5.8600e-003**	**0.0157**	**210.6387**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Grading - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.0961	0.0000	5.0961	1.7473	0.0000	1.7473			0.0000			0.0000
Off-Road	1.3114	21.3786	42.7005	0.0790		0.1292	0.1292		0.1292	0.1292	0.0000	7,649.9475	7,649.9475	2.4742		7,711.8012
Total	**1.3114**	**21.3786**	**42.7005**	**0.0790**	**5.0961**	**0.1292**	**5.2253**	**1.7473**	**0.1292**	**1.8765**	**0.0000**	**7,649.9475**	**7,649.9475**	**2.4742**		**7,711.8012**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.7800e-003	0.1715	0.0618	8.2000e-004	0.0271	1.0400e-003	0.0281	7.8000e-003	1.0000e-003	8.8000e-003		88.4188	88.4188	2.6800e-003	0.0128	92.3009
Worker	0.0437	0.0272	0.3840	1.1600e-003	0.1314	7.0000e-004	0.1321	0.0349	6.5000e-004	0.0355		117.3863	117.3863	3.1800e-003	2.9300e-003	118.3378
Total	**0.0485**	**0.1986**	**0.4458**	**1.9800e-003**	**0.1585**	**1.7400e-003**	**0.1603**	**0.0427**	**1.6500e-003**	**0.0443**		**205.8050**	**205.8050**	**5.8600e-003**	**0.0157**	**210.6387**

Gran Vista Specific Plan - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Grading - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					11.3246	0.0000	11.3246	3.8828	0.0000	3.8828			0.0000			0.0000
Off-Road	4.2339	43.5144	30.8911	0.0790		1.7391	1.7391		1.6000	1.6000		7,645.6472	7,645.6472	2.4728		7,707.4661
Total	**4.2339**	**43.5144**	**30.8911**	**0.0790**	**11.3246**	**1.7391**	**13.0637**	**3.8828**	**1.6000**	**5.4827**		**7,645.6472**	**7,645.6472**	**2.4728**		**7,707.4661**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.6000e-003	0.1703	0.0604	8.0000e-004	0.0271	1.0500e-003	0.0281	7.8000e-003	1.0000e-003	8.8000e-003		86.8772	86.8772	2.7400e-003	0.0126	90.6941
Worker	0.0411	0.0244	0.3582	1.1200e-003	0.1314	6.7000e-004	0.1321	0.0349	6.2000e-004	0.0355		113.5294	113.5294	2.9000e-003	2.7300e-003	114.4167
Total	**0.0457**	**0.1947**	**0.4186**	**1.9200e-003**	**0.1585**	**1.7200e-003**	**0.1603**	**0.0427**	**1.6200e-003**	**0.0443**		**200.4066**	**200.4066**	**5.6400e-003**	**0.0153**	**205.1108**

Gran Vista Specific Plan - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Grading - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.0961	0.0000	5.0961	1.7473	0.0000	1.7473			0.0000			0.0000
Off-Road	1.3114	21.3786	42.7005	0.0790		0.1292	0.1292		0.1292	0.1292	0.0000	7,645.6472	7,645.6472	2.4728		7,707.4661
Total	**1.3114**	**21.3786**	**42.7005**	**0.0790**	**5.0961**	**0.1292**	**5.2253**	**1.7473**	**0.1292**	**1.8765**	**0.0000**	**7,645.6472**	**7,645.6472**	**2.4728**		**7,707.4661**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.6000e-003	0.1703	0.0604	8.0000e-004	0.0271	1.0500e-003	0.0281	7.8000e-003	1.0000e-003	8.8000e-003		86.8772	86.8772	2.7400e-003	0.0126	90.6941
Worker	0.0411	0.0244	0.3582	1.1200e-003	0.1314	6.7000e-004	0.1321	0.0349	6.2000e-004	0.0355		113.5294	113.5294	2.9000e-003	2.7300e-003	114.4167
Total	**0.0457**	**0.1947**	**0.4186**	**1.9200e-003**	**0.1585**	**1.7200e-003**	**0.1603**	**0.0427**	**1.6200e-003**	**0.0443**		**200.4066**	**200.4066**	**5.6400e-003**	**0.0153**	**205.1108**

Gran Vista Specific Plan - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4603	11.8320	15.1306	0.0256		0.5421	0.5421		0.5244	0.5244		2,407.6728	2,407.6728	0.3560		2,416.5728
Total	**1.4603**	**11.8320**	**15.1306**	**0.0256**		**0.5421**	**0.5421**		**0.5244**	**0.5244**		**2,407.6728**	**2,407.6728**	**0.3560**		**2,416.5728**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0621	2.2991	0.8147	0.0109	0.3657	0.0142	0.3799	0.1053	0.0136	0.1188		1,172.8426	1,172.8426	0.0370	0.1698	1,224.3706
Worker	0.4927	0.2930	4.2987	0.0135	1.5772	8.0500e-003	1.5853	0.4184	7.4100e-003	0.4258		1,362.3527	1,362.3527	0.0348	0.0328	1,373.0005
Total	**0.5548**	**2.5920**	**5.1134**	**0.0243**	**1.9430**	**0.0222**	**1.9652**	**0.5237**	**0.0210**	**0.5446**		**2,535.1953**	**2,535.1953**	**0.0718**	**0.2026**	**2,597.3711**

Gran Vista Specific Plan - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4425	8.5365	14.7576	0.0230		0.0554	0.0554		0.0554	0.0554	0.0000	2,200.1950	2,200.1950	0.3348		2,208.5657
Total	**0.4425**	**8.5365**	**14.7576**	**0.0230**		**0.0554**	**0.0554**		**0.0554**	**0.0554**	**0.0000**	**2,200.1950**	**2,200.1950**	**0.3348**		**2,208.5657**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0621	2.2991	0.8147	0.0109	0.3657	0.0142	0.3799	0.1053	0.0136	0.1188		1,172.8426	1,172.8426	0.0370	0.1698	1,224.3706
Worker	0.4927	0.2930	4.2987	0.0135	1.5772	8.0500e-003	1.5853	0.4184	7.4100e-003	0.4258		1,362.3527	1,362.3527	0.0348	0.0328	1,373.0005
Total	**0.5548**	**2.5920**	**5.1134**	**0.0243**	**1.9430**	**0.0222**	**1.9652**	**0.5237**	**0.0210**	**0.5446**		**2,535.1953**	**2,535.1953**	**0.0718**	**0.2026**	**2,597.3711**

Gran Vista Specific Plan - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3677	11.0768	15.0757	0.0256		0.4677	0.4677		0.4521	0.4521		2,407.7806	2,407.7806	0.3511		2,416.5572
Total	**1.3677**	**11.0768**	**15.0757**	**0.0256**		**0.4677**	**0.4677**		**0.4521**	**0.4521**		**2,407.7806**	**2,407.7806**	**0.3511**		**2,416.5572**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0602	2.2765	0.8010	0.0106	0.3657	0.0141	0.3799	0.1053	0.0135	0.1188		1,150.4691	1,150.4691	0.0380	0.1665	1,201.0302
Worker	0.4639	0.2652	4.0242	0.0130	1.5772	7.6900e-003	1.5849	0.4184	7.0800e-003	0.4254		1,315.8857	1,315.8857	0.0317	0.0308	1,325.8569
Total	**0.5242**	**2.5416**	**4.8252**	**0.0237**	**1.9430**	**0.0218**	**1.9648**	**0.5237**	**0.0206**	**0.5442**		**2,466.3548**	**2,466.3548**	**0.0696**	**0.1973**	**2,526.8871**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4425	8.5365	14.7576	0.0230		0.0554	0.0554		0.0554	0.0554	0.0000	2,200.3029	2,200.3029	0.3314		2,208.5866
Total	**0.4425**	**8.5365**	**14.7576**	**0.0230**		**0.0554**	**0.0554**		**0.0554**	**0.0554**	**0.0000**	**2,200.3029**	**2,200.3029**	**0.3314**		**2,208.5866**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0602	2.2765	0.8010	0.0106	0.3657	0.0141	0.3799	0.1053	0.0135	0.1188		1,150.4691	1,150.4691	0.0380	0.1665	1,201.0302
Worker	0.4639	0.2652	4.0242	0.0130	1.5772	7.6900e-003	1.5849	0.4184	7.0800e-003	0.4254		1,315.8857	1,315.8857	0.0317	0.0308	1,325.8569
Total	**0.5242**	**2.5416**	**4.8252**	**0.0237**	**1.9430**	**0.0218**	**1.9648**	**0.5237**	**0.0206**	**0.5442**		**2,466.3548**	**2,466.3548**	**0.0696**	**0.1973**	**2,526.8871**

Gran Vista Specific Plan - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1339	11.0489	16.4758	0.0254		0.5492	0.5492		0.5053	0.5053		2,461.6929	2,461.6929	0.7962		2,481.5970
Paving	0.3039					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.4378**	**11.0489**	**16.4758**	**0.0254**		**0.5492**	**0.5492**		**0.5053**	**0.5053**		**2,461.6929**	**2,461.6929**	**0.7962**		**2,481.5970**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.6000e-003	0.1703	0.0604	8.0000e-004	0.0271	1.0500e-003	0.0281	7.8000e-003	1.0000e-003	8.8000e-003		86.8772	86.8772	2.7400e-003	0.0126	90.6941
Worker	0.0411	0.0244	0.3582	1.1200e-003	0.1314	6.7000e-004	0.1321	0.0349	6.2000e-004	0.0355		113.5294	113.5294	2.9000e-003	2.7300e-003	114.4167
Total	**0.0457**	**0.1947**	**0.4186**	**1.9200e-003**	**0.1585**	**1.7200e-003**	**0.1603**	**0.0427**	**1.6200e-003**	**0.0443**		**200.4066**	**200.4066**	**5.6400e-003**	**0.0153**	**205.1108**

Gran Vista Specific Plan - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Paving - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3931	11.1869	19.2795	0.0254		0.0417	0.0417		0.0417	0.0417	0.0000	2,461.6929	2,461.6929	0.7962		2,481.5969
Paving	0.3039					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.6970**	**11.1869**	**19.2795**	**0.0254**		**0.0417**	**0.0417**		**0.0417**	**0.0417**	**0.0000**	**2,461.6929**	**2,461.6929**	**0.7962**		**2,481.5969**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.6000e-003	0.1703	0.0604	8.0000e-004	0.0271	1.0500e-003	0.0281	7.8000e-003	1.0000e-003	8.8000e-003		86.8772	86.8772	2.7400e-003	0.0126	90.6941
Worker	0.0411	0.0244	0.3582	1.1200e-003	0.1314	6.7000e-004	0.1321	0.0349	6.2000e-004	0.0355		113.5294	113.5294	2.9000e-003	2.7300e-003	114.4167
Total	**0.0457**	**0.1947**	**0.4186**	**1.9200e-003**	**0.1585**	**1.7200e-003**	**0.1603**	**0.0427**	**1.6200e-003**	**0.0443**		**200.4066**	**200.4066**	**5.6400e-003**	**0.0153**	**205.1108**

Gran Vista Specific Plan - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Architectural Coating - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	48.3368					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	**48.5077**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**		**281.4481**	**281.4481**	**0.0154**		**281.8319**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.4600e-003	0.1686	0.0593	7.9000e-004	0.0271	1.0500e-003	0.0281	7.8000e-003	1.0000e-003	8.8000e-003		85.2199	85.2199	2.8100e-003	0.0123	88.9652
Worker	0.0918	0.0525	0.7965	2.5800e-003	0.3122	1.5200e-003	0.3137	0.0828	1.4000e-003	0.0842		260.4357	260.4357	6.2700e-003	6.1000e-003	262.4092
Total	**0.0963**	**0.2211**	**0.8558**	**3.3700e-003**	**0.3393**	**2.5700e-003**	**0.3418**	**0.0906**	**2.4000e-003**	**0.0930**		**345.6556**	**345.6556**	**9.0800e-003**	**0.0184**	**351.3744**

Gran Vista Specific Plan - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Architectural Coating - 2025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	48.3368					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0545	1.0598	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**48.3913**	**1.0598**	**1.8324**	**2.9700e-003**		**3.9600e-003**	**3.9600e-003**		**3.9600e-003**	**3.9600e-003**	**0.0000**	**281.4481**	**281.4481**	**0.0154**		**281.8319**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.4600e-003	0.1686	0.0593	7.9000e-004	0.0271	1.0500e-003	0.0281	7.8000e-003	1.0000e-003	8.8000e-003		85.2199	85.2199	2.8100e-003	0.0123	88.9652
Worker	0.0918	0.0525	0.7965	2.5800e-003	0.3122	1.5200e-003	0.3137	0.0828	1.4000e-003	0.0842		260.4357	260.4357	6.2700e-003	6.1000e-003	262.4092
Total	**0.0963**	**0.2211**	**0.8558**	**3.3700e-003**	**0.3393**	**2.5700e-003**	**0.3418**	**0.0906**	**2.4000e-003**	**0.0930**		**345.6556**	**345.6556**	**9.0800e-003**	**0.0184**	**351.3744**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Density

Increase Diversity

Increase Transit Accessibility

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.0278	1.6251	14.3162	0.0281	2.9954	0.0223	3.0176	0.7979	0.0208	0.8187		2,866.4734	2,866.4734	0.2320	0.1415	2,914.4261
Unmitigated	2.4482	2.3053	20.6088	0.0447	4.8402	0.0338	4.8740	1.2893	0.0315	1.3208		4,552.9624	4,552.9624	0.3159	0.1979	4,619.8263

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Condo/Townhouse High Rise	960.00	960.00	960.00	2,299,315	1,422,938
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	960.00	960.00	960.00	2,299,315	1,422,938

4.3 Trip Type Information

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Condo/Townhouse High Rise	6.58	0.00	0.00	100.00	0.00	0.00	100	0	0
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.561854	0.062428	0.177046	0.117565	0.023832	0.006317	0.008949	0.006298	0.000705	0.000577	0.028723	0.000955	0.004751
Condo/Townhouse High Rise	0.561854	0.062428	0.177046	0.117565	0.023832	0.006317	0.008949	0.006298	0.000705	0.000577	0.028723	0.000955	0.004751
Other Asphalt Surfaces	0.561854	0.062428	0.177046	0.117565	0.023832	0.006317	0.008949	0.006298	0.000705	0.000577	0.028723	0.000955	0.004751
Parking Lot	0.561854	0.062428	0.177046	0.117565	0.023832	0.006317	0.008949	0.006298	0.000705	0.000577	0.028723	0.000955	0.004751

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install Energy Efficient Appliances

Gran Vista Specific Plan - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0258	0.2205	0.0938	1.4100e-003		0.0178	0.0178		0.0178	0.0178		281.4266	281.4266	5.3900e-003	5.1600e-003	283.0990
NaturalGas Unmitigated	0.0258	0.2205	0.0938	1.4100e-003		0.0178	0.0178		0.0178	0.0178		281.4266	281.4266	5.3900e-003	5.1600e-003	283.0990

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse High Rise	2392.13	0.0258	0.2205	0.0938	1.4100e-003		0.0178	0.0178		0.0178	0.0178		281.4266	281.4266	5.3900e-003	5.1600e-003	283.0990
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0258**	**0.2205**	**0.0938**	**1.4100e-003**		**0.0178**	**0.0178**		**0.0178**	**0.0178**		**281.4266**	**281.4266**	**5.3900e-003**	**5.1600e-003**	**283.0990**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse High Rise	2.39213	0.0258	0.2205	0.0938	1.4100e-003		0.0178	0.0178		0.0178	0.0178		281.4266	281.4266	5.3900e-003	5.1600e-003	283.0990
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0258**	**0.2205**	**0.0938**	**1.4100e-003**		**0.0178**	**0.0178**		**0.0178**	**0.0178**		**281.4266**	**281.4266**	**5.3900e-003**	**5.1600e-003**	**283.0990**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

No Hearths Installed

Gran Vista Specific Plan - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.1736	0.1140	9.8934	5.2000e-004		0.0549	0.0549		0.0549	0.0549	0.0000	17.8319	17.8319	0.0171	0.0000	18.2590
Unmitigated	3.1736	0.1140	9.8934	5.2000e-004		0.0549	0.0549		0.0549	0.0549	0.0000	17.8319	17.8319	0.0171	0.0000	18.2590

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2649					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.6115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.2972	0.1140	9.8934	5.2000e-004		0.0549	0.0549		0.0549	0.0549		17.8319	17.8319	0.0171		18.2590
Total	**3.1736**	**0.1140**	**9.8934**	**5.2000e-004**		**0.0549**	**0.0549**		**0.0549**	**0.0549**	**0.0000**	**17.8319**	**17.8319**	**0.0171**	**0.0000**	**18.2590**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2649					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.6115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.2972	0.1140	9.8934	5.2000e-004		0.0549	0.0549		0.0549	0.0549		17.8319	17.8319	0.0171		18.2590
Total	**3.1736**	**0.1140**	**9.8934**	**5.2000e-004**		**0.0549**	**0.0549**		**0.0549**	**0.0549**	**0.0000**	**17.8319**	**17.8319**	**0.0171**	**0.0000**	**18.2590**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Gran Vista Specific Plan

San Diego County APCD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	2.14	Acre	2.14	93,218.40	0
Parking Lot	20.00	Space	0.18	8,000.00	0
City Park	3.40	Acre	3.40	148,104.00	0
Condo/Townhouse High Rise	120.00	Dwelling Unit	1.88	120,000.00	343

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2025
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	539.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Based on site plan for project.

Construction Phase - Based on applicant provided information.

Off-road Equipment - Based on applicant provided information.

Off-road Equipment - Based on applicant provided information.

Off-road Equipment - Based on applicant provided information.

Off-road Equipment - Based on applicant provided information.

Off-road Equipment - Based on applicant provided information.

Trips and VMT - Based on applicant provided information.

Gran Vista Specific Plan - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

On-road Fugitive Dust - CalEEmod defaults.

Grading - CalEEmod defaults.

Architectural Coating - Low-VOC content coatings to be used onsite.

Vehicle Trips - Based on traffic assessment for project.

Road Dust - CalEEmod defaults.

Woodstoves - No wood or natural gas.

Consumer Products - CalEEmod defaults.

Area Coating - Low-VOC coatings to be used.

Landscape Equipment - CalEEmod defaults.

Energy Use - CalEEMod defaults.

Water And Wastewater - CalEEmod defaults.

Solid Waste - CalEEmod defaults.

Construction Off-road Equipment Mitigation - In accordance with SDAPCD Rule 55. Applicant has committed to Tier 4 Interim equipment over 50 horsepower, electric under 50 horsepower.

Mobile Land Use Mitigation -

Area Mitigation - Low-VOC architectural coatings and no hearths.

Energy Mitigation - Energy star appliances

Water Mitigation - low-flow fixtures and water-efficient irrigation

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	100.00
tblArchitecturalCoating	EF_Parking	250.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Parking	250	100
tblAreaCoating	Area_EF_Residential_Exterior	250	100
tblAreaCoating	Area_EF_Residential_Interior	250	50
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblAreaMitigation	UseLowVOCPaintParkingValue	250	100

Gran Vista Specific Plan - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	250	100
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	250	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	FuelType	Diesel	Electrical
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim

Gran Vista Specific Plan - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstructionPhase	NumDays	230.00	262.00
tblConstructionPhase	NumDays	20.00	24.00
tblConstructionPhase	NumDays	10.00	6.00
tblConstructionPhase	PhaseEndDate	1/23/2025	3/10/2025
tblConstructionPhase	PhaseEndDate	11/28/2024	2/10/2025
tblConstructionPhase	PhaseEndDate	12/26/2024	2/8/2024
tblConstructionPhase	PhaseEndDate	12/14/2023	12/8/2023
tblConstructionPhase	PhaseStartDate	12/27/2024	2/11/2025
tblConstructionPhase	PhaseStartDate	1/12/2024	2/9/2024
tblConstructionPhase	PhaseStartDate	12/15/2023	12/9/2023
tblConstructionPhase	PhaseStartDate	11/29/2024	1/12/2024
tblFireplaces	FireplaceDayYear	82.00	0.00
tblFireplaces	FireplaceHourDay	3.00	0.00
tblFireplaces	FireplaceWoodMass	3,078.40	0.00
tblFireplaces	NumberGas	66.00	0.00
tblFireplaces	NumberNoFireplace	12.00	0.00
tblFireplaces	NumberWood	42.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	3.00
tblOffRoadEquipment	UsageHours	7.00	4.00

Gran Vista Specific Plan - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblOffRoadEquipment	UsageHours	7.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	WorkerTripNumber	10.00	12.00
tblTripsAndVMT	WorkerTripNumber	18.00	16.00
tblTripsAndVMT	WorkerTripNumber	18.00	16.00
tblTripsAndVMT	WorkerTripNumber	191.00	192.00
tblVehicleTrips	DV_TP	11.00	0.00
tblVehicleTrips	HO_TL	7.50	0.00
tblVehicleTrips	HO_TTP	39.60	0.00
tblVehicleTrips	HS_TL	7.30	0.00
tblVehicleTrips	HS_TTP	18.80	0.00
tblVehicleTrips	HW_TL	10.80	6.58
tblVehicleTrips	HW_TTP	41.60	100.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	86.00	100.00
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	ST_TR	4.91	8.00
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	SU_TR	4.09	8.00
tblVehicleTrips	WD_TR	0.78	0.00
tblVehicleTrips	WD_TR	5.44	8.00
tblWoodstoves	NumberCatalytic	6.00	0.00
tblWoodstoves	NumberNoncatalytic	6.00	0.00
tblWoodstoves	WoodstoveDayYear	82.00	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.0 Emissions Summary

Gran Vista Specific Plan - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	4.4186	46.6587	32.0069	0.0809	11.4831	1.8484	13.3315	3.9254	1.7006	5.6260	0.0000	7,849.4263	7,849.4263	2.4802	0.0160	7,916.1985
2024	4.2829	43.7193	31.2944	0.0808	11.4831	1.7408	13.2239	3.9254	1.6016	5.5270	0.0000	7,839.9550	7,839.9550	2.4786	0.2057	7,906.5576
2025	48.6120	13.7477	19.7390	0.0486	1.9430	0.4895	2.4325	0.5237	0.4728	0.9964	0.0000	4,803.8385	4,803.8385	0.4227	0.2002	4,874.0569
Maximum	**48.6120**	**46.6587**	**32.0069**	**0.0809**	**11.4831**	**1.8484**	**13.3315**	**3.9254**	**1.7006**	**5.6260**	**0.0000**	**7,849.4263**	**7,849.4263**	**2.4802**	**0.2057**	**7,916.1985**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	1.3635	21.5878	43.1291	0.0809	5.2546	0.1310	5.3856	1.7899	0.1309	1.9208	0.0000	7,849.4263	7,849.4263	2.4802	0.0160	7,916.1985
2024	1.3605	21.5835	43.1038	0.0808	5.2546	0.1310	5.3856	1.7899	0.1309	1.9208	0.0000	7,839.9550	7,839.9550	2.4786	0.2057	7,906.5576
2025	48.4956	11.2074	19.4209	0.0460	1.9430	0.0773	2.0202	0.5237	0.0760	0.5997	0.0000	4,596.3608	4,596.3608	0.4030	0.2002	4,666.0863
Maximum	**48.4956**	**21.5878**	**43.1291**	**0.0809**	**5.2546**	**0.1310**	**5.3856**	**1.7899**	**0.1309**	**1.9208**	**0.0000**	**7,849.4263**	**7,849.4263**	**2.4802**	**0.2057**	**7,916.1985**

Gran Vista Specific Plan - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	10.63	47.78	-27.23	1.22	50.01	91.68	55.87	51.00	91.05	63.44	0.00	1.01	1.01	0.37	0.00	1.00

Gran Vista Specific Plan - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.1736	0.1140	9.8934	5.2000e-004		0.0549	0.0549		0.0549	0.0549	0.0000	17.8319	17.8319	0.0171	0.0000	18.2590
Energy	0.0258	0.2205	0.0938	1.4100e-003		0.0178	0.0178		0.0178	0.0178		281.4266	281.4266	5.3900e-003	5.1600e-003	283.0990
Mobile	2.3792	2.4992	21.3132	0.0428	4.8402	0.0338	4.8740	1.2893	0.0315	1.3208		4,357.5717	4,357.5717	0.3356	0.2086	4,428.1244
Total	**5.5785**	**2.8336**	**31.3004**	**0.0447**	**4.8402**	**0.1065**	**4.9467**	**1.2893**	**0.1042**	**1.3935**	**0.0000**	**4,656.8301**	**4,656.8301**	**0.3581**	**0.2138**	**4,729.4824**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.1736	0.1140	9.8934	5.2000e-004		0.0549	0.0549		0.0549	0.0549	0.0000	17.8319	17.8319	0.0171	0.0000	18.2590
Energy	0.0258	0.2205	0.0938	1.4100e-003		0.0178	0.0178		0.0178	0.0178		281.4266	281.4266	5.3900e-003	5.1600e-003	283.0990
Mobile	1.9463	1.7663	15.1808	0.0269	2.9954	0.0223	3.0177	0.7979	0.0208	0.8187		2,746.4824	2,746.4824	0.2511	0.1498	2,797.3987
Total	**5.1457**	**2.1007**	**25.1680**	**0.0289**	**2.9954**	**0.0950**	**3.0904**	**0.7979**	**0.0935**	**0.8914**	**0.0000**	**3,045.7409**	**3,045.7409**	**0.2736**	**0.1550**	**3,098.7567**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**7.76**	**25.87**	**19.59**	**35.38**	**38.11**	**10.81**	**37.53**	**38.11**	**10.31**	**36.03**	**0.00**	**34.60**	**34.60**	**23.61**	**27.51**	**34.48**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	12/1/2023	12/8/2023	5	6	
2	Grading	Grading	12/9/2023	1/11/2024	5	24	
3	Building Construction	Building Construction	2/9/2024	2/10/2025	5	262	
4	Paving	Paving	1/12/2024	2/8/2024	5	20	
5	Architectural Coating	Architectural Coating	2/11/2025	3/10/2025	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 120

Acres of Paving: 2.32

Residential Indoor: 243,000; Residential Outdoor: 81,000; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 6,073 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	0	8.00	247	0.40
Site Preparation	Rubber Tired Loaders	1	8.00	203	0.36
Site Preparation	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Grading	Excavators	0	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40

Gran Vista Specific Plan - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Grading	Scrapers	4	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Air Compressors	2	8.00	78	0.48
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Skid Steer Loaders	1	4.00	65	0.37
Building Construction	Tractors/Loaders/Backhoes	1	4.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	3	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	4	12.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	7	16.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	192.00	54.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	16.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	38.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Alternative Fuel for Construction Equipment

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Gran Vista Specific Plan - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.7246	7.2617	8.2037	0.0156		0.3163	0.3163		0.2910	0.2910		1,510.2906	1,510.2906	0.4885		1,522.5021
Total	**0.7246**	**7.2617**	**8.2037**	**0.0156**	**0.0000**	**0.3163**	**0.3163**	**0.0000**	**0.2910**	**0.2910**		**1,510.2906**	**1,510.2906**	**0.4885**		**1,522.5021**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.6500e-003	0.1787	0.0637	8.2000e-004	0.0271	1.0500e-003	0.0281	7.8000e-003	1.0000e-003	8.8000e-003		88.5445	88.5445	2.6700e-003	0.0128	92.4352
Worker	0.0356	0.0229	0.2737	8.2000e-004	0.0986	5.3000e-004	0.0991	0.0262	4.9000e-004	0.0266		83.2007	83.2007	2.5400e-003	2.3700e-003	83.9715
Total	**0.0402**	**0.2016**	**0.3373**	**1.6400e-003**	**0.1257**	**1.5800e-003**	**0.1273**	**0.0340**	**1.4900e-003**	**0.0354**		**171.7452**	**171.7452**	**5.2100e-003**	**0.0152**	**176.4067**

Gran Vista Specific Plan - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Site Preparation - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.3120	5.7265	10.3774	0.0156		0.0255	0.0255		0.0255	0.0255	0.0000	1,510.2906	1,510.2906	0.4885		1,522.5021
Total	**0.3120**	**5.7265**	**10.3774**	**0.0156**	**0.0000**	**0.0255**	**0.0255**	**0.0000**	**0.0255**	**0.0255**	**0.0000**	**1,510.2906**	**1,510.2906**	**0.4885**		**1,522.5021**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.6500e-003	0.1787	0.0637	8.2000e-004	0.0271	1.0500e-003	0.0281	7.8000e-003	1.0000e-003	8.8000e-003		88.5445	88.5445	2.6700e-003	0.0128	92.4352
Worker	0.0356	0.0229	0.2737	8.2000e-004	0.0986	5.3000e-004	0.0991	0.0262	4.9000e-004	0.0266		83.2007	83.2007	2.5400e-003	2.3700e-003	83.9715
Total	**0.0402**	**0.2016**	**0.3373**	**1.6400e-003**	**0.1257**	**1.5800e-003**	**0.1273**	**0.0340**	**1.4900e-003**	**0.0354**		**171.7452**	**171.7452**	**5.2100e-003**	**0.0152**	**176.4067**

Gran Vista Specific Plan - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					11.3246	0.0000	11.3246	3.8828	0.0000	3.8828			0.0000			0.0000
Off-Road	4.3666	46.4495	31.5784	0.0790		1.8467	1.8467		1.6989	1.6989		7,649.9476	7,649.9476	2.4742		7,711.8013
Total	**4.3666**	**46.4495**	**31.5784**	**0.0790**	**11.3246**	**1.8467**	**13.1712**	**3.8828**	**1.6989**	**5.5817**		**7,649.9476**	**7,649.9476**	**2.4742**		**7,711.8013**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.6500e-003	0.1787	0.0637	8.2000e-004	0.0271	1.0500e-003	0.0281	7.8000e-003	1.0000e-003	8.8000e-003		88.5445	88.5445	2.6700e-003	0.0128	92.4352
Worker	0.0474	0.0305	0.3649	1.1000e-003	0.1314	7.0000e-004	0.1321	0.0349	6.5000e-004	0.0355		110.9342	110.9342	3.3900e-003	3.1600e-003	111.9621
Total	**0.0521**	**0.2092**	**0.4285**	**1.9200e-003**	**0.1585**	**1.7500e-003**	**0.1603**	**0.0427**	**1.6500e-003**	**0.0443**		**199.4787**	**199.4787**	**6.0600e-003**	**0.0160**	**204.3972**

Gran Vista Specific Plan - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Grading - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.0961	0.0000	5.0961	1.7473	0.0000	1.7473			0.0000			0.0000
Off-Road	1.3114	21.3786	42.7005	0.0790		0.1292	0.1292		0.1292	0.1292	0.0000	7,649.9475	7,649.9475	2.4742		7,711.8012
Total	**1.3114**	**21.3786**	**42.7005**	**0.0790**	**5.0961**	**0.1292**	**5.2253**	**1.7473**	**0.1292**	**1.8765**	**0.0000**	**7,649.9475**	**7,649.9475**	**2.4742**		**7,711.8012**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.6500e-003	0.1787	0.0637	8.2000e-004	0.0271	1.0500e-003	0.0281	7.8000e-003	1.0000e-003	8.8000e-003		88.5445	88.5445	2.6700e-003	0.0128	92.4352
Worker	0.0474	0.0305	0.3649	1.1000e-003	0.1314	7.0000e-004	0.1321	0.0349	6.5000e-004	0.0355		110.9342	110.9342	3.3900e-003	3.1600e-003	111.9621
Total	**0.0521**	**0.2092**	**0.4285**	**1.9200e-003**	**0.1585**	**1.7500e-003**	**0.1603**	**0.0427**	**1.6500e-003**	**0.0443**		**199.4787**	**199.4787**	**6.0600e-003**	**0.0160**	**204.3972**

Gran Vista Specific Plan - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Grading - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					11.3246	0.0000	11.3246	3.8828	0.0000	3.8828			0.0000			0.0000
Off-Road	4.2339	43.5144	30.8911	0.0790		1.7391	1.7391		1.6000	1.6000		7,645.6472	7,645.6472	2.4728		7,707.4661
Total	**4.2339**	**43.5144**	**30.8911**	**0.0790**	**11.3246**	**1.7391**	**13.0637**	**3.8828**	**1.6000**	**5.4827**		**7,645.6472**	**7,645.6472**	**2.4728**		**7,707.4661**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.4600e-003	0.1775	0.0622	8.0000e-004	0.0271	1.0500e-003	0.0282	7.8000e-003	1.0100e-003	8.8100e-003		87.0043	87.0043	2.7300e-003	0.0126	90.8295
Worker	0.0446	0.0275	0.3411	1.0600e-003	0.1314	6.7000e-004	0.1321	0.0349	6.2000e-004	0.0355		107.3036	107.3036	3.0900e-003	2.9600e-003	108.2620
Total	**0.0491**	**0.2049**	**0.4033**	**1.8600e-003**	**0.1585**	**1.7200e-003**	**0.1603**	**0.0427**	**1.6300e-003**	**0.0443**		**194.3078**	**194.3078**	**5.8200e-003**	**0.0156**	**199.0915**

Gran Vista Specific Plan - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Grading - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.0961	0.0000	5.0961	1.7473	0.0000	1.7473			0.0000			0.0000
Off-Road	1.3114	21.3786	42.7005	0.0790		0.1292	0.1292		0.1292	0.1292	0.0000	7,645.6472	7,645.6472	2.4728		7,707.4661
Total	**1.3114**	**21.3786**	**42.7005**	**0.0790**	**5.0961**	**0.1292**	**5.2253**	**1.7473**	**0.1292**	**1.8765**	**0.0000**	**7,645.6472**	**7,645.6472**	**2.4728**		**7,707.4661**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.4600e-003	0.1775	0.0622	8.0000e-004	0.0271	1.0500e-003	0.0282	7.8000e-003	1.0100e-003	8.8100e-003		87.0043	87.0043	2.7300e-003	0.0126	90.8295
Worker	0.0446	0.0275	0.3411	1.0600e-003	0.1314	6.7000e-004	0.1321	0.0349	6.2000e-004	0.0355		107.3036	107.3036	3.0900e-003	2.9600e-003	108.2620
Total	**0.0491**	**0.2049**	**0.4033**	**1.8600e-003**	**0.1585**	**1.7200e-003**	**0.1603**	**0.0427**	**1.6300e-003**	**0.0443**		**194.3078**	**194.3078**	**5.8200e-003**	**0.0156**	**199.0915**

Gran Vista Specific Plan - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4603	11.8320	15.1306	0.0256		0.5421	0.5421		0.5244	0.5244		2,407.6728	2,407.6728	0.3560		2,416.5728
Total	**1.4603**	**11.8320**	**15.1306**	**0.0256**		**0.5421**	**0.5421**		**0.5244**	**0.5244**		**2,407.6728**	**2,407.6728**	**0.3560**		**2,416.5728**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0602	2.3960	0.8398	0.0109	0.3657	0.0142	0.3800	0.1053	0.0136	0.1189		1,174.5577	1,174.5577	0.0368	0.1702	1,226.1987
Worker	0.5356	0.3295	4.0928	0.0127	1.5772	8.0500e-003	1.5853	0.4184	7.4100e-003	0.4258		1,287.6426	1,287.6426	0.0371	0.0355	1,299.1438
Total	**0.5958**	**2.7255**	**4.9326**	**0.0236**	**1.9430**	**0.0223**	**1.9652**	**0.5237**	**0.0210**	**0.5447**		**2,462.2003**	**2,462.2003**	**0.0739**	**0.2057**	**2,525.3426**

Gran Vista Specific Plan - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4425	8.5365	14.7576	0.0230		0.0554	0.0554		0.0554	0.0554	0.0000	2,200.1950	2,200.1950	0.3348		2,208.5657
Total	**0.4425**	**8.5365**	**14.7576**	**0.0230**		**0.0554**	**0.0554**		**0.0554**	**0.0554**	**0.0000**	**2,200.1950**	**2,200.1950**	**0.3348**		**2,208.5657**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0602	2.3960	0.8398	0.0109	0.3657	0.0142	0.3800	0.1053	0.0136	0.1189		1,174.5577	1,174.5577	0.0368	0.1702	1,226.1987
Worker	0.5356	0.3295	4.0928	0.0127	1.5772	8.0500e-003	1.5853	0.4184	7.4100e-003	0.4258		1,287.6426	1,287.6426	0.0371	0.0355	1,299.1438
Total	**0.5958**	**2.7255**	**4.9326**	**0.0236**	**1.9430**	**0.0223**	**1.9652**	**0.5237**	**0.0210**	**0.5447**		**2,462.2003**	**2,462.2003**	**0.0739**	**0.2057**	**2,525.3426**

Gran Vista Specific Plan - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3677	11.0768	15.0757	0.0256		0.4677	0.4677		0.4521	0.4521		2,407.7806	2,407.7806	0.3511		2,416.5572
Total	**1.3677**	**11.0768**	**15.0757**	**0.0256**		**0.4677**	**0.4677**		**0.4521**	**0.4521**		**2,407.7806**	**2,407.7806**	**0.3511**		**2,416.5572**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0582	2.3728	0.8259	0.0106	0.3657	0.0142	0.3799	0.1053	0.0136	0.1189		1,152.1916	1,152.1916	0.0378	0.1669	1,202.8630
Worker	0.5055	0.2982	3.8373	0.0123	1.5772	7.6900e-003	1.5849	0.4184	7.0800e-003	0.4254		1,243.8663	1,243.8663	0.0339	0.0333	1,254.6368
Total	**0.5637**	**2.6709**	**4.6633**	**0.0230**	**1.9430**	**0.0219**	**1.9648**	**0.5237**	**0.0207**	**0.5443**		**2,396.0579**	**2,396.0579**	**0.0716**	**0.2002**	**2,457.4997**

Gran Vista Specific Plan - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4425	8.5365	14.7576	0.0230		0.0554	0.0554		0.0554	0.0554	0.0000	2,200.3029	2,200.3029	0.3314		2,208.5866
Total	**0.4425**	**8.5365**	**14.7576**	**0.0230**		**0.0554**	**0.0554**		**0.0554**	**0.0554**	**0.0000**	**2,200.3029**	**2,200.3029**	**0.3314**		**2,208.5866**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0582	2.3728	0.8259	0.0106	0.3657	0.0142	0.3799	0.1053	0.0136	0.1189		1,152.1916	1,152.1916	0.0378	0.1669	1,202.8630
Worker	0.5055	0.2982	3.8373	0.0123	1.5772	7.6900e-003	1.5849	0.4184	7.0800e-003	0.4254		1,243.8663	1,243.8663	0.0339	0.0333	1,254.6368
Total	**0.5637**	**2.6709**	**4.6633**	**0.0230**	**1.9430**	**0.0219**	**1.9648**	**0.5237**	**0.0207**	**0.5443**		**2,396.0579**	**2,396.0579**	**0.0716**	**0.2002**	**2,457.4997**

Gran Vista Specific Plan - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1339	11.0489	16.4758	0.0254		0.5492	0.5492		0.5053	0.5053		2,461.6929	2,461.6929	0.7962		2,481.5970
Paving	0.3039					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.4378**	**11.0489**	**16.4758**	**0.0254**		**0.5492**	**0.5492**		**0.5053**	**0.5053**		**2,461.6929**	**2,461.6929**	**0.7962**		**2,481.5970**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.4600e-003	0.1775	0.0622	8.0000e-004	0.0271	1.0500e-003	0.0282	7.8000e-003	1.0100e-003	8.8100e-003		87.0043	87.0043	2.7300e-003	0.0126	90.8295
Worker	0.0446	0.0275	0.3411	1.0600e-003	0.1314	6.7000e-004	0.1321	0.0349	6.2000e-004	0.0355		107.3036	107.3036	3.0900e-003	2.9600e-003	108.2620
Total	**0.0491**	**0.2049**	**0.4033**	**1.8600e-003**	**0.1585**	**1.7200e-003**	**0.1603**	**0.0427**	**1.6300e-003**	**0.0443**		**194.3078**	**194.3078**	**5.8200e-003**	**0.0156**	**199.0915**

Gran Vista Specific Plan - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Paving - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3931	11.1869	19.2795	0.0254		0.0417	0.0417		0.0417	0.0417	0.0000	2,461.6929	2,461.6929	0.7962		2,481.5969
Paving	0.3039					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.6970**	**11.1869**	**19.2795**	**0.0254**		**0.0417**	**0.0417**		**0.0417**	**0.0417**	**0.0000**	**2,461.6929**	**2,461.6929**	**0.7962**		**2,481.5969**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.4600e-003	0.1775	0.0622	8.0000e-004	0.0271	1.0500e-003	0.0282	7.8000e-003	1.0100e-003	8.8100e-003		87.0043	87.0043	2.7300e-003	0.0126	90.8295
Worker	0.0446	0.0275	0.3411	1.0600e-003	0.1314	6.7000e-004	0.1321	0.0349	6.2000e-004	0.0355		107.3036	107.3036	3.0900e-003	2.9600e-003	108.2620
Total	**0.0491**	**0.2049**	**0.4033**	**1.8600e-003**	**0.1585**	**1.7200e-003**	**0.1603**	**0.0427**	**1.6300e-003**	**0.0443**		**194.3078**	**194.3078**	**5.8200e-003**	**0.0156**	**199.0915**

Gran Vista Specific Plan - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Architectural Coating - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	48.3368					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	**48.5077**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**		**281.4481**	**281.4481**	**0.0154**		**281.8319**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.3100e-003	0.1758	0.0612	7.9000e-004	0.0271	1.0500e-003	0.0281	7.8000e-003	1.0100e-003	8.8000e-003		85.3475	85.3475	2.8000e-003	0.0124	89.1010
Worker	0.1000	0.0590	0.7595	2.4400e-003	0.3122	1.5200e-003	0.3137	0.0828	1.4000e-003	0.0842		246.1819	246.1819	6.7000e-003	6.5900e-003	248.3135
Total	**0.1044**	**0.2348**	**0.8207**	**3.2300e-003**	**0.3393**	**2.5700e-003**	**0.3418**	**0.0906**	**2.4100e-003**	**0.0930**		**331.5294**	**331.5294**	**9.5000e-003**	**0.0190**	**337.4145**

Gran Vista Specific Plan - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Architectural Coating - 2025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	48.3368					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0545	1.0598	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**48.3913**	**1.0598**	**1.8324**	**2.9700e-003**		**3.9600e-003**	**3.9600e-003**		**3.9600e-003**	**3.9600e-003**	**0.0000**	**281.4481**	**281.4481**	**0.0154**		**281.8319**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.3100e-003	0.1758	0.0612	7.9000e-004	0.0271	1.0500e-003	0.0281	7.8000e-003	1.0100e-003	8.8000e-003		85.3475	85.3475	2.8000e-003	0.0124	89.1010
Worker	0.1000	0.0590	0.7595	2.4400e-003	0.3122	1.5200e-003	0.3137	0.0828	1.4000e-003	0.0842		246.1819	246.1819	6.7000e-003	6.5900e-003	248.3135
Total	**0.1044**	**0.2348**	**0.8207**	**3.2300e-003**	**0.3393**	**2.5700e-003**	**0.3418**	**0.0906**	**2.4100e-003**	**0.0930**		**331.5294**	**331.5294**	**9.5000e-003**	**0.0190**	**337.4145**

Gran Vista Specific Plan - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Density

Increase Diversity

Increase Transit Accessibility

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.9463	1.7663	15.1808	0.0269	2.9954	0.0223	3.0177	0.7979	0.0208	0.8187		2,746.4824	2,746.4824	0.2511	0.1498	2,797.3987
Unmitigated	2.3792	2.4992	21.3132	0.0428	4.8402	0.0338	4.8740	1.2893	0.0315	1.3208		4,357.5717	4,357.5717	0.3356	0.2086	4,428.1244

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Condo/Townhouse High Rise	960.00	960.00	960.00	2,299,315	1,422,938
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	960.00	960.00	960.00	2,299,315	1,422,938

4.3 Trip Type Information

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Condo/Townhouse High Rise	6.58	0.00	0.00	100.00	0.00	0.00	100	0	0
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.561854	0.062428	0.177046	0.117565	0.023832	0.006317	0.008949	0.006298	0.000705	0.000577	0.028723	0.000955	0.004751
Condo/Townhouse High Rise	0.561854	0.062428	0.177046	0.117565	0.023832	0.006317	0.008949	0.006298	0.000705	0.000577	0.028723	0.000955	0.004751
Other Asphalt Surfaces	0.561854	0.062428	0.177046	0.117565	0.023832	0.006317	0.008949	0.006298	0.000705	0.000577	0.028723	0.000955	0.004751
Parking Lot	0.561854	0.062428	0.177046	0.117565	0.023832	0.006317	0.008949	0.006298	0.000705	0.000577	0.028723	0.000955	0.004751

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install Energy Efficient Appliances

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0258	0.2205	0.0938	1.4100e-003		0.0178	0.0178		0.0178	0.0178		281.4266	281.4266	5.3900e-003	5.1600e-003	283.0990
NaturalGas Unmitigated	0.0258	0.2205	0.0938	1.4100e-003		0.0178	0.0178		0.0178	0.0178		281.4266	281.4266	5.3900e-003	5.1600e-003	283.0990

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse High Rise	2392.13	0.0258	0.2205	0.0938	1.4100e-003		0.0178	0.0178		0.0178	0.0178		281.4266	281.4266	5.3900e-003	5.1600e-003	283.0990
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0258**	**0.2205**	**0.0938**	**1.4100e-003**		**0.0178**	**0.0178**		**0.0178**	**0.0178**		**281.4266**	**281.4266**	**5.3900e-003**	**5.1600e-003**	**283.0990**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse High Rise	2.39213	0.0258	0.2205	0.0938	1.4100e-003		0.0178	0.0178		0.0178	0.0178		281.4266	281.4266	5.3900e-003	5.1600e-003	283.0990
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0258**	**0.2205**	**0.0938**	**1.4100e-003**		**0.0178**	**0.0178**		**0.0178**	**0.0178**		**281.4266**	**281.4266**	**5.3900e-003**	**5.1600e-003**	**283.0990**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

No Hearths Installed

Gran Vista Specific Plan - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.1736	0.1140	9.8934	5.2000e-004		0.0549	0.0549		0.0549	0.0549	0.0000	17.8319	17.8319	0.0171	0.0000	18.2590
Unmitigated	3.1736	0.1140	9.8934	5.2000e-004		0.0549	0.0549		0.0549	0.0549	0.0000	17.8319	17.8319	0.0171	0.0000	18.2590

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2649					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.6115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.2972	0.1140	9.8934	5.2000e-004		0.0549	0.0549		0.0549	0.0549		17.8319	17.8319	0.0171		18.2590
Total	**3.1736**	**0.1140**	**9.8934**	**5.2000e-004**		**0.0549**	**0.0549**		**0.0549**	**0.0549**	**0.0000**	**17.8319**	**17.8319**	**0.0171**	**0.0000**	**18.2590**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2649					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.6115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.2972	0.1140	9.8934	5.2000e-004		0.0549	0.0549		0.0549	0.0549		17.8319	17.8319	0.0171		18.2590
Total	**3.1736**	**0.1140**	**9.8934**	**5.2000e-004**		**0.0549**	**0.0549**		**0.0549**	**0.0549**	**0.0000**	**17.8319**	**17.8319**	**0.0171**	**0.0000**	**18.2590**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Gran Vista Specific Plan - 2030 CAP Buildout - San Diego County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Gran Vista Specific Plan - 2030 CAP Buildout

San Diego County APCD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	1.99	Acre	1.99	86,684.40	0
Parking Lot	20.00	Space	0.18	8,000.00	0
City Park	3.55	Acre	3.55	154,638.00	0
Condo/Townhouse High Rise	120.00	Dwelling Unit	1.88	120,000.00	343

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2030
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	44	**CH4 Intensity (lb/MWhr)**	0	**N2O Intensity (lb/MWhr)**	0

1.3 User Entered Comments & Non-Default Data

Project Characteristics - CO2 intensity factor based on 2030 projection in City of San Marcos CAP.

Land Use - Based on site plan for project.

Construction Phase - Based on applicant provided information.

Off-road Equipment - Based on applicant provided information.

Off-road Equipment - Based on applicant provided information.

Off-road Equipment - Based on applicant provided information.

Off-road Equipment - Based on applicant provided information.

Off-road Equipment - Based on applicant provided information.

Trips and VMT - Based on applicant provided information.

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

On-road Fugitive Dust - CalEEmod defaults.

Grading - CalEEmod defaults.

Architectural Coating - Low-VOC content coatings to be used onsite.

Vehicle Trips - Based on traffic assessment for project and measures T-1 and T-18 from CAPCOA GHG Reduction Handbook.

Road Dust - CalEEmod defaults.

Woodstoves - No wood or natural gas.

Consumer Products - CalEEmod defaults.

Area Coating - Low-VOC coatings to be used.

Landscape Equipment - CalEEmod defaults.

Energy Use - Natural gas reduced by 46% to account for alternatively fueled water heaters. Electricity use for water heaters added.

Water And Wastewater - CalEEmod defaults.

Solid Waste - CalEEmod defaults.

Construction Off-road Equipment Mitigation - In accordance with SDAPCD Rule 55. Applicant has committed to Tier 4 Interim equipment over 50 horsepower, electric under 50 horsepower.

Mobile Land Use Mitigation -

Area Mitigation - Low-VOC architectural coatings and no hearths.

Energy Mitigation - Energy star appliances

Water Mitigation - low-flow fixtures and water-efficient irrigation

Stationary Sources - User Defined - Reductions based on CAP assumptions within Tables 25 of Appendix B to the City of San Marcos' CAP.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Parking	5,681.00	6,073.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	100.00
tblArchitecturalCoating	EF_Parking	250.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Parking	250	150
tblAreaCoating	Area_EF_Residential_Exterior	250	100
tblAreaCoating	Area_EF_Residential_Interior	250	50

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tblAreaCoating	Area_Parking	5681	6073
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	FuelType	Diesel	Electrical
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim

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tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstructionPhase	NumDays	10.00	6.00
tblConstructionPhase	NumDays	20.00	24.00
tblConstructionPhase	NumDays	230.00	262.00
tblEnergyUse	NT24E	3,054.10	3,820.10
tblEnergyUse	NT24NG	4,180.00	2,257.20
tblEnergyUse	T24NG	3,096.05	1,671.87
tblFireplaces	FireplaceDayYear	82.00	0.00
tblFireplaces	FireplaceHourDay	3.00	0.00
tblFireplaces	FireplaceWoodMass	3,078.40	0.00
tblFireplaces	NumberGas	66.00	0.00
tblFireplaces	NumberNoFireplace	12.00	0.00
tblFireplaces	NumberWood	42.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	3.00
tblOffRoadEquipment	UsageHours	7.00	4.00
tblOffRoadEquipment	UsageHours	7.00	4.00
tblProjectCharacteristics	CH4IntensityFactor	0.033	0
tblProjectCharacteristics	CO2IntensityFactor	539.98	44
tblProjectCharacteristics	N2OIntensityFactor	0.004	0
tblSolidWaste	SolidWasteGenerationRate	0.31	0.29
tblTripsAndVMT	VendorTripNumber	0.00	4.00

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	WorkerTripNumber	10.00	12.00
tblTripsAndVMT	WorkerTripNumber	18.00	16.00
tblTripsAndVMT	WorkerTripNumber	18.00	16.00
tblTripsAndVMT	WorkerTripNumber	191.00	192.00
tblVehicleTrips	DV_TP	11.00	0.00
tblVehicleTrips	HO_TL	7.50	0.00
tblVehicleTrips	HO_TTP	39.60	0.00
tblVehicleTrips	HS_TL	7.30	0.00
tblVehicleTrips	HS_TTP	18.80	0.00
tblVehicleTrips	HW_TL	10.80	5.39
tblVehicleTrips	HW_TTP	41.60	100.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	86.00	100.00
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	ST_TR	4.91	8.00
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	SU_TR	4.09	8.00
tblVehicleTrips	WD_TR	0.78	0.00
tblVehicleTrips	WD_TR	5.44	8.00
tblWater	OutdoorWaterUseRate	4,229,758.79	4,051,036.59
tblWoodstoves	NumberCatalytic	6.00	0.00
tblWoodstoves	NumberNoncatalytic	6.00	0.00
tblWoodstoves	WoodstoveDayYear	82.00	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00

2.0 Emissions Summary

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.0354	0.3723	0.2657	6.6000e-004	0.1103	0.0148	0.1251	0.0321	0.0136	0.0457	0.0000	57.9924	57.9924	0.0182	1.5000e-004	58.4924
2024	0.2680	2.0027	2.6448	6.3800e-003	0.3141	0.0791	0.3932	0.0821	0.0758	0.1579	0.0000	571.8919	571.8919	0.0628	0.0219	579.9792
2025	0.5134	0.2128	0.3122	7.7000e-004	0.0308	7.6400e-003	0.0385	8.3200e-003	7.3900e-003	0.0157	0.0000	68.9016	68.9016	5.7800e-003	2.8000e-003	69.8792
Maximum	**0.5134**	**2.0027**	**2.6448**	**6.3800e-003**	**0.3141**	**0.0791**	**0.3932**	**0.0821**	**0.0758**	**0.1579**	**0.0000**	**571.8919**	**571.8919**	**0.0628**	**0.0219**	**579.9792**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.0112	0.1797	0.3556	6.6000e-004	0.0505	1.0600e-003	0.0516	0.0147	1.0600e-003	0.0157	0.0000	57.9923	57.9923	0.0182	1.5000e-004	58.4924
2024	0.1288	1.5205	2.6825	6.0800e-003	0.2642	0.0101	0.2743	0.0701	9.9200e-003	0.0801	0.0000	549.9639	549.9639	0.0605	0.0219	557.9952
2025	0.4988	0.1751	0.3078	7.3000e-004	0.0308	1.1800e-003	0.0320	8.3200e-003	1.1700e-003	9.4900e-003	0.0000	66.1724	66.1724	5.5200e-003	2.8000e-003	67.1435
Maximum	**0.4988**	**1.5205**	**2.6825**	**6.0800e-003**	**0.2642**	**0.0101**	**0.2743**	**0.0701**	**9.9200e-003**	**0.0801**	**0.0000**	**549.9639**	**549.9639**	**0.0605**	**0.0219**	**557.9952**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**21.78**	**27.53**	**-3.83**	**4.35**	**24.10**	**87.88**	**35.73**	**23.99**	**87.45**	**52.01**	**0.00**	**3.53**	**3.53**	**2.88**	**0.00**	**3.49**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**12-1-2023**	**2-29-2024**	0.8835	0.5100
2	**3-1-2024**	**5-31-2024**	0.5421	0.4003
3	**6-1-2024**	**8-31-2024**	0.5401	0.3984
4	**9-1-2024**	**11-30-2024**	0.5381	0.3979
5	**12-1-2024**	**2-28-2025**	0.7349	0.6351
6	**3-1-2025**	**5-31-2025**	0.1785	0.1778
		Highest	0.8835	0.6351

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.5519	0.0103	0.8889	5.0000e-005		4.9400e-003	4.9400e-003		4.9400e-003	4.9400e-003	0.0000	1.4559	1.4559	1.3900e-003	0.0000	1.4906
Energy	2.5400e-003	0.0217	9.2400e-003	1.4000e-004		1.7600e-003	1.7600e-003		1.7600e-003	1.7600e-003	0.0000	36.8697	36.8697	4.8000e-004	4.6000e-004	37.0193
Mobile	0.3233	0.3052	2.8007	5.6300e-003	0.7044	3.9700e-003	0.7084	0.1880	3.7000e-003	0.1917	0.0000	521.1141	521.1141	0.0410	0.0256	529.7583
Stationary	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	-3.3000	-3.3000	0.0000	0.0000	-3.3000
Waste						0.0000	0.0000		0.0000	0.0000	11.2640	0.0000	11.2640	0.6657	0.0000	27.9060
Water						0.0000	0.0000		0.0000	0.0000	2.4804	4.0230	6.5035	0.2548	6.0200e-003	14.6652
Total	**0.8777**	**0.3372**	**3.6989**	**5.8200e-003**	**0.7044**	**0.0107**	**0.7151**	**0.1880**	**0.0104**	**0.1984**	**13.7444**	**560.1628**	**573.9072**	**0.9633**	**0.0321**	**607.5394**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.5519	0.0103	0.8889	5.0000e-005		4.9400e-003	4.9400e-003		4.9400e-003	4.9400e-003	0.0000	1.4559	1.4559	1.3900e-003	0.0000	1.4906
Energy	2.5400e-003	0.0217	9.2400e-003	1.4000e-004		1.7600e-003	1.7600e-003		1.7600e-003	1.7600e-003	0.0000	36.6155	36.6155	4.8000e-004	4.6000e-004	36.7650
Mobile	0.3233	0.3052	2.8007	5.6300e-003	0.7044	3.9700e-003	0.7084	0.1880	3.7000e-003	0.1917	0.0000	521.1141	521.1141	0.0410	0.0256	529.7583
Stationary	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	-3.3000	-3.3000	0.0000	0.0000	-3.3000
Waste						0.0000	0.0000		0.0000	0.0000	11.2640	0.0000	11.2640	0.6657	0.0000	27.9060
Water						0.0000	0.0000		0.0000	0.0000	1.9844	3.4952	5.4795	0.2038	4.8100e-003	12.0090
Total	**0.8777**	**0.3372**	**3.6989**	**5.8200e-003**	**0.7044**	**0.0107**	**0.7151**	**0.1880**	**0.0104**	**0.1984**	**13.2483**	**559.3807**	**572.6290**	**0.9123**	**0.0308**	**604.6289**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**3.61**	**0.14**	**0.22**	**5.29**	**3.78**	**0.48**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	12/1/2023	12/8/2023	5	6	
2	Grading	Grading	12/9/2023	1/11/2024	5	24	

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3	Paving	Paving	1/12/2024	2/8/2024	5	20	
4	Building Construction	Building Construction	2/9/2024	2/10/2025	5	262	
5	Architectural Coating	Architectural Coating	2/11/2025	3/10/2025	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 120

Acres of Paving: 2.17

Residential Indoor: 243,000; Residential Outdoor: 81,000; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 6,073 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	0	8.00	247	0.40
Site Preparation	Rubber Tired Loaders	1	8.00	203	0.36
Site Preparation	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Grading	Excavators	0	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	4	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	3	8.00	80	0.38
Building Construction	Air Compressors	2	8.00	78	0.48
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Skid Steer Loaders	1	4.00	65	0.37
Building Construction	Tractors/Loaders/Backhoes	1	4.00	97	0.37

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Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	4	12.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	7	16.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	16.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	192.00	54.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	38.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Alternative Fuel for Construction Equipment

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

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3.2 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.1700e-003	0.0218	0.0246	5.0000e-005		9.5000e-004	9.5000e-004		8.7000e-004	8.7000e-004	0.0000	4.1103	4.1103	1.3300e-003	0.0000	4.1436
Total	**2.1700e-003**	**0.0218**	**0.0246**	**5.0000e-005**	**0.0000**	**9.5000e-004**	**9.5000e-004**	**0.0000**	**8.7000e-004**	**8.7000e-004**	**0.0000**	**4.1103**	**4.1103**	**1.3300e-003**	**0.0000**	**4.1436**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0000e-005	5.3000e-004	1.9000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	3.0000e-005	0.0000	0.2408	0.2408	1.0000e-005	3.0000e-005	0.2514
Worker	1.0000e-004	7.0000e-005	8.2000e-004	0.0000	2.9000e-004	0.0000	2.9000e-004	8.0000e-005	0.0000	8.0000e-005	0.0000	0.2284	0.2284	1.0000e-005	1.0000e-005	0.2305
Total	**1.1000e-004**	**6.0000e-004**	**1.0100e-003**	**0.0000**	**3.7000e-004**	**0.0000**	**3.7000e-004**	**1.0000e-004**	**0.0000**	**1.1000e-004**	**0.0000**	**0.4692**	**0.4692**	**2.0000e-005**	**4.0000e-005**	**0.4819**

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3.2 Site Preparation - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.4000e-004	0.0172	0.0311	5.0000e-005		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005	0.0000	4.1103	4.1103	1.3300e-003	0.0000	4.1436
Total	**9.4000e-004**	**0.0172**	**0.0311**	**5.0000e-005**	**0.0000**	**8.0000e-005**	**8.0000e-005**	**0.0000**	**8.0000e-005**	**8.0000e-005**	**0.0000**	**4.1103**	**4.1103**	**1.3300e-003**	**0.0000**	**4.1436**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0000e-005	5.3000e-004	1.9000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	3.0000e-005	0.0000	0.2408	0.2408	1.0000e-005	3.0000e-005	0.2514
Worker	1.0000e-004	7.0000e-005	8.2000e-004	0.0000	2.9000e-004	0.0000	2.9000e-004	8.0000e-005	0.0000	8.0000e-005	0.0000	0.2284	0.2284	1.0000e-005	1.0000e-005	0.2305
Total	**1.1000e-004**	**6.0000e-004**	**1.0100e-003**	**0.0000**	**3.7000e-004**	**0.0000**	**3.7000e-004**	**1.0000e-004**	**0.0000**	**1.1000e-004**	**0.0000**	**0.4692**	**0.4692**	**2.0000e-005**	**4.0000e-005**	**0.4819**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1088	0.0000	0.1088	0.0317	0.0000	0.0317	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0328	0.3484	0.2368	5.9000e-004		0.0139	0.0139		0.0127	0.0127	0.0000	52.0494	52.0494	0.0168	0.0000	52.4702
Total	**0.0328**	**0.3484**	**0.2368**	**5.9000e-004**	**0.1088**	**0.0139**	**0.1227**	**0.0317**	**0.0127**	**0.0444**	**0.0000**	**52.0494**	**52.0494**	**0.0168**	**0.0000**	**52.4702**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.0000e-005	1.3300e-003	4.7000e-004	1.0000e-005	2.0000e-004	1.0000e-005	2.1000e-004	6.0000e-005	1.0000e-005	7.0000e-005	0.0000	0.6020	0.6020	2.0000e-005	9.0000e-005	0.6284
Worker	3.2000e-004	2.2000e-004	2.7300e-003	1.0000e-005	9.6000e-004	1.0000e-005	9.7000e-004	2.6000e-004	0.0000	2.6000e-004	0.0000	0.7615	0.7615	2.0000e-005	2.0000e-005	0.7684
Total	**3.6000e-004**	**1.5500e-003**	**3.2000e-003**	**2.0000e-005**	**1.1600e-003**	**2.0000e-005**	**1.1800e-003**	**3.2000e-004**	**1.0000e-005**	**3.3000e-004**	**0.0000**	**1.3634**	**1.3634**	**4.0000e-005**	**1.1000e-004**	**1.3968**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Grading - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0490	0.0000	0.0490	0.0143	0.0000	0.0143	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.8400e-003	0.1603	0.3203	5.9000e-004		9.7000e-004	9.7000e-004		9.7000e-004	9.7000e-004	0.0000	52.0493	52.0493	0.0168	0.0000	52.4702
Total	**9.8400e-003**	**0.1603**	**0.3203**	**5.9000e-004**	**0.0490**	**9.7000e-004**	**0.0499**	**0.0143**	**9.7000e-004**	**0.0152**	**0.0000**	**52.0493**	**52.0493**	**0.0168**	**0.0000**	**52.4702**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.0000e-005	1.3300e-003	4.7000e-004	1.0000e-005	2.0000e-004	1.0000e-005	2.1000e-004	6.0000e-005	1.0000e-005	7.0000e-005	0.0000	0.6020	0.6020	2.0000e-005	9.0000e-005	0.6284
Worker	3.2000e-004	2.2000e-004	2.7300e-003	1.0000e-005	9.6000e-004	1.0000e-005	9.7000e-004	2.6000e-004	0.0000	2.6000e-004	0.0000	0.7615	0.7615	2.0000e-005	2.0000e-005	0.7684
Total	**3.6000e-004**	**1.5500e-003**	**3.2000e-003**	**2.0000e-005**	**1.1600e-003**	**2.0000e-005**	**1.1800e-003**	**3.2000e-004**	**1.0000e-005**	**3.3000e-004**	**0.0000**	**1.3634**	**1.3634**	**4.0000e-005**	**1.1000e-004**	**1.3968**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Grading - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0907	0.0000	0.0907	0.0218	0.0000	0.0218	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0191	0.1958	0.1390	3.6000e-004		7.8300e-003	7.8300e-003		7.2000e-003	7.2000e-003	0.0000	31.2121	31.2121	0.0101	0.0000	31.4644
Total	**0.0191**	**0.1958**	**0.1390**	**3.6000e-004**	**0.0907**	**7.8300e-003**	**0.0986**	**0.0218**	**7.2000e-003**	**0.0290**	**0.0000**	**31.2121**	**31.2121**	**0.0101**	**0.0000**	**31.4644**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.0000e-005	7.9000e-004	2.8000e-004	0.0000	1.2000e-004	0.0000	1.2000e-004	3.0000e-005	0.0000	4.0000e-005	0.0000	0.3549	0.3549	1.0000e-005	5.0000e-005	0.3705
Worker	1.8000e-004	1.2000e-004	1.5300e-003	0.0000	5.8000e-004	0.0000	5.8000e-004	1.5000e-004	0.0000	1.6000e-004	0.0000	0.4419	0.4419	1.0000e-005	1.0000e-005	0.4458
Total	**2.0000e-004**	**9.1000e-004**	**1.8100e-003**	**0.0000**	**7.0000e-004**	**0.0000**	**7.0000e-004**	**1.8000e-004**	**0.0000**	**2.0000e-004**	**0.0000**	**0.7968**	**0.7968**	**2.0000e-005**	**6.0000e-005**	**0.8163**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Grading - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0408	0.0000	0.0408	9.7900e-003	0.0000	9.7900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.9000e-003	0.0962	0.1922	3.6000e-004		5.8000e-004	5.8000e-004		5.8000e-004	5.8000e-004	0.0000	31.2120	31.2120	0.0101	0.0000	31.4644
Total	**5.9000e-003**	**0.0962**	**0.1922**	**3.6000e-004**	**0.0408**	**5.8000e-004**	**0.0414**	**9.7900e-003**	**5.8000e-004**	**0.0104**	**0.0000**	**31.2120**	**31.2120**	**0.0101**	**0.0000**	**31.4644**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.0000e-005	7.9000e-004	2.8000e-004	0.0000	1.2000e-004	0.0000	1.2000e-004	3.0000e-005	0.0000	4.0000e-005	0.0000	0.3549	0.3549	1.0000e-005	5.0000e-005	0.3705
Worker	1.8000e-004	1.2000e-004	1.5300e-003	0.0000	5.8000e-004	0.0000	5.8000e-004	1.5000e-004	0.0000	1.6000e-004	0.0000	0.4419	0.4419	1.0000e-005	1.0000e-005	0.4458
Total	**2.0000e-004**	**9.1000e-004**	**1.8100e-003**	**0.0000**	**7.0000e-004**	**0.0000**	**7.0000e-004**	**1.8000e-004**	**0.0000**	**2.0000e-004**	**0.0000**	**0.7968**	**0.7968**	**2.0000e-005**	**6.0000e-005**	**0.8163**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0113	0.1105	0.1648	2.5000e-004		5.4900e-003	5.4900e-003		5.0500e-003	5.0500e-003	0.0000	22.3321	22.3321	7.2200e-003	0.0000	22.5127
Paving	2.8400e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0142**	**0.1105**	**0.1648**	**2.5000e-004**		**5.4900e-003**	**5.4900e-003**		**5.0500e-003**	**5.0500e-003**	**0.0000**	**22.3321**	**22.3321**	**7.2200e-003**	**0.0000**	**22.5127**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.0000e-005	1.7600e-003	6.1000e-004	1.0000e-005	2.7000e-004	1.0000e-005	2.8000e-004	8.0000e-005	1.0000e-005	9.0000e-005	0.0000	0.7886	0.7886	2.0000e-005	1.1000e-004	0.8233
Worker	4.1000e-004	2.7000e-004	3.4100e-003	1.0000e-005	1.2800e-003	1.0000e-005	1.2900e-003	3.4000e-004	1.0000e-005	3.5000e-004	0.0000	0.9821	0.9821	3.0000e-005	3.0000e-005	0.9906
Total	**4.6000e-004**	**2.0300e-003**	**4.0200e-003**	**2.0000e-005**	**1.5500e-003**	**2.0000e-005**	**1.5700e-003**	**4.2000e-004**	**2.0000e-005**	**4.4000e-004**	**0.0000**	**1.7707**	**1.7707**	**5.0000e-005**	**1.4000e-004**	**1.8139**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Paving - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.9300e-003	0.1119	0.1928	2.5000e-004		4.2000e-004	4.2000e-004		4.2000e-004	4.2000e-004	0.0000	22.3321	22.3321	7.2200e-003	0.0000	22.5126
Paving	2.8400e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**6.7700e-003**	**0.1119**	**0.1928**	**2.5000e-004**		**4.2000e-004**	**4.2000e-004**		**4.2000e-004**	**4.2000e-004**	**0.0000**	**22.3321**	**22.3321**	**7.2200e-003**	**0.0000**	**22.5126**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.0000e-005	1.7600e-003	6.1000e-004	1.0000e-005	2.7000e-004	1.0000e-005	2.8000e-004	8.0000e-005	1.0000e-005	9.0000e-005	0.0000	0.7886	0.7886	2.0000e-005	1.1000e-004	0.8233
Worker	4.1000e-004	2.7000e-004	3.4100e-003	1.0000e-005	1.2800e-003	1.0000e-005	1.2900e-003	3.4000e-004	1.0000e-005	3.5000e-004	0.0000	0.9821	0.9821	3.0000e-005	3.0000e-005	0.9906
Total	**4.6000e-004**	**2.0300e-003**	**4.0200e-003**	**2.0000e-005**	**1.5500e-003**	**2.0000e-005**	**1.5700e-003**	**4.2000e-004**	**2.0000e-005**	**4.4000e-004**	**0.0000**	**1.7707**	**1.7707**	**5.0000e-005**	**1.4000e-004**	**1.8139**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1701	1.3784	1.7627	2.9800e-003		0.0632	0.0632		0.0611	0.0611	0.0000	254.4598	254.4598	0.0376	0.0000	255.4004
Total	**0.1701**	**1.3784**	**1.7627**	**2.9800e-003**		**0.0632**	**0.0632**		**0.0611**	**0.0611**	**0.0000**	**254.4598**	**254.4598**	**0.0376**	**0.0000**	**255.4004**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.1100e-003	0.2774	0.0962	1.2600e-003	0.0418	1.6500e-003	0.0434	0.0121	1.5800e-003	0.0136	0.0000	124.0305	124.0305	3.9000e-003	0.0180	129.4831
Worker	0.0568	0.0376	0.4762	1.5000e-003	0.1794	9.4000e-004	0.1803	0.0477	8.6000e-004	0.0485	0.0000	137.2900	137.2900	3.8400e-003	3.7000e-003	138.4885
Total	**0.0639**	**0.3150**	**0.5725**	**2.7600e-003**	**0.2212**	**2.5900e-003**	**0.2237**	**0.0597**	**2.4400e-003**	**0.0622**	**0.0000**	**261.3205**	**261.3205**	**7.7400e-003**	**0.0217**	**267.9715**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0516	0.9945	1.7193	2.6800e-003		6.4500e-003	6.4500e-003		6.4500e-003	6.4500e-003	0.0000	232.5318	232.5318	0.0354	0.0000	233.4165
Total	**0.0516**	**0.9945**	**1.7193**	**2.6800e-003**		**6.4500e-003**	**6.4500e-003**		**6.4500e-003**	**6.4500e-003**	**0.0000**	**232.5318**	**232.5318**	**0.0354**	**0.0000**	**233.4165**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.1100e-003	0.2774	0.0962	1.2600e-003	0.0418	1.6500e-003	0.0434	0.0121	1.5800e-003	0.0136	0.0000	124.0305	124.0305	3.9000e-003	0.0180	129.4831
Worker	0.0568	0.0376	0.4762	1.5000e-003	0.1794	9.4000e-004	0.1803	0.0477	8.6000e-004	0.0485	0.0000	137.2900	137.2900	3.8400e-003	3.7000e-003	138.4885
Total	**0.0639**	**0.3150**	**0.5725**	**2.7600e-003**	**0.2212**	**2.5900e-003**	**0.2237**	**0.0597**	**2.4400e-003**	**0.0622**	**0.0000**	**261.3205**	**261.3205**	**7.7400e-003**	**0.0217**	**267.9715**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0198	0.1606	0.2186	3.7000e-004		6.7800e-003	6.7800e-003		6.5600e-003	6.5600e-003	0.0000	31.6724	31.6724	4.6200e-003	0.0000	31.7878
Total	**0.0198**	**0.1606**	**0.2186**	**3.7000e-004**		**6.7800e-003**	**6.7800e-003**		**6.5600e-003**	**6.5600e-003**	**0.0000**	**31.6724**	**31.6724**	**4.6200e-003**	**0.0000**	**31.7878**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.6000e-004	0.0342	0.0118	1.5000e-004	5.2000e-003	2.1000e-004	5.4000e-003	1.5000e-003	2.0000e-004	1.7000e-003	0.0000	15.1430	15.1430	5.0000e-004	2.1900e-003	15.8089
Worker	6.6600e-003	4.2400e-003	0.0556	1.8000e-004	0.0223	1.1000e-004	0.0224	5.9300e-003	1.0000e-004	6.0400e-003	0.0000	16.5064	16.5064	4.4000e-004	4.3000e-004	16.6461
Total	**7.5200e-003**	**0.0384**	**0.0673**	**3.3000e-004**	**0.0275**	**3.2000e-004**	**0.0278**	**7.4300e-003**	**3.0000e-004**	**7.7400e-003**	**0.0000**	**31.6494**	**31.6494**	**9.4000e-004**	**2.6200e-003**	**32.4550**

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3.5 Building Construction - 2025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.4200e-003	0.1238	0.2140	3.3000e-004		8.0000e-004	8.0000e-004		8.0000e-004	8.0000e-004	0.0000	28.9431	28.9431	4.3600e-003	0.0000	29.0521
Total	**6.4200e-003**	**0.1238**	**0.2140**	**3.3000e-004**		**8.0000e-004**	**8.0000e-004**		**8.0000e-004**	**8.0000e-004**	**0.0000**	**28.9431**	**28.9431**	**4.3600e-003**	**0.0000**	**29.0521**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.6000e-004	0.0342	0.0118	1.5000e-004	5.2000e-003	2.1000e-004	5.4000e-003	1.5000e-003	2.0000e-004	1.7000e-003	0.0000	15.1430	15.1430	5.0000e-004	2.1900e-003	15.8089
Worker	6.6600e-003	4.2400e-003	0.0556	1.8000e-004	0.0223	1.1000e-004	0.0224	5.9300e-003	1.0000e-004	6.0400e-003	0.0000	16.5064	16.5064	4.4000e-004	4.3000e-004	16.6461
Total	**7.5200e-003**	**0.0384**	**0.0673**	**3.3000e-004**	**0.0275**	**3.2000e-004**	**0.0278**	**7.4300e-003**	**3.0000e-004**	**7.7400e-003**	**0.0000**	**31.6494**	**31.6494**	**9.4000e-004**	**2.6200e-003**	**32.4550**

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3.6 Architectural Coating - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.4834					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.7100e-003	0.0115	0.0181	3.0000e-005		5.2000e-004	5.2000e-004		5.2000e-004	5.2000e-004	0.0000	2.5533	2.5533	1.4000e-004	0.0000	2.5567
Total	**0.4851**	**0.0115**	**0.0181**	**3.0000e-005**		**5.2000e-004**	**5.2000e-004**		**5.2000e-004**	**5.2000e-004**	**0.0000**	**2.5533**	**2.5533**	**1.4000e-004**	**0.0000**	**2.5567**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.0000e-005	1.7500e-003	6.0000e-004	1.0000e-005	2.7000e-004	1.0000e-005	2.8000e-004	8.0000e-005	1.0000e-005	9.0000e-005	0.0000	0.7736	0.7736	3.0000e-005	1.1000e-004	0.8076
Worker	9.1000e-004	5.8000e-004	7.5800e-003	2.0000e-005	3.0500e-003	2.0000e-005	3.0600e-003	8.1000e-004	1.0000e-005	8.2000e-004	0.0000	2.2530	2.2530	6.0000e-005	6.0000e-005	2.2721
Total	**9.5000e-004**	**2.3300e-003**	**8.1800e-003**	**3.0000e-005**	**3.3200e-003**	**3.0000e-005**	**3.3400e-003**	**8.9000e-004**	**2.0000e-005**	**9.1000e-004**	**0.0000**	**3.0266**	**3.0266**	**9.0000e-005**	**1.7000e-004**	**3.0797**

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3.6 Architectural Coating - 2025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.4834					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.4000e-004	0.0106	0.0183	3.0000e-005		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	2.5533	2.5533	1.4000e-004	0.0000	2.5567
Total	**0.4839**	**0.0106**	**0.0183**	**3.0000e-005**		**4.0000e-005**	**4.0000e-005**		**4.0000e-005**	**4.0000e-005**	**0.0000**	**2.5533**	**2.5533**	**1.4000e-004**	**0.0000**	**2.5567**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.0000e-005	1.7500e-003	6.0000e-004	1.0000e-005	2.7000e-004	1.0000e-005	2.8000e-004	8.0000e-005	1.0000e-005	9.0000e-005	0.0000	0.7736	0.7736	3.0000e-005	1.1000e-004	0.8076
Worker	9.1000e-004	5.8000e-004	7.5800e-003	2.0000e-005	3.0500e-003	2.0000e-005	3.0600e-003	8.1000e-004	1.0000e-005	8.2000e-004	0.0000	2.2530	2.2530	6.0000e-005	6.0000e-005	2.2721
Total	**9.5000e-004**	**2.3300e-003**	**8.1800e-003**	**3.0000e-005**	**3.3200e-003**	**3.0000e-005**	**3.3400e-003**	**8.9000e-004**	**2.0000e-005**	**9.1000e-004**	**0.0000**	**3.0266**	**3.0266**	**9.0000e-005**	**1.7000e-004**	**3.0797**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.3233	0.3052	2.8007	5.6300e-003	0.7044	3.9700e-003	0.7084	0.1880	3.7000e-003	0.1917	0.0000	521.1141	521.1141	0.0410	0.0256	529.7583
Unmitigated	0.3233	0.3052	2.8007	5.6300e-003	0.7044	3.9700e-003	0.7084	0.1880	3.7000e-003	0.1917	0.0000	521.1141	521.1141	0.0410	0.0256	529.7583

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Condo/Townhouse High Rise	960.00	960.00	960.00	1,883,482	1,883,482
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	960.00	960.00	960.00	1,883,482	1,883,482

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Condo/Townhouse High Rise	5.39	0.00	0.00	100.00	0.00	0.00	100	0	0
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

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	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.575453	0.061728	0.171227	0.112384	0.022882	0.006522	0.009800	0.006298	0.000679	0.000623	0.027611	0.000857	0.003936
Condo/Townhouse High Rise	0.575453	0.061728	0.171227	0.112384	0.022882	0.006522	0.009800	0.006298	0.000679	0.000623	0.027611	0.000857	0.003936
Other Asphalt Surfaces	0.575453	0.061728	0.171227	0.112384	0.022882	0.006522	0.009800	0.006298	0.000679	0.000623	0.027611	0.000857	0.003936
Parking Lot	0.575453	0.061728	0.171227	0.112384	0.022882	0.006522	0.009800	0.006298	0.000679	0.000623	0.027611	0.000857	0.003936

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install Energy Efficient Appliances

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	11.4551	11.4551	0.0000	0.0000	11.4551
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	11.7093	11.7093	0.0000	0.0000	11.7093
NaturalGas Mitigated	2.5400e-003	0.0217	9.2400e-003	1.4000e-004		1.7600e-003	1.7600e-003		1.7600e-003	1.7600e-003	0.0000	25.1604	25.1604	4.8000e-004	4.6000e-004	25.3099
NaturalGas Unmitigated	2.5400e-003	0.0217	9.2400e-003	1.4000e-004		1.7600e-003	1.7600e-003		1.7600e-003	1.7600e-003	0.0000	25.1604	25.1604	4.8000e-004	4.6000e-004	25.3099

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse High Rise	471488	2.5400e-003	0.0217	9.2400e-003	1.4000e-004		1.7600e-003	1.7600e-003		1.7600e-003	1.7600e-003	0.0000	25.1604	25.1604	4.8000e-004	4.6000e-004	25.3099
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**2.5400e-003**	**0.0217**	**9.2400e-003**	**1.4000e-004**		**1.7600e-003**	**1.7600e-003**		**1.7600e-003**	**1.7600e-003**	**0.0000**	**25.1604**	**25.1604**	**4.8000e-004**	**4.6000e-004**	**25.3099**

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5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse High Rise	471488	2.5400e-003	0.0217	9.2400e-003	1.4000e-004		1.7600e-003	1.7600e-003		1.7600e-003	1.7600e-003	0.0000	25.1604	25.1604	4.8000e-004	4.6000e-004	25.3099
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**2.5400e-003**	**0.0217**	**9.2400e-003**	**1.4000e-004**		**1.7600e-003**	**1.7600e-003**		**1.7600e-003**	**1.7600e-003**	**0.0000**	**25.1604**	**25.1604**	**4.8000e-004**	**4.6000e-004**	**25.3099**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse High Rise	583896	11.6534	0.0000	0.0000	11.6534
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	2800	0.0559	0.0000	0.0000	0.0559
Total		**11.7093**	**0.0000**	**0.0000**	**11.7093**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse High Rise	571157	11.3992	0.0000	0.0000	11.3992
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	2800	0.0559	0.0000	0.0000	0.0559
Total		**11.4551**	**0.0000**	**0.0000**	**11.4551**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

No Hearths Installed

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.5519	0.0103	0.8889	5.0000e-005		4.9400e-003	4.9400e-003		4.9400e-003	4.9400e-003	0.0000	1.4559	1.4559	1.3900e-003	0.0000	1.4906
Unmitigated	0.5519	0.0103	0.8889	5.0000e-005		4.9400e-003	4.9400e-003		4.9400e-003	4.9400e-003	0.0000	1.4559	1.4559	1.3900e-003	0.0000	1.4906

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0490					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4762					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0266	0.0103	0.8889	5.0000e-005		4.9400e-003	4.9400e-003		4.9400e-003	4.9400e-003	0.0000	1.4559	1.4559	1.3900e-003	0.0000	1.4906
Total	**0.5519**	**0.0103**	**0.8889**	**5.0000e-005**		**4.9400e-003**	**4.9400e-003**		**4.9400e-003**	**4.9400e-003**	**0.0000**	**1.4559**	**1.4559**	**1.3900e-003**	**0.0000**	**1.4906**

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6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0490					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4762					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0266	0.0103	0.8889	5.0000e-005		4.9400e-003	4.9400e-003		4.9400e-003	4.9400e-003	0.0000	1.4559	1.4559	1.3900e-003	0.0000	1.4906
Total	**0.5519**	**0.0103**	**0.8889**	**5.0000e-005**		**4.9400e-003**	**4.9400e-003**		**4.9400e-003**	**4.9400e-003**	**0.0000**	**1.4559**	**1.4559**	**1.3900e-003**	**0.0000**	**1.4906**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	5.4795	0.2038	4.8100e-003	12.0090
Unmitigated	6.5035	0.2548	6.0200e-003	14.6652

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 4.05104	0.8983	0.0000	0.0000	0.8983
Condo/Townhouse High Rise	7.81848 / 4.92904	5.6052	0.2548	6.0200e-003	13.7670
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**6.5035**	**0.2548**	**6.0200e-003**	**14.6652**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 3.80392	0.8435	0.0000	0.0000	0.8435
Condo/Townhouse High Rise	6.25479 / 4.62837	4.6361	0.2038	4.8100e-003	11.1655
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**5.4795**	**0.2038**	**4.8100e-003**	**12.0090**

8.0 Waste Detail

8.1 Mitigation Measures Waste

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	11.2640	0.6657	0.0000	27.9060
Unmitigated	11.2640	0.6657	0.0000	27.9060

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.29	0.0589	3.4800e-003	0.0000	0.1458
Condo/Townhouse High Rise	55.2	11.2051	0.6622	0.0000	27.7602
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**11.2640**	**0.6657**	**0.0000**	**27.9060**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.29	0.0589	3.4800e-003	0.0000	0.1458
Condo/Townhouse High Rise	55.2	11.2051	0.6622	0.0000	27.7602
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**11.2640**	**0.6657**	**0.0000**	**27.9060**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Equipment Type	Number
EVCS	1

10.1 Stationary Sources

Unmitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	tons/yr										MT/yr					
EVCS	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	-3.3000	-3.3000	0.0000	0.0000	-3.3000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**-3.3000**	**-3.3000**	**0.0000**	**0.0000**	**-3.3000**

11.0 Vegetation

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Gran Vista Specific Plan - Existing Land Use

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1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	23.00	1000sqft	0.53	23,000.00	0
Parking Lot	276.00	Space	2.48	110,400.00	0
Gasoline/Service Station	10.00	Pump	0.03	1,411.75	0
Supermarket	69.00	1000sqft	1.58	69,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2030
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	44	**CH4 Intensity (lb/MWhr)**	0	**N2O Intensity (lb/MWhr)**	0

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Electric GHG intensity factor consistent with City's CAP assumption for 2030.

Land Use - Based on alternative description.

Construction Phase - CalEEMod defaults.

Off-road Equipment - CalEEMod defaults.

Off-road Equipment - CalEEMod defaults.

Off-road Equipment - CalEEMod defaults.

Off-road Equipment - CalEEMod defaults.

Off-road Equipment - CalEEMod defaults.

Trips and VMT - CalEEMod defaults. Odd trips were rounded up to account for whole round trips.

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On-road Fugitive Dust - CalEEmod defaults.

Grading - CalEEmod defaults.

Architectural Coating - CalEEMod defaults.

Vehicle Trips - CalEEMod defaults.

Road Dust - CalEEmod defaults.

Woodstoves -

Consumer Products - CalEEmod defaults.

Area Coating - CalEEMod defaults.

Landscape Equipment - CalEEmod defaults.

Energy Use - CalEEMod defaults.

Water And Wastewater - CalEEmod defaults.

Solid Waste - CalEEmod defaults.

Construction Off-road Equipment Mitigation - In accordance with SDAPCD Rule 55.

Mobile Land Use Mitigation -

Area Mitigation -

Energy Mitigation - In accordance with Measure E-2 of the CAP.

Water Mitigation - low-flow fixtures and water-efficient irrigation

Stationary Sources - User Defined - Compliance with measure T-2 of the City's CAP.

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblProjectCharacteristics	CH4IntensityFactor	0.033	0
tblProjectCharacteristics	CO2IntensityFactor	539.98	44
tblProjectCharacteristics	N2OIntensityFactor	0.004	0
tblTripsAndVMT	VendorTripNumber	33.00	34.00
tblTripsAndVMT	WorkerTripNumber	15.00	16.00
tblTripsAndVMT	WorkerTripNumber	15.00	16.00

2.0 Emissions Summary

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.0211	0.2049	0.1811	3.8000e-004	0.0817	9.1200e-003	0.0908	0.0401	8.4500e-003	0.0485	0.0000	33.4087	33.4087	8.4400e-003	4.7000e-004	33.7594
2024	1.3235	1.7588	2.1650	4.5300e-003	0.0953	0.0736	0.1689	0.0259	0.0692	0.0951	0.0000	402.5662	402.5662	0.0695	0.0122	407.9470
Maximum	**1.3235**	**1.7588**	**2.1650**	**4.5300e-003**	**0.0953**	**0.0736**	**0.1689**	**0.0401**	**0.0692**	**0.0951**	**0.0000**	**402.5662**	**402.5662**	**0.0695**	**0.0122**	**407.9470**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.0211	0.2049	0.1811	3.8000e-004	0.0391	9.1200e-003	0.0482	0.0187	8.4500e-003	0.0271	0.0000	33.4087	33.4087	8.4400e-003	4.7000e-004	33.7593
2024	1.3235	1.7588	2.1650	4.5300e-003	0.0953	0.0736	0.1689	0.0259	0.0692	0.0951	0.0000	402.5659	402.5659	0.0695	0.0122	407.9467
Maximum	**1.3235**	**1.7588**	**2.1650**	**4.5300e-003**	**0.0953**	**0.0736**	**0.1689**	**0.0259**	**0.0692**	**0.0951**	**0.0000**	**402.5659**	**402.5659**	**0.0695**	**0.0122**	**407.9467**

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**24.07**	**0.00**	**16.41**	**32.47**	**0.00**	**14.91**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**12-1-2023**	**2-29-2024**	0.5970	0.5970
2	**3-1-2024**	**5-31-2024**	0.5502	0.5502
3	**6-1-2024**	**8-31-2024**	0.5491	0.5491
4	**9-1-2024**	**9-30-2024**	0.1791	0.1791
		Highest	0.5970	0.5970

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.4844	3.0000e-005	3.4600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.7500e-003	6.7500e-003	2.0000e-005	0.0000	7.1900e-003
Energy	0.0119	0.1080	0.0907	6.5000e-004		8.2100e-003	8.2100e-003		8.2100e-003	8.2100e-003	0.0000	173.2419	173.2419	2.2500e-003	2.1600e-003	173.9406
Mobile	2.7984	2.2450	20.5468	0.0346	4.2054	0.0263	4.2317	1.1222	0.0245	1.1467	0.0000	3,204.5446	3,204.5446	0.3112	0.1895	3,268.8000
Stationary	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	-23.1000	-23.1000	0.0000	0.0000	-23.1000
Waste						0.0000	0.0000		0.0000	0.0000	84.4321	0.0000	84.4321	4.9898	0.0000	209.1769
Water						0.0000	0.0000		0.0000	0.0000	4.0374	3.9391	7.9766	0.4147	9.7900e-003	21.2616
Total	**3.2946**	**2.3530**	**20.6410**	**0.0353**	**4.2054**	**0.0345**	**4.2399**	**1.1222**	**0.0327**	**1.1549**	**88.4695**	**3,358.6324**	**3,447.1018**	**5.7180**	**0.2015**	**3,650.0862**

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2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.4844	3.0000e-005	3.4600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.7500e-003	6.7500e-003	2.0000e-005	0.0000	7.1900e-003
Energy	0.0119	0.1080	0.0907	6.5000e-004		8.2100e-003	8.2100e-003		8.2100e-003	8.2100e-003	0.0000	167.0847	167.0847	2.2500e-003	2.1600e-003	167.7835
Mobile	2.7984	2.2450	20.5468	0.0346	4.2054	0.0263	4.2317	1.1222	0.0245	1.1467	0.0000	3,204.5446	3,204.5446	0.3112	0.1895	3,268.8000
Stationary	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	-23.1000	-23.1000	0.0000	0.0000	-23.1000
Waste						0.0000	0.0000		0.0000	0.0000	84.4321	0.0000	84.4321	4.9898	0.0000	209.1769
Water						0.0000	0.0000		0.0000	0.0000	3.2300	3.2392	6.4691	0.3318	7.8300e-003	17.0971
Total	**3.2946**	**2.3530**	**20.6410**	**0.0353**	**4.2054**	**0.0345**	**4.2399**	**1.1222**	**0.0327**	**1.1549**	**87.6620**	**3,351.7752**	**3,439.4373**	**5.6351**	**0.1995**	**3,639.7646**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.91**	**0.20**	**0.22**	**1.45**	**0.97**	**0.28**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	12/1/2023	12/7/2023	5	5	
2	Grading	Grading	12/8/2023	12/19/2023	5	8	

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3	Building Construction	Building Construction	12/20/2023	11/5/2024	5	230	
4	Paving	Paving	11/6/2024	11/29/2024	5	18	
5	Architectural Coating	Architectural Coating	11/30/2024	12/25/2024	5	18	

Acres of Grading (Site Preparation Phase): 7.5

Acres of Grading (Grading Phase): 8

Acres of Paving: 2.48

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 140,118; Non-Residential Outdoor: 46,706; Striped Parking Area: 6,624 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	2	6.00	132	0.36
Paving	Rollers	2	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48

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Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	16.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	76.00	34.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	16.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0491	0.0000	0.0491	0.0253	0.0000	0.0253	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.6500e-003	0.0688	0.0456	1.0000e-004		3.1700e-003	3.1700e-003		2.9100e-003	2.9100e-003	0.0000	8.3627	8.3627	2.7000e-003	0.0000	8.4303
Total	**6.6500e-003**	**0.0688**	**0.0456**	**1.0000e-004**	**0.0491**	**3.1700e-003**	**0.0523**	**0.0253**	**2.9100e-003**	**0.0282**	**0.0000**	**8.3627**	**8.3627**	**2.7000e-003**	**0.0000**	**8.4303**

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3.2 Site Preparation - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2000e-004	8.0000e-005	1.0300e-003	0.0000	3.6000e-004	0.0000	3.6000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.2856	0.2856	1.0000e-005	1.0000e-005	0.2881
Total	**1.2000e-004**	**8.0000e-005**	**1.0300e-003**	**0.0000**	**3.6000e-004**	**0.0000**	**3.6000e-004**	**1.0000e-004**	**0.0000**	**1.0000e-004**	**0.0000**	**0.2856**	**0.2856**	**1.0000e-005**	**1.0000e-005**	**0.2881**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0221	0.0000	0.0221	0.0114	0.0000	0.0114	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.6500e-003	0.0688	0.0456	1.0000e-004		3.1700e-003	3.1700e-003		2.9100e-003	2.9100e-003	0.0000	8.3627	8.3627	2.7000e-003	0.0000	8.4303
Total	**6.6500e-003**	**0.0688**	**0.0456**	**1.0000e-004**	**0.0221**	**3.1700e-003**	**0.0253**	**0.0114**	**2.9100e-003**	**0.0143**	**0.0000**	**8.3627**	**8.3627**	**2.7000e-003**	**0.0000**	**8.4303**

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3.2 Site Preparation - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2000e-004	8.0000e-005	1.0300e-003	0.0000	3.6000e-004	0.0000	3.6000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.2856	0.2856	1.0000e-005	1.0000e-005	0.2881
Total	**1.2000e-004**	**8.0000e-005**	**1.0300e-003**	**0.0000**	**3.6000e-004**	**0.0000**	**3.6000e-004**	**1.0000e-004**	**0.0000**	**1.0000e-004**	**0.0000**	**0.2856**	**0.2856**	**1.0000e-005**	**1.0000e-005**	**0.2881**

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0283	0.0000	0.0283	0.0137	0.0000	0.0137	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.8400e-003	0.0717	0.0590	1.2000e-004		3.1000e-003	3.1000e-003		2.8500e-003	2.8500e-003	0.0000	10.4243	10.4243	3.3700e-003	0.0000	10.5085
Total	**6.8400e-003**	**0.0717**	**0.0590**	**1.2000e-004**	**0.0283**	**3.1000e-003**	**0.0314**	**0.0137**	**2.8500e-003**	**0.0166**	**0.0000**	**10.4243**	**10.4243**	**3.3700e-003**	**0.0000**	**10.5085**

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3.3 Grading - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.7000e-004	1.2000e-004	1.4600e-003	0.0000	5.1000e-004	0.0000	5.2000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.4061	0.4061	1.0000e-005	1.0000e-005	0.4098
Total	**1.7000e-004**	**1.2000e-004**	**1.4600e-003**	**0.0000**	**5.1000e-004**	**0.0000**	**5.2000e-004**	**1.4000e-004**	**0.0000**	**1.4000e-004**	**0.0000**	**0.4061**	**0.4061**	**1.0000e-005**	**1.0000e-005**	**0.4098**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0128	0.0000	0.0128	6.1600e-003	0.0000	6.1600e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.8400e-003	0.0717	0.0590	1.2000e-004		3.1000e-003	3.1000e-003		2.8500e-003	2.8500e-003	0.0000	10.4242	10.4242	3.3700e-003	0.0000	10.5085
Total	**6.8400e-003**	**0.0717**	**0.0590**	**1.2000e-004**	**0.0128**	**3.1000e-003**	**0.0159**	**6.1600e-003**	**2.8500e-003**	**9.0100e-003**	**0.0000**	**10.4242**	**10.4242**	**3.3700e-003**	**0.0000**	**10.5085**

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3.3 Grading - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.7000e-004	1.2000e-004	1.4600e-003	0.0000	5.1000e-004	0.0000	5.2000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.4061	0.4061	1.0000e-005	1.0000e-005	0.4098
Total	**1.7000e-004**	**1.2000e-004**	**1.4600e-003**	**0.0000**	**5.1000e-004**	**0.0000**	**5.2000e-004**	**1.4000e-004**	**0.0000**	**1.4000e-004**	**0.0000**	**0.4061**	**0.4061**	**1.0000e-005**	**1.0000e-005**	**0.4098**

3.4 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.2900e-003	0.0575	0.0650	1.1000e-004		2.8000e-003	2.8000e-003		2.6300e-003	2.6300e-003	0.0000	9.2722	9.2722	2.2100e-003	0.0000	9.3273
Total	**6.2900e-003**	**0.0575**	**0.0650**	**1.1000e-004**		**2.8000e-003**	**2.8000e-003**		**2.6300e-003**	**2.6300e-003**	**0.0000**	**9.2722**	**9.2722**	**2.2100e-003**	**0.0000**	**9.3273**

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3.4 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.6000e-004	6.0400e-003	2.1300e-003	3.0000e-005	9.0000e-004	4.0000e-005	9.4000e-004	2.6000e-004	3.0000e-005	2.9000e-004	0.0000	2.7289	2.7289	8.0000e-005	4.0000e-004	2.8487
Worker	8.2000e-004	5.7000e-004	6.9300e-003	2.0000e-005	2.4400e-003	1.0000e-005	2.4500e-003	6.5000e-004	1.0000e-005	6.6000e-004	0.0000	1.9291	1.9291	6.0000e-005	5.0000e-005	1.9465
Total	**9.8000e-004**	**6.6100e-003**	**9.0600e-003**	**5.0000e-005**	**3.3400e-003**	**5.0000e-005**	**3.3900e-003**	**9.1000e-004**	**4.0000e-005**	**9.5000e-004**	**0.0000**	**4.6579**	**4.6579**	**1.4000e-004**	**4.5000e-004**	**4.7953**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.2900e-003	0.0575	0.0650	1.1000e-004		2.8000e-003	2.8000e-003		2.6300e-003	2.6300e-003	0.0000	9.2722	9.2722	2.2100e-003	0.0000	9.3273
Total	**6.2900e-003**	**0.0575**	**0.0650**	**1.1000e-004**		**2.8000e-003**	**2.8000e-003**		**2.6300e-003**	**2.6300e-003**	**0.0000**	**9.2722**	**9.2722**	**2.2100e-003**	**0.0000**	**9.3273**

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3.4 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.6000e-004	6.0400e-003	2.1300e-003	3.0000e-005	9.0000e-004	4.0000e-005	9.4000e-004	2.6000e-004	3.0000e-005	2.9000e-004	0.0000	2.7289	2.7289	8.0000e-005	4.0000e-004	2.8487
Worker	8.2000e-004	5.7000e-004	6.9300e-003	2.0000e-005	2.4400e-003	1.0000e-005	2.4500e-003	6.5000e-004	1.0000e-005	6.6000e-004	0.0000	1.9291	1.9291	6.0000e-005	5.0000e-005	1.9465
Total	**9.8000e-004**	**6.6100e-003**	**9.0600e-003**	**5.0000e-005**	**3.3400e-003**	**5.0000e-005**	**3.3900e-003**	**9.1000e-004**	**4.0000e-005**	**9.5000e-004**	**0.0000**	**4.6579**	**4.6579**	**1.4000e-004**	**4.5000e-004**	**4.7953**

3.4 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1633	1.4923	1.7945	2.9900e-003		0.0681	0.0681		0.0640	0.0640	0.0000	257.3525	257.3525	0.0609	0.0000	258.8739
Total	**0.1633**	**1.4923**	**1.7945**	**2.9900e-003**		**0.0681**	**0.0681**		**0.0640**	**0.0640**	**0.0000**	**257.3525**	**257.3525**	**0.0609**	**0.0000**	**258.8739**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.2600e-003	0.1664	0.0577	7.6000e-004	0.0251	9.9000e-004	0.0261	7.2400e-003	9.5000e-004	8.1900e-003	0.0000	74.4065	74.4065	2.3400e-003	0.0108	77.6775
Worker	0.0214	0.0142	0.1796	5.6000e-004	0.0677	3.5000e-004	0.0680	0.0180	3.3000e-004	0.0183	0.0000	51.7784	51.7784	1.4500e-003	1.4000e-003	52.2304
Total	**0.0257**	**0.1806**	**0.2373**	**1.3200e-003**	**0.0927**	**1.3400e-003**	**0.0941**	**0.0252**	**1.2800e-003**	**0.0265**	**0.0000**	**126.1848**	**126.1848**	**3.7900e-003**	**0.0122**	**129.9079**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1633	1.4923	1.7945	2.9900e-003		0.0681	0.0681		0.0640	0.0640	0.0000	257.3522	257.3522	0.0609	0.0000	258.8736
Total	**0.1633**	**1.4923**	**1.7945**	**2.9900e-003**		**0.0681**	**0.0681**		**0.0640**	**0.0640**	**0.0000**	**257.3522**	**257.3522**	**0.0609**	**0.0000**	**258.8736**

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3.4 Building Construction - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.2600e-003	0.1664	0.0577	7.6000e-004	0.0251	9.9000e-004	0.0261	7.2400e-003	9.5000e-004	8.1900e-003	0.0000	74.4065	74.4065	2.3400e-003	0.0108	77.6775
Worker	0.0214	0.0142	0.1796	5.6000e-004	0.0677	3.5000e-004	0.0680	0.0180	3.3000e-004	0.0183	0.0000	51.7784	51.7784	1.4500e-003	1.4000e-003	52.2304
Total	**0.0257**	**0.1806**	**0.2373**	**1.3200e-003**	**0.0927**	**1.3400e-003**	**0.0941**	**0.0252**	**1.2800e-003**	**0.0265**	**0.0000**	**126.1848**	**126.1848**	**3.7900e-003**	**0.0122**	**129.9079**

3.5 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	7.9300e-003	0.0745	0.1100	1.7000e-004		3.5900e-003	3.5900e-003		3.3200e-003	3.3200e-003	0.0000	14.7423	14.7423	4.6300e-003	0.0000	14.8581
Paving	3.2500e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0112**	**0.0745**	**0.1100**	**1.7000e-004**		**3.5900e-003**	**3.5900e-003**		**3.3200e-003**	**3.3200e-003**	**0.0000**	**14.7423**	**14.7423**	**4.6300e-003**	**0.0000**	**14.8581**

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3.5 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.6000e-004	3.0000e-004	3.8300e-003	1.0000e-005	1.4400e-003	1.0000e-005	1.4500e-003	3.8000e-004	1.0000e-005	3.9000e-004	0.0000	1.1048	1.1048	3.0000e-005	3.0000e-005	1.1145
Total	**4.6000e-004**	**3.0000e-004**	**3.8300e-003**	**1.0000e-005**	**1.4400e-003**	**1.0000e-005**	**1.4500e-003**	**3.8000e-004**	**1.0000e-005**	**3.9000e-004**	**0.0000**	**1.1048**	**1.1048**	**3.0000e-005**	**3.0000e-005**	**1.1145**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	7.9300e-003	0.0745	0.1100	1.7000e-004		3.5900e-003	3.5900e-003		3.3200e-003	3.3200e-003	0.0000	14.7423	14.7423	4.6300e-003	0.0000	14.8581
Paving	3.2500e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0112**	**0.0745**	**0.1100**	**1.7000e-004**		**3.5900e-003**	**3.5900e-003**		**3.3200e-003**	**3.3200e-003**	**0.0000**	**14.7423**	**14.7423**	**4.6300e-003**	**0.0000**	**14.8581**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.6000e-004	3.0000e-004	3.8300e-003	1.0000e-005	1.4400e-003	1.0000e-005	1.4500e-003	3.8000e-004	1.0000e-005	3.9000e-004	0.0000	1.1048	1.1048	3.0000e-005	3.0000e-005	1.1145
Total	**4.6000e-004**	**3.0000e-004**	**3.8300e-003**	**1.0000e-005**	**1.4400e-003**	**1.0000e-005**	**1.4500e-003**	**3.8000e-004**	**1.0000e-005**	**3.9000e-004**	**0.0000**	**1.1048**	**1.1048**	**3.0000e-005**	**3.0000e-005**	**1.1145**

3.6 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.1208					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.6300e-003	0.0110	0.0163	3.0000e-005		5.5000e-004	5.5000e-004		5.5000e-004	5.5000e-004	0.0000	2.2979	2.2979	1.3000e-004	0.0000	2.3012
Total	**1.1224**	**0.0110**	**0.0163**	**3.0000e-005**		**5.5000e-004**	**5.5000e-004**		**5.5000e-004**	**5.5000e-004**	**0.0000**	**2.2979**	**2.2979**	**1.3000e-004**	**0.0000**	**2.3012**

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3.6 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.7000e-004	2.4000e-004	3.0700e-003	1.0000e-005	1.1500e-003	1.0000e-005	1.1600e-003	3.1000e-004	1.0000e-005	3.1000e-004	0.0000	0.8838	0.8838	2.0000e-005	2.0000e-005	0.8916
Total	**3.7000e-004**	**2.4000e-004**	**3.0700e-003**	**1.0000e-005**	**1.1500e-003**	**1.0000e-005**	**1.1600e-003**	**3.1000e-004**	**1.0000e-005**	**3.1000e-004**	**0.0000**	**0.8838**	**0.8838**	**2.0000e-005**	**2.0000e-005**	**0.8916**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.1208					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.6300e-003	0.0110	0.0163	3.0000e-005		5.5000e-004	5.5000e-004		5.5000e-004	5.5000e-004	0.0000	2.2979	2.2979	1.3000e-004	0.0000	2.3012
Total	**1.1224**	**0.0110**	**0.0163**	**3.0000e-005**		**5.5000e-004**	**5.5000e-004**		**5.5000e-004**	**5.5000e-004**	**0.0000**	**2.2979**	**2.2979**	**1.3000e-004**	**0.0000**	**2.3012**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.7000e-004	2.4000e-004	3.0700e-003	1.0000e-005	1.1500e-003	1.0000e-005	1.1600e-003	3.1000e-004	1.0000e-005	3.1000e-004	0.0000	0.8838	0.8838	2.0000e-005	2.0000e-005	0.8916
Total	**3.7000e-004**	**2.4000e-004**	**3.0700e-003**	**1.0000e-005**	**1.1500e-003**	**1.0000e-005**	**1.1600e-003**	**3.1000e-004**	**1.0000e-005**	**3.1000e-004**	**0.0000**	**0.8838**	**0.8838**	**2.0000e-005**	**2.0000e-005**	**0.8916**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	2.7984	2.2450	20.5468	0.0346	4.2054	0.0263	4.2317	1.1222	0.0245	1.1467	0.0000	3,204.5446	3,204.5446	0.3112	0.1895	3,268.8000
Unmitigated	2.7984	2.2450	20.5468	0.0346	4.2054	0.0263	4.2317	1.1222	0.0245	1.1467	0.0000	3,204.5446	3,204.5446	0.3112	0.1895	3,268.8000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Gasoline/Service Station	1,720.10	1,821.70	1668.80	995,207	995,207
General Office Building	224.02	50.83	16.10	405,244	405,244
Parking Lot	0.00	0.00	0.00		
Supermarket	7,367.82	12,255.78	11486.43	9,843,975	9,843,975
Total	9,311.94	14,128.31	13,171.33	11,244,426	11,244,426

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Gasoline/Service Station	9.50	7.30	7.30	2.00	79.00	19.00	14	27	59
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Supermarket	9.50	7.30	7.30	6.50	74.50	19.00	34	30	36

4.4 Fleet Mix

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Gasoline/Service Station	0.575453	0.061728	0.171227	0.112384	0.022882	0.006522	0.009800	0.006298	0.000679	0.000623	0.027611	0.000857	0.003936
General Office Building	0.575453	0.061728	0.171227	0.112384	0.022882	0.006522	0.009800	0.006298	0.000679	0.000623	0.027611	0.000857	0.003936
Parking Lot	0.575453	0.061728	0.171227	0.112384	0.022882	0.006522	0.009800	0.006298	0.000679	0.000623	0.027611	0.000857	0.003936
Supermarket	0.575453	0.061728	0.171227	0.112384	0.022882	0.006522	0.009800	0.006298	0.000679	0.000623	0.027611	0.000857	0.003936

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Kilowatt Hours of Renewable Electricity Generated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	49.5065	49.5065	0.0000	0.0000	49.5065
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	55.6636	55.6636	0.0000	0.0000	55.6636
NaturalGas Mitigated	0.0119	0.1080	0.0907	6.5000e-004		8.2100e-003	8.2100e-003		8.2100e-003	8.2100e-003	0.0000	117.5783	117.5783	2.2500e-003	2.1600e-003	118.2770
NaturalGas Unmitigated	0.0119	0.1080	0.0907	6.5000e-004		8.2100e-003	8.2100e-003		8.2100e-003	8.2100e-003	0.0000	117.5783	117.5783	2.2500e-003	2.1600e-003	118.2770

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Gasoline/Service Station	16263.4	9.0000e-005	8.0000e-004	6.7000e-004	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.8679	0.8679	2.0000e-005	2.0000e-005	0.8730
General Office Building	460690	2.4800e-003	0.0226	0.0190	1.4000e-004		1.7200e-003	1.7200e-003		1.7200e-003	1.7200e-003	0.0000	24.5842	24.5842	4.7000e-004	4.5000e-004	24.7303
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Supermarket	1.72638e+006	9.3100e-003	0.0846	0.0711	5.1000e-004		6.4300e-003	6.4300e-003		6.4300e-003	6.4300e-003	0.0000	92.1262	92.1262	1.7700e-003	1.6900e-003	92.6737
Total		**0.0119**	**0.1080**	**0.0907**	**6.5000e-004**		**8.2100e-003**	**8.2100e-003**		**8.2100e-003**	**8.2100e-003**	**0.0000**	**117.5783**	**117.5783**	**2.2600e-003**	**2.1600e-003**	**118.2770**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Gasoline/Service Station	16263.4	9.0000e-005	8.0000e-004	6.7000e-004	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.8679	0.8679	2.0000e-005	2.0000e-005	0.8730
General Office Building	460690	2.4800e-003	0.0226	0.0190	1.4000e-004		1.7200e-003	1.7200e-003		1.7200e-003	1.7200e-003	0.0000	24.5842	24.5842	4.7000e-004	4.5000e-004	24.7303
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Supermarket	1.72638e+006	9.3100e-003	0.0846	0.0711	5.1000e-004		6.4300e-003	6.4300e-003		6.4300e-003	6.4300e-003	0.0000	92.1262	92.1262	1.7700e-003	1.6900e-003	92.6737
Total		**0.0119**	**0.1080**	**0.0907**	**6.5000e-004**		**8.2100e-003**	**8.2100e-003**		**8.2100e-003**	**8.2100e-003**	**0.0000**	**117.5783**	**117.5783**	**2.2600e-003**	**2.1600e-003**	**118.2770**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Gasoline/Service Station	11548.1	0.2305	0.0000	0.0000	0.2305
General Office Building	297620	5.9399	0.0000	0.0000	5.9399
Parking Lot	38640	0.7712	0.0000	0.0000	0.7712
Supermarket	2.44122e+006	48.7220	0.0000	0.0000	48.7220
Total		**55.6636**	**0.0000**	**0.0000**	**55.6636**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Gasoline/Service Station	-65577.6	-1.3088	0.0000	0.0000	-1.3088
General Office Building	220494	4.4006	0.0000	0.0000	4.4006
Parking Lot	-38485.8	-0.7681	0.0000	0.0000	-0.7681
Supermarket	2.36409e+006	47.1828	0.0000	0.0000	47.1828
Total		**49.5065**	**0.0000**	**0.0000**	**49.5065**

6.0 Area Detail

6.1 Mitigation Measures Area

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.4844	3.0000e-005	3.4600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.7500e-003	6.7500e-003	2.0000e-005	0.0000	7.1900e-003
Unmitigated	0.4844	3.0000e-005	3.4600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.7500e-003	6.7500e-003	2.0000e-005	0.0000	7.1900e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1121					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3720					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.2000e-004	3.0000e-005	3.4600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.7500e-003	6.7500e-003	2.0000e-005	0.0000	7.1900e-003
Total	**0.4844**	**3.0000e-005**	**3.4600e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**6.7500e-003**	**6.7500e-003**	**2.0000e-005**	**0.0000**	**7.1900e-003**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1121					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3720					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.2000e-004	3.0000e-005	3.4600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.7500e-003	6.7500e-003	2.0000e-005	0.0000	7.1900e-003
Total	**0.4844**	**3.0000e-005**	**3.4600e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**6.7500e-003**	**6.7500e-003**	**2.0000e-005**	**0.0000**	**7.1900e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	6.4691	0.3318	7.8300e-003	17.0971
Unmitigated	7.9766	0.4147	9.7900e-003	21.2616

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Gasoline/Service Station	0.132819 / 0.0814051	0.0947	4.3300e-003	1.0000e-004	0.2334
General Office Building	4.08788 / 2.50547	2.9148	0.1332	3.1500e-003	7.1821
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Supermarket	8.50551 / 0.263057	4.9671	0.2772	6.5400e-003	13.8461
Total		**7.9766**	**0.4147**	**9.7900e-003**	**21.2615**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Gasoline/Service Station	0.106255 / 0.0764394	0.0783	3.4600e-003	8.0000e-005	0.1892
General Office Building	3.2703 / 2.35264	2.4090	0.1066	2.5200e-003	5.8229
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Supermarket	6.80441 / 0.24701	3.9818	0.2217	5.2400e-003	11.0850
Total		**6.4691**	**0.3317**	**7.8400e-003**	**17.0971**

8.0 Waste Detail

8.1 Mitigation Measures Waste

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	84.4321	4.9898	0.0000	209.1769
Unmitigated	84.4321	4.9898	0.0000	209.1769

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Gasoline/Service Station	5.39	1.0941	0.0647	0.0000	2.7106
General Office Building	21.39	4.3420	0.2566	0.0000	10.7571
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Supermarket	389.16	78.9960	4.6685	0.0000	195.7092
Total		**84.4321**	**4.9898**	**0.0000**	**209.1769**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Gasoline/Service Station	5.39	1.0941	0.0647	0.0000	2.7106
General Office Building	21.39	4.3420	0.2566	0.0000	10.7571
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Supermarket	389.16	78.9960	4.6685	0.0000	195.7092
Total		**84.4321**	**4.9898**	**0.0000**	**209.1769**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Equipment Type	Number
EVCS	1

10.1 Stationary Sources

Unmitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	tons/yr										MT/yr					
EVCS	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	-23.1000	-23.1000	0.0000	0.0000	-23.1000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**-23.1000**	**-23.1000**	**0.0000**	**0.0000**	**-23.1000**

11.0 Vegetation

CAPCOA Final Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity, December 2021

T-1 Increase Residential Density

GHG Reduction Formula

$$A = \frac{B - C}{C} \times D$$

GHG Calculation Variables

ID	Variable	Value	Unit	Source
Output				
A	Percent reduction in GHG emissions from project VMT in study area	0–30.0	%	calculated
User Inputs				
B	Residential density of project development	[ ]	du/acre	user input
Constants, Assumptions, and Available Defaults				
C	Residential density of typical development	9.1	du/acre	Ewing et al. 2007
D	Elasticity of VMT with respect to residential density	-0.22	unitless	Stevens 2016

B = 120 units / 7.6 acres = 15.78947
A = -16.2%

T-18 Provide Pedestrian Network Improvement

GHG Reduction Formula

$$A = \left(\frac{C}{B} - 1\right) \times D$$

GHG Calculation Variables

ID	Variable	Value	Unit	Source
Output				
A	Percent reduction in GHG emissions from household vehicle travel in plan/community	0–6.4	%	calculated
User Inputs				
B	Existing sidewalk length in study area	[ ]	miles	user input
C	Sidewalk length in study area with measure	[ ]	miles	user input
Constants, Assumptions, and Available Defaults				
D	Elasticity of household VMT with respect to the ratio of sidewalks-to-streets	-0.05	unitless	Frank et al. 2011

B 1.2
C 1.64

A = -1.8%

City of San Marcos CAP GHG Reductions

Table 25 of Appendix B to the City of San Marcos CAP

New Development Type	Projected Number of EVCSs in 2030	Annual San Marcos EV Miles due to the EVCSs in 2030 (miles per year)	2030 Emissions Reduction (MT CO2e)	2030 Emissions Reductions per EVCS[1] (MT CO2e)
Multi-Family	220	1519489	363	1.65
Commercial	234	8924491	2,130	9.10
		Total	2,493	

Note: [1] Emissions reductions per EVCS were calculated by dividing the 2030 Emissions Reductions by the Projected Number of EVCSs in 2030.

Project = 2 EVCS
GHG Reduction = 1.65 MT CO2e per EVCS
Project GHG Reduction = **3.3 MT CO2e**

Table 48 of Appendix B to the City of San Marcos CAP

Year	New Residential Water Heaters Added Annually	Total New Alternatively Fueld Water Heaters after 2022	Natural Gas Savings Per Alternatively-Fueled Water Heater (Therms/year)	Total Natual Gas Savings (Therms/year)	Natural Gas Emission Factor (MT CO2e/Therm)	Emission Reductions from Natural Gas Savings (MT CO2e)	Emission Reductions from Natural Gas Savings per Water Heater (MT CO2e)
2030	250	1800	133	239400	0.0054	1303	0.72

Note: [1] Emissions reductions per water heater were calculated by dividing the Emission Reductiosn from Natural Gas Savings by the New Residential Water Heaters Added Annually.

Project = 120 units
GHG Reduction = 0.72 MT CO2e per water heater
Project GHG Reduction = **86.4 MT CO2e**

Table 49 of Appendix B to the City of San Marcos CAP

Year	New Residential Water Heaters Added Annually	Total New Alternatively Fueld Water Heaters after 2022	Electricity Added Per Alternatively-Fueled Water Heater (kWh/year)	Total Electricity Use (kWh/year)	Electricity Emission Factor (lbs CO2e/MWh)	Emissions from Additional Electricity Use (MT CO2e)	Emissions from Additional Electricity Use per Water Heater (MT CO2e)
2030	250	1800	766	1378800	44	28	0.02

Project = 120 units
GHG Reduction = 0.02 MT CO2e per water heater
Project GHG Addition = **2.4 MT CO2e**

Project Net GHG Reduction = **84 MT CO2e**

Existing Land Use Designation

Table 25 of Appendix B to the City of San Marcos CAP

New Development Type	Projected Number of EVCSs in 2030	Annual San Marcos EV Miles due to the EVCSs in 2030 (miles per year)	2030 Emissions Reduction (MT CO2e)	2030 Emissions Reductions per EVCS[1] (MT CO2e)
Multi-Family	220	1519489	363	1.65
Commercial	234	8924491	2,130	9.10
		Total	2,493	

Note: [1] Emissions reductions per EVCS were calculated by dividing the 2030 Emissions Reductions by the Projected Number of EVCSs in 2030.

Existing Land Use Designation = 14 EVCS
GHG Reduction = 1.65 MT CO2e per EVCS
Total GHG Reduction = **23.1 MT CO2e**

NREL
NATIONAL RENEWABLE ENERGY LABORATORY

Caution: Photovoltaic system performance predictions calculated by PVWatts® include many inherent assumptions and uncertainties and do not reflect variations between PV technologies nor site-specific characteristics except as represented by PVWatts® inputs. For example, PV modules with better performance are not differentiated within PVWatts® from lesser performing modules. Both NREL and private companies provide more sophisticated PV modeling tools (such as the System Advisor Model at https://sam.nrel.gov) that allow for more precise and complex modeling of PV systems.

The expected range is based on 30 years of actual weather data at the given location and is intended to provide an indication of the variation you might see. For more information, please refer to this NREL report: The Error Report.

Disclaimer: The PVWatts® Model ("Model") is provided by the National Renewable Energy Laboratory ("NREL"), which is operated by the Alliance for Sustainable Energy, LLC ("Alliance") for the U.S. Department Of Energy ("DOE") and may be used for any purpose whatsoever.

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The energy output range is based on analysis of 30 years of historical weather data, and is intended to provide an indication of the possible interannual variability in generation for a Fixed (open rack) PV system at this location.

RESULTS

308,503 kWh/Year*

System output may range from 296,533 to 310,447 kWh per year near this location.

Month	Solar Radiation (kWh / m^2 / day)	AC Energy (kWh)
January	4.76	20,962
February	4.95	19,987
March	6.20	26,891
April	6.81	28,085
May	6.90	29,333
June	7.26	29,872
July	7.39	30,872
August	7.37	30,306
September	6.80	27,596
October	5.69	24,411
November	4.97	20,798
December	4.32	19,390
Annual	6.12	308,503

Location and Station Identification

Requested Location	san marcos, ca
Weather Data Source	Lat, Lng: 33.13, -117.18 1.4 mi
Latitude	33.13° N
Longitude	117.18° W

PV System Specifications

DC System Size	184 kW
Module Type	Standard
Array Type	Fixed (open rack)
Array Tilt	20°
Array Azimuth	180°
System Losses	14.08%
Inverter Efficiency	96%
DC to AC Size Ratio	1.2

Performance Metrics

Capacity Factor	19.1%

Appendix B
Construction HRA Output Files

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Gran Vista Specific Plan HRA

San Diego County APCD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	2.14	Acre	2.14	93,218.40	0
Parking Lot	20.00	Space	0.18	8,000.00	0
City Park	3.40	Acre	3.40	148,104.00	0
Condo/Townhouse High Rise	120.00	Dwelling Unit	1.88	120,000.00	343

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2025
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	539.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Based on site plan for project.

Construction Phase - Based on applicant provided information.

Off-road Equipment - Based on applicant provided information.

Off-road Equipment - Based on applicant provided information.

Off-road Equipment - Based on applicant provided information.

Off-road Equipment - Based on applicant provided information.

Off-road Equipment - Based on applicant provided information.

Trips and VMT - Based on applicant provided information.

Gran Vista Specific Plan HRA - San Diego County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

On-road Fugitive Dust - CalEEmod defaults.

Grading - CalEEmod defaults.

Architectural Coating - Low-VOC content coatings to be used onsite.

Vehicle Trips - Based on traffic assessment for project.

Road Dust - CalEEmod defaults.

Woodstoves - No wood or natural gas.

Consumer Products - CalEEmod defaults.

Area Coating - Low-VOC coatings to be used.

Landscape Equipment - CalEEmod defaults.

Energy Use - CalEEMod defaults.

Water And Wastewater - CalEEmod defaults.

Solid Waste - CalEEmod defaults.

Construction Off-road Equipment Mitigation - In accordance with SDAPCD Rule 55. Applicant has committed to Tier 4 Interim equipment over 50 horsepower, electric under 50 horsepower.

Mobile Land Use Mitigation -

Area Mitigation - Low-VOC architectural coatings and no hearths.

Energy Mitigation - Energy star appliances

Water Mitigation - low-flow fixtures and water-efficient irrigation

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	100.00
tblArchitecturalCoating	EF_Parking	250.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Parking	250	100
tblAreaCoating	Area_EF_Residential_Exterior	250	100
tblAreaCoating	Area_EF_Residential_Interior	250	50
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblConstEquipMitigation	FuelType	Diesel	Electrical
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblConstructionPhase	NumDays	10.00	6.00
tblConstructionPhase	NumDays	20.00	24.00
tblConstructionPhase	NumDays	230.00	262.00
tblFireplaces	FireplaceDayYear	82.00	0.00
tblFireplaces	FireplaceHourDay	3.00	0.00
tblFireplaces	FireplaceWoodMass	3,078.40	0.00
tblFireplaces	NumberGas	66.00	0.00
tblFireplaces	NumberNoFireplace	12.00	0.00
tblFireplaces	NumberWood	42.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	3.00
tblOffRoadEquipment	UsageHours	7.00	4.00
tblOffRoadEquipment	UsageHours	7.00	4.00
tblTripsAndVMT	VendorTripLength	7.30	0.25
tblTripsAndVMT	VendorTripLength	7.30	0.25
tblTripsAndVMT	VendorTripLength	7.30	0.25
tblTripsAndVMT	VendorTripLength	7.30	0.25
tblTripsAndVMT	VendorTripLength	7.30	0.25
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	WorkerTripNumber	10.00	0.00
tblTripsAndVMT	WorkerTripNumber	18.00	0.00

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblTripsAndVMT	WorkerTripNumber	191.00	0.00
tblTripsAndVMT	WorkerTripNumber	18.00	0.00
tblTripsAndVMT	WorkerTripNumber	38.00	0.00
tblVehicleTrips	DV_TP	11.00	0.00
tblVehicleTrips	HO_TL	7.50	0.00
tblVehicleTrips	HO_TTP	39.60	0.00
tblVehicleTrips	HS_TL	7.30	0.00
tblVehicleTrips	HS_TTP	18.80	0.00
tblVehicleTrips	HW_TL	10.80	6.58
tblVehicleTrips	HW_TTP	41.60	100.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	86.00	100.00
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	ST_TR	4.91	8.00
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	SU_TR	4.09	8.00
tblVehicleTrips	WD_TR	0.78	0.00
tblVehicleTrips	WD_TR	5.44	8.00
tblWoodstoves	NumberCatalytic	6.00	0.00
tblWoodstoves	NumberNoncatalytic	6.00	0.00
tblWoodstoves	WoodstoveDayYear	82.00	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00

2.0 Emissions Summary

Gran Vista Specific Plan HRA - San Diego County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.0350	0.3707	0.2619	6.4000e-004	0.1088	0.0148	0.1236	0.0317	0.0136	0.0453	0.0000	56.2480	56.2480	0.0182	1.0000e-005	56.7062
2024	0.2075	1.7660	2.1261	3.7300e-003	0.0923	0.0766	0.1689	0.0223	0.0734	0.0957	0.0000	321.1114	321.1114	0.0554	2.0300e-003	323.1003
2025	0.5054	0.1825	0.2443	4.2000e-004	2.1000e-004	7.3100e-003	7.5200e-003	6.0000e-005	7.0800e-003	7.1500e-003	0.0000	35.8920	35.8920	4.8200e-003	2.6000e-004	36.0892
Maximum	**0.5054**	**1.7660**	**2.1261**	**3.7300e-003**	**0.1088**	**0.0766**	**0.1689**	**0.0317**	**0.0734**	**0.0957**	**0.0000**	**321.1114**	**321.1114**	**0.0554**	**2.0300e-003**	**323.1003**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.0108	0.1781	0.3518	6.4000e-004	0.0490	1.0500e-003	0.0500	0.0143	1.0500e-003	0.0153	0.0000	56.2479	56.2479	0.0182	1.0000e-005	56.7061
2024	0.0684	1.2838	2.1638	3.4300e-003	0.0424	7.5500e-003	0.0500	0.0103	7.5500e-003	0.0178	0.0000	299.1834	299.1834	0.0532	2.0300e-003	301.1163
2025	0.4908	0.1448	0.2400	3.8000e-004	2.1000e-004	8.6000e-004	1.0600e-003	6.0000e-005	8.6000e-004	9.2000e-004	0.0000	33.1627	33.1627	4.5600e-003	2.6000e-004	33.3535
Maximum	**0.4908**	**1.2838**	**2.1638**	**3.4300e-003**	**0.0490**	**7.5500e-003**	**0.0500**	**0.0143**	**7.5500e-003**	**0.0178**	**0.0000**	**299.1834**	**299.1834**	**0.0532**	**2.0300e-003**	**301.1163**

Gran Vista Specific Plan HRA - San Diego County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**23.78**	**30.72**	**-4.68**	**7.10**	**54.50**	**90.41**	**66.31**	**54.43**	**89.95**	**77.02**	**0.00**	**5.97**	**5.97**	**3.19**	**0.00**	**5.94**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**12-1-2023**	**2-29-2024**	0.8593	0.4859
2	**3-1-2024**	**5-31-2024**	0.4604	0.3187
3	**6-1-2024**	**8-31-2024**	0.4600	0.3183
4	**9-1-2024**	**11-30-2024**	0.4558	0.3156
5	**12-1-2024**	**2-28-2025**	0.6680	0.5682
6	**3-1-2025**	**5-31-2025**	0.1775	0.1768
		Highest	0.8593	0.5682

Gran Vista Specific Plan HRA - San Diego County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.5517	0.0103	0.8904	5.0000e-005		4.9400e-003	4.9400e-003		4.9400e-003	4.9400e-003	0.0000	1.4559	1.4559	1.3900e-003	0.0000	1.4908
Energy	4.7100e-003	0.0402	0.0171	2.6000e-004		3.2500e-003	3.2500e-003		3.2500e-003	3.2500e-003	0.0000	167.7792	167.7792	8.3000e-003	1.7500e-003	168.5088
Mobile	0.4249	0.4494	3.7944	7.8200e-003	0.8601	6.1400e-003	0.8662	0.2295	5.7300e-003	0.2353	0.0000	723.4273	723.4273	0.0543	0.0341	734.9389
Waste						0.0000	0.0000		0.0000	0.0000	11.2640	0.0000	11.2640	0.6657	0.0000	27.9060
Water						0.0000	0.0000		0.0000	0.0000	2.4804	49.3715	51.8519	0.2578	6.3800e-003	60.1981
Total	**0.9813**	**0.4999**	**4.7019**	**8.1300e-003**	**0.8601**	**0.0143**	**0.8744**	**0.2295**	**0.0139**	**0.2435**	**13.7444**	**942.0339**	**955.7783**	**0.9875**	**0.0422**	**993.0426**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.5517	0.0103	0.8904	5.0000e-005		4.9400e-003	4.9400e-003		4.9400e-003	4.9400e-003	0.0000	1.4559	1.4559	1.3900e-003	0.0000	1.4908
Energy	4.7100e-003	0.0402	0.0171	2.6000e-004		3.2500e-003	3.2500e-003		3.2500e-003	3.2500e-003	0.0000	164.6591	164.6591	8.1100e-003	1.7300e-003	165.3769
Mobile	0.3469	0.3168	2.6867	4.9300e-003	0.5323	4.0500e-003	0.5363	0.1421	3.7700e-003	0.1458	0.0000	455.8539	455.8539	0.0404	0.0244	464.1404
Waste						0.0000	0.0000		0.0000	0.0000	11.2640	0.0000	11.2640	0.6657	0.0000	27.9060
Water						0.0000	0.0000		0.0000	0.0000	1.9844	42.8938	44.8782	0.2064	5.1300e-003	51.5678
Total	**0.9033**	**0.3673**	**3.5942**	**5.2400e-003**	**0.5323**	**0.0122**	**0.5445**	**0.1421**	**0.0120**	**0.1540**	**13.2483**	**664.8627**	**678.1110**	**0.9221**	**0.0313**	**710.4820**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**7.94**	**26.53**	**23.56**	**35.55**	**38.11**	**14.58**	**37.73**	**38.12**	**14.08**	**36.74**	**3.61**	**29.42**	**29.05**	**6.62**	**25.90**	**28.45**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	12/1/2023	12/8/2023	5	6	
2	Grading	Grading	12/9/2023	1/11/2024	5	24	
3	Paving	Paving	1/12/2024	2/8/2024	5	20	

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4	Building Construction	Building Construction	2/9/2024	2/10/2025	5	262	
5	Architectural Coating	Architectural Coating	2/11/2025	3/10/2025	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 120

Acres of Paving: 2.32

Residential Indoor: 243,000; Residential Outdoor: 81,000; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 6,073 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	0	8.00	247	0.40
Site Preparation	Rubber Tired Loaders	1	8.00	203	0.36
Site Preparation	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Grading	Excavators	0	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	4	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Air Compressors	2	8.00	78	0.48
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Skid Steer Loaders	1	4.00	65	0.37
Building Construction	Tractors/Loaders/Backhoes	1	4.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	3	8.00	80	0.38

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	4	0.00	4.00	0.00	10.80	0.25	20.00	LD_Mix	HDT_Mix	HHDT
Grading	7	0.00	4.00	0.00	10.80	0.25	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	0.00	54.00	0.00	10.80	0.25	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	0.00	4.00	0.00	10.80	0.25	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	0.00	4.00	0.00	10.80	0.25	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Alternative Fuel for Construction Equipment

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.1700e-003	0.0218	0.0246	5.0000e-005		9.5000e-004	9.5000e-004		8.7000e-004	8.7000e-004	0.0000	4.1103	4.1103	1.3300e-003	0.0000	4.1436
Total	**2.1700e-003**	**0.0218**	**0.0246**	**5.0000e-005**	**0.0000**	**9.5000e-004**	**9.5000e-004**	**0.0000**	**8.7000e-004**	**8.7000e-004**	**0.0000**	**4.1103**	**4.1103**	**1.3300e-003**	**0.0000**	**4.1436**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0000e-005	1.5000e-004	1.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0252	0.0252	0.0000	0.0000	0.0264
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.0000e-005**	**1.5000e-004**	**1.1000e-004**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0252**	**0.0252**	**0.0000**	**0.0000**	**0.0264**

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3.2 Site Preparation - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.4000e-004	0.0172	0.0311	5.0000e-005		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005	0.0000	4.1103	4.1103	1.3300e-003	0.0000	4.1436
Total	**9.4000e-004**	**0.0172**	**0.0311**	**5.0000e-005**	**0.0000**	**8.0000e-005**	**8.0000e-005**	**0.0000**	**8.0000e-005**	**8.0000e-005**	**0.0000**	**4.1103**	**4.1103**	**1.3300e-003**	**0.0000**	**4.1436**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0000e-005	1.5000e-004	1.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0252	0.0252	0.0000	0.0000	0.0264
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.0000e-005**	**1.5000e-004**	**1.1000e-004**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0252**	**0.0252**	**0.0000**	**0.0000**	**0.0264**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1088	0.0000	0.1088	0.0317	0.0000	0.0317	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0328	0.3484	0.2368	5.9000e-004		0.0139	0.0139		0.0127	0.0127	0.0000	52.0494	52.0494	0.0168	0.0000	52.4702
Total	**0.0328**	**0.3484**	**0.2368**	**5.9000e-004**	**0.1088**	**0.0139**	**0.1227**	**0.0317**	**0.0127**	**0.0444**	**0.0000**	**52.0494**	**52.0494**	**0.0168**	**0.0000**	**52.4702**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.0000e-005	3.9000e-004	2.9000e-004	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0630	0.0630	0.0000	1.0000e-005	0.0660
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**2.0000e-005**	**3.9000e-004**	**2.9000e-004**	**0.0000**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0630**	**0.0630**	**0.0000**	**1.0000e-005**	**0.0660**

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3.3 Grading - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0490	0.0000	0.0490	0.0143	0.0000	0.0143	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.8400e-003	0.1603	0.3203	5.9000e-004		9.7000e-004	9.7000e-004		9.7000e-004	9.7000e-004	0.0000	52.0493	52.0493	0.0168	0.0000	52.4702
Total	**9.8400e-003**	**0.1603**	**0.3203**	**5.9000e-004**	**0.0490**	**9.7000e-004**	**0.0499**	**0.0143**	**9.7000e-004**	**0.0152**	**0.0000**	**52.0493**	**52.0493**	**0.0168**	**0.0000**	**52.4702**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.0000e-005	3.9000e-004	2.9000e-004	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0630	0.0630	0.0000	1.0000e-005	0.0660
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**2.0000e-005**	**3.9000e-004**	**2.9000e-004**	**0.0000**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0630**	**0.0630**	**0.0000**	**1.0000e-005**	**0.0660**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Grading - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0907	0.0000	0.0907	0.0218	0.0000	0.0218	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0191	0.1958	0.1390	3.6000e-004		7.8300e-003	7.8300e-003		7.2000e-003	7.2000e-003	0.0000	31.2121	31.2121	0.0101	0.0000	31.4644
Total	**0.0191**	**0.1958**	**0.1390**	**3.6000e-004**	**0.0907**	**7.8300e-003**	**0.0986**	**0.0218**	**7.2000e-003**	**0.0290**	**0.0000**	**31.2121**	**31.2121**	**0.0101**	**0.0000**	**31.4644**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0000e-005	2.3000e-004	1.7000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0372	0.0372	0.0000	1.0000e-005	0.0389
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.0000e-005**	**2.3000e-004**	**1.7000e-004**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0372**	**0.0372**	**0.0000**	**1.0000e-005**	**0.0389**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Grading - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0408	0.0000	0.0408	9.7900e-003	0.0000	9.7900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.9000e-003	0.0962	0.1922	3.6000e-004		5.8000e-004	5.8000e-004		5.8000e-004	5.8000e-004	0.0000	31.2120	31.2120	0.0101	0.0000	31.4644
Total	**5.9000e-003**	**0.0962**	**0.1922**	**3.6000e-004**	**0.0408**	**5.8000e-004**	**0.0414**	**9.7900e-003**	**5.8000e-004**	**0.0104**	**0.0000**	**31.2120**	**31.2120**	**0.0101**	**0.0000**	**31.4644**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0000e-005	2.3000e-004	1.7000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0372	0.0372	0.0000	1.0000e-005	0.0389
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.0000e-005**	**2.3000e-004**	**1.7000e-004**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0372**	**0.0372**	**0.0000**	**1.0000e-005**	**0.0389**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0113	0.1105	0.1648	2.5000e-004		5.4900e-003	5.4900e-003		5.0500e-003	5.0500e-003	0.0000	22.3321	22.3321	7.2200e-003	0.0000	22.5127
Paving	3.0400e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0144**	**0.1105**	**0.1648**	**2.5000e-004**		**5.4900e-003**	**5.4900e-003**		**5.0500e-003**	**5.0500e-003**	**0.0000**	**22.3321**	**22.3321**	**7.2200e-003**	**0.0000**	**22.5127**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.0000e-005	5.1000e-004	3.8000e-004	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0826	0.0826	0.0000	1.0000e-005	0.0865
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**2.0000e-005**	**5.1000e-004**	**3.8000e-004**	**0.0000**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0826**	**0.0826**	**0.0000**	**1.0000e-005**	**0.0865**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Paving - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.9300e-003	0.1119	0.1928	2.5000e-004		4.2000e-004	4.2000e-004		4.2000e-004	4.2000e-004	0.0000	22.3321	22.3321	7.2200e-003	0.0000	22.5126
Paving	3.0400e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**6.9700e-003**	**0.1119**	**0.1928**	**2.5000e-004**		**4.2000e-004**	**4.2000e-004**		**4.2000e-004**	**4.2000e-004**	**0.0000**	**22.3321**	**22.3321**	**7.2200e-003**	**0.0000**	**22.5126**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.0000e-005	5.1000e-004	3.8000e-004	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0826	0.0826	0.0000	1.0000e-005	0.0865
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**2.0000e-005**	**5.1000e-004**	**3.8000e-004**	**0.0000**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0826**	**0.0826**	**0.0000**	**1.0000e-005**	**0.0865**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1701	1.3784	1.7627	2.9800e-003		0.0632	0.0632		0.0611	0.0611	0.0000	254.4598	254.4598	0.0376	0.0000	255.4004
Total	**0.1701**	**1.3784**	**1.7627**	**2.9800e-003**		**0.0632**	**0.0632**		**0.0611**	**0.0611**	**0.0000**	**254.4598**	**254.4598**	**0.0376**	**0.0000**	**255.4004**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.9300e-003	0.0805	0.0591	1.3000e-004	1.5900e-003	1.0000e-004	1.6900e-003	4.8000e-004	1.0000e-004	5.7000e-004	0.0000	12.9878	12.9878	4.4000e-004	2.0100e-003	13.5974
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**3.9300e-003**	**0.0805**	**0.0591**	**1.3000e-004**	**1.5900e-003**	**1.0000e-004**	**1.6900e-003**	**4.8000e-004**	**1.0000e-004**	**5.7000e-004**	**0.0000**	**12.9878**	**12.9878**	**4.4000e-004**	**2.0100e-003**	**13.5974**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0516	0.9945	1.7193	2.6800e-003		6.4500e-003	6.4500e-003		6.4500e-003	6.4500e-003	0.0000	232.5318	232.5318	0.0354	0.0000	233.4165
Total	**0.0516**	**0.9945**	**1.7193**	**2.6800e-003**		**6.4500e-003**	**6.4500e-003**		**6.4500e-003**	**6.4500e-003**	**0.0000**	**232.5318**	**232.5318**	**0.0354**	**0.0000**	**233.4165**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.9300e-003	0.0805	0.0591	1.3000e-004	1.5900e-003	1.0000e-004	1.6900e-003	4.8000e-004	1.0000e-004	5.7000e-004	0.0000	12.9878	12.9878	4.4000e-004	2.0100e-003	13.5974
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**3.9300e-003**	**0.0805**	**0.0591**	**1.3000e-004**	**1.5900e-003**	**1.0000e-004**	**1.6900e-003**	**4.8000e-004**	**1.0000e-004**	**5.7000e-004**	**0.0000**	**12.9878**	**12.9878**	**4.4000e-004**	**2.0100e-003**	**13.5974**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0198	0.1606	0.2186	3.7000e-004		6.7800e-003	6.7800e-003		6.5600e-003	6.5600e-003	0.0000	31.6724	31.6724	4.6200e-003	0.0000	31.7878
Total	**0.0198**	**0.1606**	**0.2186**	**3.7000e-004**		**6.7800e-003**	**6.7800e-003**		**6.5600e-003**	**6.5600e-003**	**0.0000**	**31.6724**	**31.6724**	**4.6200e-003**	**0.0000**	**31.7878**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.8000e-004	9.9500e-003	7.2700e-003	2.0000e-005	2.0000e-004	1.0000e-005	2.1000e-004	6.0000e-005	1.0000e-005	7.0000e-005	0.0000	1.5854	1.5854	6.0000e-005	2.5000e-004	1.6598
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**4.8000e-004**	**9.9500e-003**	**7.2700e-003**	**2.0000e-005**	**2.0000e-004**	**1.0000e-005**	**2.1000e-004**	**6.0000e-005**	**1.0000e-005**	**7.0000e-005**	**0.0000**	**1.5854**	**1.5854**	**6.0000e-005**	**2.5000e-004**	**1.6598**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.4200e-003	0.1238	0.2140	3.3000e-004		8.0000e-004	8.0000e-004		8.0000e-004	8.0000e-004	0.0000	28.9431	28.9431	4.3600e-003	0.0000	29.0521
Total	**6.4200e-003**	**0.1238**	**0.2140**	**3.3000e-004**		**8.0000e-004**	**8.0000e-004**		**8.0000e-004**	**8.0000e-004**	**0.0000**	**28.9431**	**28.9431**	**4.3600e-003**	**0.0000**	**29.0521**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.8000e-004	9.9500e-003	7.2700e-003	2.0000e-005	2.0000e-004	1.0000e-005	2.1000e-004	6.0000e-005	1.0000e-005	7.0000e-005	0.0000	1.5854	1.5854	6.0000e-005	2.5000e-004	1.6598
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**4.8000e-004**	**9.9500e-003**	**7.2700e-003**	**2.0000e-005**	**2.0000e-004**	**1.0000e-005**	**2.1000e-004**	**6.0000e-005**	**1.0000e-005**	**7.0000e-005**	**0.0000**	**1.5854**	**1.5854**	**6.0000e-005**	**2.5000e-004**	**1.6598**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Architectural Coating - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.4834					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.7100e-003	0.0115	0.0181	3.0000e-005		5.2000e-004	5.2000e-004		5.2000e-004	5.2000e-004	0.0000	2.5533	2.5533	1.4000e-004	0.0000	2.5567
Total	**0.4851**	**0.0115**	**0.0181**	**3.0000e-005**		**5.2000e-004**	**5.2000e-004**		**5.2000e-004**	**5.2000e-004**	**0.0000**	**2.5533**	**2.5533**	**1.4000e-004**	**0.0000**	**2.5567**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.0000e-005	5.1000e-004	3.7000e-004	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0810	0.0810	0.0000	1.0000e-005	0.0848
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**2.0000e-005**	**5.1000e-004**	**3.7000e-004**	**0.0000**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0810**	**0.0810**	**0.0000**	**1.0000e-005**	**0.0848**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Architectural Coating - 2025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.4834					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.4000e-004	0.0106	0.0183	3.0000e-005		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	2.5533	2.5533	1.4000e-004	0.0000	2.5567
Total	**0.4839**	**0.0106**	**0.0183**	**3.0000e-005**		**4.0000e-005**	**4.0000e-005**		**4.0000e-005**	**4.0000e-005**	**0.0000**	**2.5533**	**2.5533**	**1.4000e-004**	**0.0000**	**2.5567**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.0000e-005	5.1000e-004	3.7000e-004	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0810	0.0810	0.0000	1.0000e-005	0.0848
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**2.0000e-005**	**5.1000e-004**	**3.7000e-004**	**0.0000**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0810**	**0.0810**	**0.0000**	**1.0000e-005**	**0.0848**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Density

Increase Diversity

Increase Transit Accessibility

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.3469	0.3168	2.6867	4.9300e-003	0.5323	4.0500e-003	0.5363	0.1421	3.7700e-003	0.1458	0.0000	455.8539	455.8539	0.0404	0.0244	464.1404
Unmitigated	0.4249	0.4494	3.7944	7.8200e-003	0.8601	6.1400e-003	0.8662	0.2295	5.7300e-003	0.2353	0.0000	723.4273	723.4273	0.0543	0.0341	734.9389

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Condo/Townhouse High Rise	960.00	960.00	960.00	2,299,315	1,422,938
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	960.00	960.00	960.00	2,299,315	1,422,938

4.3 Trip Type Information

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Condo/Townhouse High Rise	6.58	0.00	0.00	100.00	0.00	0.00	100	0	0
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.561854	0.062428	0.177046	0.117565	0.023832	0.006317	0.008949	0.006298	0.000705	0.000577	0.028723	0.000955	0.004751
Condo/Townhouse High Rise	0.561854	0.062428	0.177046	0.117565	0.023832	0.006317	0.008949	0.006298	0.000705	0.000577	0.028723	0.000955	0.004751
Other Asphalt Surfaces	0.561854	0.062428	0.177046	0.117565	0.023832	0.006317	0.008949	0.006298	0.000705	0.000577	0.028723	0.000955	0.004751
Parking Lot	0.561854	0.062428	0.177046	0.117565	0.023832	0.006317	0.008949	0.006298	0.000705	0.000577	0.028723	0.000955	0.004751

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install Energy Efficient Appliances

Gran Vista Specific Plan HRA - San Diego County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	118.0657	118.0657	7.2200e-003	8.7000e-004	118.5067
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	121.1859	121.1859	7.4100e-003	9.0000e-004	121.6386
NaturalGas Mitigated	4.7100e-003	0.0402	0.0171	2.6000e-004		3.2500e-003	3.2500e-003		3.2500e-003	3.2500e-003	0.0000	46.5933	46.5933	8.9000e-004	8.5000e-004	46.8702
NaturalGas Unmitigated	4.7100e-003	0.0402	0.0171	2.6000e-004		3.2500e-003	3.2500e-003		3.2500e-003	3.2500e-003	0.0000	46.5933	46.5933	8.9000e-004	8.5000e-004	46.8702

Gran Vista Specific Plan HRA - San Diego County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse High Rise	873126	4.7100e-003	0.0402	0.0171	2.6000e-004		3.2500e-003	3.2500e-003		3.2500e-003	3.2500e-003	0.0000	46.5933	46.5933	8.9000e-004	8.5000e-004	46.8702
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**4.7100e-003**	**0.0402**	**0.0171**	**2.6000e-004**		**3.2500e-003**	**3.2500e-003**		**3.2500e-003**	**3.2500e-003**	**0.0000**	**46.5933**	**46.5933**	**8.9000e-004**	**8.5000e-004**	**46.8702**

Gran Vista Specific Plan HRA - San Diego County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse High Rise	873126	4.7100e-003	0.0402	0.0171	2.6000e-004		3.2500e-003	3.2500e-003		3.2500e-003	3.2500e-003	0.0000	46.5933	46.5933	8.9000e-004	8.5000e-004	46.8702
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**4.7100e-003**	**0.0402**	**0.0171**	**2.6000e-004**		**3.2500e-003**	**3.2500e-003**		**3.2500e-003**	**3.2500e-003**	**0.0000**	**46.5933**	**46.5933**	**8.9000e-004**	**8.5000e-004**	**46.8702**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse High Rise	491976	120.5001	7.3600e-003	8.9000e-004	120.9502
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	2800	0.6858	4.0000e-005	1.0000e-005	0.6884
Total		**121.1859**	**7.4000e-003**	**9.0000e-004**	**121.6386**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse High Rise	479237	117.3799	7.1700e-003	8.7000e-004	117.8184
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	2800	0.6858	4.0000e-005	1.0000e-005	0.6884
Total		**118.0657**	**7.2100e-003**	**8.8000e-004**	**118.5067**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

No Hearths Installed

Gran Vista Specific Plan HRA - San Diego County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.5517	0.0103	0.8904	5.0000e-005		4.9400e-003	4.9400e-003		4.9400e-003	4.9400e-003	0.0000	1.4559	1.4559	1.3900e-003	0.0000	1.4908
Unmitigated	0.5517	0.0103	0.8904	5.0000e-005		4.9400e-003	4.9400e-003		4.9400e-003	4.9400e-003	0.0000	1.4559	1.4559	1.3900e-003	0.0000	1.4908

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0483					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4766					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0268	0.0103	0.8904	5.0000e-005		4.9400e-003	4.9400e-003		4.9400e-003	4.9400e-003	0.0000	1.4559	1.4559	1.3900e-003	0.0000	1.4908
Total	**0.5517**	**0.0103**	**0.8904**	**5.0000e-005**		**4.9400e-003**	**4.9400e-003**		**4.9400e-003**	**4.9400e-003**	**0.0000**	**1.4559**	**1.4559**	**1.3900e-003**	**0.0000**	**1.4908**

Gran Vista Specific Plan HRA - San Diego County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0483					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4766					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0268	0.0103	0.8904	5.0000e-005		4.9400e-003	4.9400e-003		4.9400e-003	4.9400e-003	0.0000	1.4559	1.4559	1.3900e-003	0.0000	1.4908
Total	**0.5517**	**0.0103**	**0.8904**	**5.0000e-005**		**4.9400e-003**	**4.9400e-003**		**4.9400e-003**	**4.9400e-003**	**0.0000**	**1.4559**	**1.4559**	**1.3900e-003**	**0.0000**	**1.4908**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	44.8782	0.2064	5.1300e-003	51.5678
Unmitigated	51.8519	0.2578	6.3800e-003	60.1981

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 4.05104	11.0236	6.7000e-004	8.0000e-005	11.0648
Condo/Townhouse High Rise	7.81848 / 4.92904	40.8283	0.2571	6.3000e-003	49.1333
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**51.8519**	**0.2578**	**6.3800e-003**	**60.1981**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 3.80392	10.3512	6.3000e-004	8.0000e-005	10.3898
Condo/Townhouse High Rise	6.25479 / 4.62837	34.5270	0.2058	5.0500e-003	41.1780
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**44.8782**	**0.2064**	**5.1300e-003**	**51.5678**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Gran Vista Specific Plan HRA - San Diego County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	11.2640	0.6657	0.0000	27.9060
Unmitigated	11.2640	0.6657	0.0000	27.9060

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.29	0.0589	3.4800e-003	0.0000	0.1458
Condo/Townhouse High Rise	55.2	11.2051	0.6622	0.0000	27.7602
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**11.2640**	**0.6657**	**0.0000**	**27.9060**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.29	0.0589	3.4800e-003	0.0000	0.1458
Condo/Townhouse High Rise	55.2	11.2051	0.6622	0.0000	27.7602
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**11.2640**	**0.6657**	**0.0000**	**27.9060**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Equipment Type	Number

11.0 Vegetation

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** AERMOD View Ver. 10.2.1
** Lakes Environmental Software Inc.
** Date: 4/27/2022
** File: F:\Lakes\Gran Vista\Gran Vista\Gran Vista.ADI
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** AERMOD Control Pathway
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CO FINISHED
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   SRCPARAM L0000015     0.0053191489      3.40      4.00      3.16
   SRCPARAM L0000016     0.0053191489      3.40      4.00      3.16
   SRCPARAM L0000017     0.0053191489      3.40      4.00      3.16
   SRCPARAM L0000018     0.0053191489      3.40      4.00      3.16
   SRCPARAM L0000019     0.0053191489      3.40      4.00      3.16
   SRCPARAM L0000020     0.0053191489      3.40      4.00      3.16
   SRCPARAM L0000021     0.0053191489      3.40      4.00      3.16
   SRCPARAM L0000022     0.0053191489      3.40      4.00      3.16
   SRCPARAM L0000023     0.0053191489      3.40      4.00      3.16
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   SRCPARAM L0000028     0.0053191489      3.40      4.00      3.16
   SRCPARAM L0000029     0.0053191489      3.40      4.00      3.16
   SRCPARAM L0000030     0.0053191489      3.40      4.00      3.16
   SRCPARAM L0000031     0.0053191489      3.40      4.00      3.16
   SRCPARAM L0000032     0.0053191489      3.40      4.00      3.16
   SRCPARAM L0000033     0.0053191489      3.40      4.00      3.16
   SRCPARAM L0000034     0.0053191489      3.40      4.00      3.16
   SRCPARAM L0000035     0.0053191489      3.40      4.00      3.16
   SRCPARAM L0000036     0.0053191489      3.40      4.00      3.16
   SRCPARAM L0000037     0.0053191489      3.40      4.00      3.16
   SRCPARAM L0000038     0.0053191489      3.40      4.00      3.16
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SRCPARAM L0000040     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000041     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000042     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000043     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000044     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000045     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000046     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000047     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000048     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000049     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000050     0.0053191489      3.40      4.00      3.16
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SRCPARAM L0000054     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000055     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000056     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000057     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000058     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000059     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000060     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000061     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000062     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000063     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000064     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000065     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000066     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000067     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000068     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000069     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000070     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000071     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000072     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000073     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000074     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000075     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000076     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000077     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000078     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000079     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000080     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000081     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000082     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000083     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000084     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000085     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000086     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000087     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000088     0.0053191489      3.40      4.00      3.16
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SRCPARAM L0000089     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000090     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000091     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000092     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000093     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000094     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000095     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000096     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000097     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000098     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000099     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000100     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000101     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000102     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000103     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000104     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000105     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000106     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000107     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000108     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000109     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000110     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000111     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000112     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000113     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000114     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000115     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000116     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000117     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000118     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000119     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000120     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000121     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000122     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000123     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000124     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000125     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000126     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000127     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000128     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000129     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000130     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000131     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000132     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000133     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000134     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000135     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000136     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000137     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000138     0.0053191489      3.40      4.00      3.16
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SRCPARAM L0000139     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000140     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000141     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000142     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000143     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000144     0.0053191489      3.40      4.00      3.16
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SRCPARAM L0000146     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000147     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000148     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000149     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000150     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000151     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000152     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000153     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000154     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000155     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000156     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000157     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000158     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000159     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000160     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000161     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000162     0.0053191489      3.40      4.00      3.16
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SRCPARAM L0000165     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000166     0.0053191489      3.40      4.00      3.16
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SRCPARAM L0000168     0.0053191489      3.40      4.00      3.16
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SRCPARAM L0000170     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000171     0.0053191489      3.40      4.00      3.16
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SRCPARAM L0000185     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000186     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000187     0.0053191489      3.40      4.00      3.16
SRCPARAM L0000188     0.0053191489      3.40      4.00      3.16
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** Variable Emissions Type: "By Hour / Day (HRDOW)"
** Variable Emission Scenario: "Scenario 1"
** WeekDays:
   EMISFACT L0000001     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT L0000001     HRDOW 0.0 7.2 7.2 7.2 7.2 7.2
   EMISFACT L0000001     HRDOW 7.2 7.2 7.2 7.2 7.2 0.0
   EMISFACT L0000001     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT L0000002     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT L0000002     HRDOW 0.0 7.2 7.2 7.2 7.2 7.2
   EMISFACT L0000002     HRDOW 7.2 7.2 7.2 7.2 7.2 0.0
   EMISFACT L0000002     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT L0000003     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT L0000003     HRDOW 0.0 7.2 7.2 7.2 7.2 7.2
   EMISFACT L0000003     HRDOW 7.2 7.2 7.2 7.2 7.2 0.0
   EMISFACT L0000003     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT L0000004     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT L0000004     HRDOW 0.0 7.2 7.2 7.2 7.2 7.2
   EMISFACT L0000004     HRDOW 7.2 7.2 7.2 7.2 7.2 0.0
   EMISFACT L0000004     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT L0000005     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT L0000005     HRDOW 0.0 7.2 7.2 7.2 7.2 7.2
   EMISFACT L0000005     HRDOW 7.2 7.2 7.2 7.2 7.2 0.0
   EMISFACT L0000005     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT L0000006     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT L0000006     HRDOW 0.0 7.2 7.2 7.2 7.2 7.2
   EMISFACT L0000006     HRDOW 7.2 7.2 7.2 7.2 7.2 0.0
   EMISFACT L0000006     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT L0000007     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT L0000007     HRDOW 0.0 7.2 7.2 7.2 7.2 7.2
   EMISFACT L0000007     HRDOW 7.2 7.2 7.2 7.2 7.2 0.0
   EMISFACT L0000007     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT L0000008     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT L0000008     HRDOW 0.0 7.2 7.2 7.2 7.2 7.2
   EMISFACT L0000008     HRDOW 7.2 7.2 7.2 7.2 7.2 0.0
   EMISFACT L0000008     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT L0000009     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT L0000009     HRDOW 0.0 7.2 7.2 7.2 7.2 7.2
   EMISFACT L0000009     HRDOW 7.2 7.2 7.2 7.2 7.2 0.0
   EMISFACT L0000009     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT L0000010     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT L0000010     HRDOW 0.0 7.2 7.2 7.2 7.2 7.2
   EMISFACT L0000010     HRDOW 7.2 7.2 7.2 7.2 7.2 0.0
   EMISFACT L0000010     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT L0000011     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT L0000011     HRDOW 0.0 7.2 7.2 7.2 7.2 7.2
   EMISFACT L0000011     HRDOW 7.2 7.2 7.2 7.2 7.2 0.0
   EMISFACT L0000011     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT L0000012     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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EMISFACT L0000012     HRDOW 0.0 7.2 7.2 7.2 7.2 7.2
EMISFACT L0000012     HRDOW 7.2 7.2 7.2 7.2 7.2 0.0
EMISFACT L0000012     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000013     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000013     HRDOW 0.0 7.2 7.2 7.2 7.2 7.2
EMISFACT L0000013     HRDOW 7.2 7.2 7.2 7.2 7.2 0.0
EMISFACT L0000013     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000014     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000014     HRDOW 0.0 7.2 7.2 7.2 7.2 7.2
EMISFACT L0000014     HRDOW 7.2 7.2 7.2 7.2 7.2 0.0
EMISFACT L0000014     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000015     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000015     HRDOW 0.0 7.2 7.2 7.2 7.2 7.2
EMISFACT L0000015     HRDOW 7.2 7.2 7.2 7.2 7.2 0.0
EMISFACT L0000015     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000016     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000016     HRDOW 0.0 7.2 7.2 7.2 7.2 7.2
EMISFACT L0000016     HRDOW 7.2 7.2 7.2 7.2 7.2 0.0
EMISFACT L0000016     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000017     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000017     HRDOW 0.0 7.2 7.2 7.2 7.2 7.2
EMISFACT L0000017     HRDOW 7.2 7.2 7.2 7.2 7.2 0.0
EMISFACT L0000017     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000018     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000018     HRDOW 0.0 7.2 7.2 7.2 7.2 7.2
EMISFACT L0000018     HRDOW 7.2 7.2 7.2 7.2 7.2 0.0
EMISFACT L0000018     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000019     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000019     HRDOW 0.0 7.2 7.2 7.2 7.2 7.2
EMISFACT L0000019     HRDOW 7.2 7.2 7.2 7.2 7.2 0.0
EMISFACT L0000019     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000020     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000020     HRDOW 0.0 7.2 7.2 7.2 7.2 7.2
EMISFACT L0000020     HRDOW 7.2 7.2 7.2 7.2 7.2 0.0
EMISFACT L0000020     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000021     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000021     HRDOW 0.0 7.2 7.2 7.2 7.2 7.2
EMISFACT L0000021     HRDOW 7.2 7.2 7.2 7.2 7.2 0.0
EMISFACT L0000021     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000022     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000022     HRDOW 0.0 7.2 7.2 7.2 7.2 7.2
EMISFACT L0000022     HRDOW 7.2 7.2 7.2 7.2 7.2 0.0
EMISFACT L0000022     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000023     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000023     HRDOW 0.0 7.2 7.2 7.2 7.2 7.2
EMISFACT L0000023     HRDOW 7.2 7.2 7.2 7.2 7.2 0.0
EMISFACT L0000023     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000024     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000024     HRDOW 0.0 7.2 7.2 7.2 7.2 7.2
EMISFACT L0000024     HRDOW 7.2 7.2 7.2 7.2 7.2 0.0
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EMISFACT L0000024     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000025     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000025     HRDOW 0.0 7.2 7.2 7.2 7.2 7.2
EMISFACT L0000025     HRDOW 7.2 7.2 7.2 7.2 7.2 0.0
EMISFACT L0000025     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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EMISFACT L0000026     HRDOW 7.2 7.2 7.2 7.2 7.2 0.0
EMISFACT L0000026     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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EMISFACT L0000027     HRDOW 7.2 7.2 7.2 7.2 7.2 0.0
EMISFACT L0000027     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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EMISFACT L0000028     HRDOW 7.2 7.2 7.2 7.2 7.2 0.0
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EMISFACT L0000029     HRDOW 7.2 7.2 7.2 7.2 7.2 0.0
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EMISFACT L0000030     HRDOW 7.2 7.2 7.2 7.2 7.2 0.0
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EMISFACT L0000068     HRDOW 7.2 7.2 7.2 7.2 7.2 0.0
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EMISFACT L0000187     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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EMISFACT L0000171     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000171     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000171     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000171     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000172     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000172     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000172     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000172     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000173     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
```

```
EMISFACT L0000173     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000173     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000173     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000174     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000174     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000174     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000174     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000175     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000175     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000175     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000175     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000176     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000176     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000176     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000176     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000177     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000177     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000177     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000177     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000178     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000178     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000178     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000178     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000179     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000179     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000179     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000179     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000180     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000180     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000180     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000180     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000181     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000181     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000181     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000181     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000182     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000182     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000182     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000182     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000183     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000183     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000183     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000183     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000184     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000184     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000184     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000184     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000185     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000185     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000185     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
```

```
   EMISFACT L0000185     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT L0000186     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT L0000186     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT L0000186     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT L0000186     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT L0000187     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT L0000187     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT L0000187     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT L0000187     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT L0000188     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT L0000188     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT L0000188     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT L0000188     HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   SRCGROUP ALL
SO FINISHED
**
**************************************
** AERMOD Receptor Pathway
**************************************
**
**
RE STARTING
   INCLUDED "Gran Vista.rou"
RE FINISHED
**
**************************************
** AERMOD Meteorology Pathway
**************************************
**
**
ME STARTING
   SURFFILE ..\ESC_2010_2012_sigma_v19191.SFC
   PROFFILE ..\ESC_2010_2012_sigma_v19191.PFL
   SURFDATA 53120 2010
   UAIRDATA 3190 2010
   SITEDATA 1002 2010
   PROFBASE 200.0 FEET
ME FINISHED
**
**************************************
** AERMOD Output Pathway
**************************************
**
**
OU STARTING
   RECTABLE ALLAVE 1ST
   RECTABLE 1 1ST
** Auto-Generated Plotfiles
   PLOTFILE 1 ALL 1ST "Gran Vista.AD\01H1GALL.PLT" 31
   PLOTFILE PERIOD ALL "Gran Vista.AD\PE00GALL.PLT" 32
```

```
   SUMMFILE "Gran Vista.sum"
OU FINISHED


  *** Message Summary For AERMOD Model Setup ***

  --------- Summary of Total Messages --------

 A Total of            0 Fatal Error Message(s)
 A Total of            2 Warning Message(s)
 A Total of            0 Informational Message(s)


    ******** FATAL ERROR MESSAGES ********
               ***  NONE  ***


    ********   WARNING MESSAGES   ********
 ME W186    2737       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used
     0.50
 MX W403    2737       PFLCNV: Turbulence data is being used w/o ADJ_U* option
SigA Data

 ***********************************
 *** SETUP Finishes Successfully ***
 ***********************************

 *** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
Vista\Gran Vista\Gran Vista.i ***        04/27/22
 *** AERMET - VERSION  19191 ***   ***
                       ***        08:26:34

                                  PAGE   1
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL  SigA Data

                                          ***     MODEL SETUP OPTIONS SUMMARY
 ***
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - -

 **Model Is Setup For Calculation of Average CONCentration Values.

   --  DEPOSITION LOGIC  --
 **NO GAS DEPOSITION Data Provided.
 **NO PARTICLE DEPOSITION Data Provided.
 **Model Uses NO DRY DEPLETION.  DRYDPLT  =  F
 **Model Uses NO WET DEPLETION.  WETDPLT  =  F

 **Model Uses RURAL Dispersion Only.
```

```
 **Model Uses Regulatory DEFAULT Options:
        1. Stack-tip Downwash.
        2. Model Accounts for ELEVated Terrain Effects.
        3. Use Calms Processing Routine.
        4. Use Missing Data Processing Routine.
        5. No Exponential Decay.

 **Other Options Specified:
        CCVR_Sub - Meteorological data includes CCVR substitutions
        TEMP_Sub - Meteorological data includes TEMP substitutions

 **Model Assumes No FLAGPOLE Receptor Heights.

 **The User Specified a Pollutant Type of:  PM_10

 **Model Calculates  1 Short Term Average(s) of:   1-HR
     and Calculates PERIOD Averages

 **This Run Includes:    188 Source(s);       1 Source Group(s); and    2996
Receptor(s)

                with:      0 POINT(s), including
                           0 POINTCAP(s) and      0 POINTHOR(s)
                 and:    188 VOLUME source(s)
                 and:      0 AREA type source(s)
                 and:      0 LINE source(s)
                 and:      0 RLINE/RLINEXT source(s)
                 and:      0 OPENPIT source(s)
                 and:      0 BUOYANT LINE source(s) with      0 line(s)


 **Model Set To Continue RUNning After the Setup Testing.

 **The AERMET Input Meteorological Data Version Date:  19191

 **Output Options Selected:
          Model Outputs Tables of PERIOD Averages by Receptor
          Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE
Keyword)
          Model Outputs External File(s) of High Values for Plotting (PLOTFILE
Keyword)
          Model Outputs Separate Summary File of High Ranked Values (SUMMFILE
Keyword)

 **NOTE:  The Following Flags May Appear Following CONC Values:  c for Calm Hours
                                                                 m for Missing Hours
                                                                 b for Both Calm and
Missing Hours

 **Misc. Inputs:  Base Elev. for Pot. Temp. Profile (m MSL) =    60.96 ;  Decay
```

Coef. =   0.000   ; Rot. Angle =   0.0
                  Emission Units = GRAMS/SEC   ;
Emission Rate Unit Factor =   0.10000E+07
                  Output Units   = MICROGRAMS/M**3

 **Approximate Storage Requirements of Model =   4.0 MB of RAM.

 **Input Runstream File: aermod.inp

 **Output Print File: aermod.out

 **Detailed Error/Message File: Gran Vista.err

 **File for Summary of Results: Gran Vista.sum

 *** MODELOPTs: RegDFAULT CONC ELEV RURAL SigA Data

                                                    *** VOLUME SOURCE DATA ***

               NUMBER EMISSION RATE   BASE   RELEASE   INIT.
INIT.   URBAN EMISSION RATE
   SOURCE   PART. (GRAMS/SEC)   X   Y   ELEV.   HEIGHT   SY
SZ   SOURCE SCALAR VARY
     ID   CATS.   (METERS) (METERS) (METERS) (METERS) (METERS)
(METERS)   BY
 - - -

```
 L0000008         0   0.53191E-02  482287.8 3668062.6   176.2     3.40     4.00
3.16     NO    HRDOW
 L0000009         0   0.53191E-02  482284.3 3668054.8   176.4     3.40     4.00
3.16     NO    HRDOW
 L0000010         0   0.53191E-02  482280.8 3668046.9   175.9     3.40     4.00
3.16     NO    HRDOW
 L0000011         0   0.53191E-02  482277.3 3668039.1   175.9     3.40     4.00
3.16     NO    HRDOW
 L0000012         0   0.53191E-02  482273.8 3668031.2   175.1     3.40     4.00
3.16     NO    HRDOW
 L0000013         0   0.53191E-02  482270.3 3668023.4   175.1     3.40     4.00
3.16     NO    HRDOW
 L0000014         0   0.53191E-02  482266.8 3668015.5   174.9     3.40     4.00
3.16     NO    HRDOW
 L0000015         0   0.53191E-02  482263.3 3668007.7   174.4     3.40     4.00
3.16     NO    HRDOW
 L0000016         0   0.53191E-02  482259.8 3667999.8   174.8     3.40     4.00
3.16     NO    HRDOW
 L0000017         0   0.53191E-02  482256.3 3667991.9   174.2     3.40     4.00
3.16     NO    HRDOW
 L0000018         0   0.53191E-02  482252.8 3667984.1   174.3     3.40     4.00
3.16     NO    HRDOW
 L0000019         0   0.53191E-02  482249.3 3667976.2   174.3     3.40     4.00
3.16     NO    HRDOW
 L0000020         0   0.53191E-02  482245.8 3667968.4   173.7     3.40     4.00
3.16     NO    HRDOW
 L0000021         0   0.53191E-02  482242.3 3667960.5   174.4     3.40     4.00
3.16     NO    HRDOW
 L0000022         0   0.53191E-02  482238.8 3667952.7   174.1     3.40     4.00
3.16     NO    HRDOW
 L0000023         0   0.53191E-02  482235.3 3667944.8   174.0     3.40     4.00
3.16     NO    HRDOW
 L0000024         0   0.53191E-02  482231.8 3667936.9   174.4     3.40     4.00
3.16     NO    HRDOW
 L0000025         0   0.53191E-02  482228.3 3667929.1   174.0     3.40     4.00
3.16     NO    HRDOW
 L0000026         0   0.53191E-02  482224.8 3667921.2   174.0     3.40     4.00
3.16     NO    HRDOW
 L0000027         0   0.53191E-02  482227.0 3667914.7   174.4     3.40     4.00
3.16     NO    HRDOW
 L0000028         0   0.53191E-02  482233.7 3667909.3   174.2     3.40     4.00
3.16     NO    HRDOW
 L0000029         0   0.53191E-02  482240.4 3667903.9   173.9     3.40     4.00
3.16     NO    HRDOW
 L0000030         0   0.53191E-02  482247.1 3667898.5   174.1     3.40     4.00
3.16     NO    HRDOW
 L0000031         0   0.53191E-02  482253.8 3667893.1   174.0     3.40     4.00
3.16     NO    HRDOW
 L0000032         0   0.53191E-02  482262.2 3667893.1   174.1     3.40     4.00
3.16     NO    HRDOW
```

 L0000033   0   0.53191E-02 482270.8 3667893.7   174.6   3.40   4.00
3.16   NO   HRDOW
 L0000034   0   0.53191E-02 482279.4 3667894.2   175.0   3.40   4.00
3.16   NO   HRDOW
 L0000035   0   0.53191E-02 482287.9 3667894.7   175.1   3.40   4.00
3.16   NO   HRDOW
 L0000036   0   0.53191E-02 482296.5 3667895.3   175.0   3.40   4.00
3.16   NO   HRDOW
 L0000037   0   0.53191E-02 482305.1 3667895.8   175.0   3.40   4.00
3.16   NO   HRDOW
 L0000038   0   0.53191E-02 482313.7 3667896.3   175.0   3.40   4.00
3.16   NO   HRDOW
 L0000039   0   0.53191E-02 482322.3 3667896.9   175.0   3.40   4.00
3.16   NO   HRDOW
 L0000040   0   0.53191E-02 482330.9 3667897.4   175.1   3.40   4.00
3.16   NO   HRDOW

                                                    *** VOLUME SOURCE DATA ***

               NUMBER EMISSION RATE   BASE   RELEASE   INIT.
INIT.   URBAN EMISSION RATE
   SOURCE   PART. (GRAMS/SEC)   X   Y   ELEV.   HEIGHT   SY
SZ   SOURCE SCALAR VARY
     ID   CATS.   (METERS) (METERS) (METERS) (METERS) (METERS)
(METERS)   BY
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 L0000041   0   0.53191E-02 482339.4 3667897.9   175.2   3.40   4.00
3.16   NO   HRDOW
 L0000042   0   0.53191E-02 482348.0 3667898.5   175.3   3.40   4.00
3.16   NO   HRDOW
 L0000043   0   0.53191E-02 482355.5 3667899.9   175.4   3.40   4.00
3.16   NO   HRDOW
 L0000044   0   0.53191E-02 482354.9 3667908.5   175.6   3.40   4.00
3.16   NO   HRDOW
 L0000045   0   0.53191E-02 482354.2 3667917.1   175.6   3.40   4.00
3.16   NO   HRDOW
 L0000046   0   0.53191E-02 482353.6 3667925.7   175.9   3.40   4.00
3.16   NO   HRDOW
 L0000047   0   0.53191E-02 482353.0 3667934.2   175.7   3.40   4.00
3.16   NO   HRDOW

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 L0000048         0   0.53191E-02  482352.3 3667942.8   175.7     3.40     4.00
3.16     NO    HRDOW
 L0000049         0   0.53191E-02  482357.4 3667946.5   175.7     3.40     4.00
3.16     NO    HRDOW
 L0000050         0   0.53191E-02  482366.0 3667947.3   175.7     3.40     4.00
3.16     NO    HRDOW
 L0000051         0   0.53191E-02  482373.4 3667948.8   175.8     3.40     4.00
3.16     NO    HRDOW
 L0000052         0   0.53191E-02  482370.4 3667956.9   175.8     3.40     4.00
3.16     NO    HRDOW
 L0000053         0   0.53191E-02  482367.5 3667965.0   175.7     3.40     4.00
3.16     NO    HRDOW
 L0000054         0   0.53191E-02  482364.5 3667973.0   175.7     3.40     4.00
3.16     NO    HRDOW
 L0000055         0   0.53191E-02  482361.5 3667981.1   175.7     3.40     4.00
3.16     NO    HRDOW
 L0000056         0   0.53191E-02  482358.6 3667989.2   175.7     3.40     4.00
3.16     NO    HRDOW
 L0000057         0   0.53191E-02  482355.6 3667997.3   175.7     3.40     4.00
3.16     NO    HRDOW
 L0000058         0   0.53191E-02  482352.7 3668005.3   175.7     3.40     4.00
3.16     NO    HRDOW
 L0000059         0   0.53191E-02  482349.7 3668013.4   175.7     3.40     4.00
3.16     NO    HRDOW
 L0000060         0   0.53191E-02  482346.8 3668021.5   175.8     3.40     4.00
3.16     NO    HRDOW
 L0000061         0   0.53191E-02  482343.8 3668029.6   175.7     3.40     4.00
3.16     NO    HRDOW
 L0000062         0   0.53191E-02  482340.8 3668037.7   177.2     3.40     4.00
3.16     NO    HRDOW
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3.16     NO    HRDOW
 L0000064         0   0.53191E-02  482334.9 3668053.8   178.3     3.40     4.00
3.16     NO    HRDOW
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3.16     NO    HRDOW
 L0000066         0   0.53191E-02  482329.0 3668070.0   178.2     3.40     4.00
3.16     NO    HRDOW
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3.16     NO    HRDOW
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3.16     NO    HRDOW
 L0000069         0   0.53191E-02  482320.1 3668094.2   178.1     3.40     4.00
3.16     NO    HRDOW
 L0000070         0   0.53191E-02  482317.0 3668096.2   178.0     3.40     4.00
3.16     NO    HRDOW
 L0000071         0   0.53191E-02  482313.6 3668088.3   178.0     3.40     4.00
3.16     NO    HRDOW
 L0000072         0   0.53191E-02  482310.2 3668080.4   178.0     3.40     4.00
3.16     NO    HRDOW
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 L0000073   0   0.53191E-02 482306.8 3668072.5   177.9   3.40   4.00
3.16   NO   HRDOW
 L0000074   0   0.53191E-02 482303.3 3668064.6   177.8   3.40   4.00
3.16   NO   HRDOW
 L0000075   0   0.53191E-02 482299.9 3668056.7   177.6   3.40   4.00
3.16   NO   HRDOW
 L0000076   0   0.53191E-02 482296.5 3668048.8   177.5   3.40   4.00
3.16   NO   HRDOW
 L0000077   0   0.53191E-02 482293.1 3668041.0   177.2   3.40   4.00
3.16   NO   HRDOW
 L0000078   0   0.53191E-02 482289.7 3668033.1   176.2   3.40   4.00
3.16   NO   HRDOW
 L0000079   0   0.53191E-02 482286.3 3668025.2   175.7   3.40   4.00
3.16   NO   HRDOW
 L0000080   0   0.53191E-02 482282.9 3668017.3   175.5   3.40   4.00
3.16   NO   HRDOW

                                                    *** VOLUME SOURCE DATA ***

               NUMBER EMISSION RATE   BASE   RELEASE   INIT.
INIT.   URBAN EMISSION RATE
   SOURCE   PART. (GRAMS/SEC)   X   Y   ELEV.   HEIGHT   SY
SZ   SOURCE SCALAR VARY
     ID   CATS.   (METERS) (METERS) (METERS) (METERS) (METERS)
(METERS)   BY
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- -

 L0000081   0   0.53191E-02 482279.4 3668009.4   175.6   3.40   4.00
3.16   NO   HRDOW
 L0000082   0   0.53191E-02 482276.0 3668001.5   175.7   3.40   4.00
3.16   NO   HRDOW
 L0000083   0   0.53191E-02 482272.6 3667993.6   175.7   3.40   4.00
3.16   NO   HRDOW
 L0000084   0   0.53191E-02 482269.2 3667985.7   175.7   3.40   4.00
3.16   NO   HRDOW
 L0000085   0   0.53191E-02 482265.8 3667977.8   175.7   3.40   4.00
3.16   NO   HRDOW
 L0000086   0   0.53191E-02 482262.4 3667969.9   175.6   3.40   4.00
3.16   NO   HRDOW
 L0000087   0   0.53191E-02 482258.9 3667962.0   175.6   3.40   4.00
3.16   NO   HRDOW

```
 L0000088         0   0.53191E-02  482255.5 3667954.1   175.0     3.40     4.00
3.16     NO    HRDOW
 L0000089         0   0.53191E-02  482252.1 3667946.2   174.4     3.40     4.00
3.16     NO    HRDOW
 L0000090         0   0.53191E-02  482248.7 3667938.3   174.3     3.40     4.00
3.16     NO    HRDOW
 L0000091         0   0.53191E-02  482245.3 3667930.5   174.5     3.40     4.00
3.16     NO    HRDOW
 L0000092         0   0.53191E-02  482243.7 3667923.0   174.4     3.40     4.00
3.16     NO    HRDOW
 L0000093         0   0.53191E-02  482250.2 3667917.3   174.0     3.40     4.00
3.16     NO    HRDOW
 L0000094         0   0.53191E-02  482256.6 3667911.6   174.0     3.40     4.00
3.16     NO    HRDOW
 L0000095         0   0.53191E-02  482264.3 3667909.5   174.7     3.40     4.00
3.16     NO    HRDOW
 L0000096         0   0.53191E-02  482272.9 3667910.2   175.6     3.40     4.00
3.16     NO    HRDOW
 L0000097         0   0.53191E-02  482281.4 3667910.9   175.8     3.40     4.00
3.16     NO    HRDOW
 L0000098         0   0.53191E-02  482290.0 3667911.5   175.5     3.40     4.00
3.16     NO    HRDOW
 L0000099         0   0.53191E-02  482298.6 3667912.2   175.2     3.40     4.00
3.16     NO    HRDOW
 L0000100         0   0.53191E-02  482307.2 3667912.9   175.2     3.40     4.00
3.16     NO    HRDOW
 L0000101         0   0.53191E-02  482315.7 3667913.5   175.2     3.40     4.00
3.16     NO    HRDOW
 L0000102         0   0.53191E-02  482324.3 3667914.2   175.3     3.40     4.00
3.16     NO    HRDOW
 L0000103         0   0.53191E-02  482332.9 3667914.9   175.4     3.40     4.00
3.16     NO    HRDOW
 L0000104         0   0.53191E-02  482339.7 3667917.0   175.4     3.40     4.00
3.16     NO    HRDOW
 L0000105         0   0.53191E-02  482338.9 3667925.5   175.5     3.40     4.00
3.16     NO    HRDOW
 L0000106         0   0.53191E-02  482338.0 3667934.1   175.6     3.40     4.00
3.16     NO    HRDOW
 L0000107         0   0.53191E-02  482337.1 3667942.6   175.8     3.40     4.00
3.16     NO    HRDOW
 L0000108         0   0.53191E-02  482336.2 3667951.2   175.9     3.40     4.00
3.16     NO    HRDOW
 L0000109         0   0.53191E-02  482335.4 3667959.7   175.9     3.40     4.00
3.16     NO    HRDOW
 L0000110         0   0.53191E-02  482342.2 3667961.4   175.9     3.40     4.00
3.16     NO    HRDOW
 L0000111         0   0.53191E-02  482350.8 3667961.4   175.8     3.40     4.00
3.16     NO    HRDOW
 L0000112         0   0.53191E-02  482354.3 3667964.9   175.8     3.40     4.00
3.16     NO    HRDOW
```

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER EMISSION RATE PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE VARY BY
L0000121	0	0.53191E-02	482327.5	3668037.5	177.4	3.40	4.00	3.16	NO	HRDOW
L0000122	0	0.53191E-02	482324.5	3668045.6	178.0	3.40	4.00	3.16	NO	HRDOW
L0000123	0	0.53191E-02	482321.5	3668053.6	177.9	3.40	4.00	3.16	NO	HRDOW
L0000124	0	0.53191E-02	482318.6	3668061.7	177.9	3.40	4.00	3.16	NO	HRDOW
L0000125	0	0.53191E-02	482315.3	3668057.3	177.8	3.40	4.00	3.16	NO	HRDOW
L0000126	0	0.53191E-02	482311.9	3668049.4	177.7	3.40	4.00	3.16	NO	HRDOW
L0000127	0	0.53191E-02	482308.5	3668041.5	177.6	3.40	4.00	3.16	NO	HRDOW

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 L0000128         0   0.53191E-02  482305.1 3668033.6   176.4     3.40     4.00
3.16     NO    HRDOW
 L0000129         0   0.53191E-02  482301.8 3668025.6   175.7     3.40     4.00
3.16     NO    HRDOW
 L0000130         0   0.53191E-02  482298.4 3668017.7   175.7     3.40     4.00
3.16     NO    HRDOW
 L0000131         0   0.53191E-02  482295.0 3668009.8   175.7     3.40     4.00
3.16     NO    HRDOW
 L0000132         0   0.53191E-02  482291.6 3668001.9   175.7     3.40     4.00
3.16     NO    HRDOW
 L0000133         0   0.53191E-02  482288.2 3667994.0   175.8     3.40     4.00
3.16     NO    HRDOW
 L0000134         0   0.53191E-02  482284.9 3667986.1   175.8     3.40     4.00
3.16     NO    HRDOW
 L0000135         0   0.53191E-02  482281.5 3667978.2   175.9     3.40     4.00
3.16     NO    HRDOW
 L0000136         0   0.53191E-02  482278.1 3667970.3   175.9     3.40     4.00
3.16     NO    HRDOW
 L0000137         0   0.53191E-02  482274.7 3667962.4   175.9     3.40     4.00
3.16     NO    HRDOW
 L0000138         0   0.53191E-02  482271.3 3667954.5   175.8     3.40     4.00
3.16     NO    HRDOW
 L0000139         0   0.53191E-02  482268.0 3667946.6   175.7     3.40     4.00
3.16     NO    HRDOW
 L0000140         0   0.53191E-02  482264.6 3667938.7   175.3     3.40     4.00
3.16     NO    HRDOW
 L0000141         0   0.53191E-02  482261.7 3667930.8   174.7     3.40     4.00
3.16     NO    HRDOW
 L0000142         0   0.53191E-02  482267.7 3667924.8   175.5     3.40     4.00
3.16     NO    HRDOW
 L0000143         0   0.53191E-02  482276.0 3667924.8   175.9     3.40     4.00
3.16     NO    HRDOW
 L0000144         0   0.53191E-02  482284.6 3667925.6   175.9     3.40     4.00
3.16     NO    HRDOW
 L0000145         0   0.53191E-02  482293.1 3667926.4   175.7     3.40     4.00
3.16     NO    HRDOW
 L0000146         0   0.53191E-02  482301.7 3667927.3   175.6     3.40     4.00
3.16     NO    HRDOW
 L0000147         0   0.53191E-02  482310.3 3667928.1   175.5     3.40     4.00
3.16     NO    HRDOW
 L0000148         0   0.53191E-02  482318.8 3667928.9   175.5     3.40     4.00
3.16     NO    HRDOW
 L0000149         0   0.53191E-02  482325.2 3667931.6   175.5     3.40     4.00
3.16     NO    HRDOW
 L0000150         0   0.53191E-02  482324.6 3667940.1   175.7     3.40     4.00
3.16     NO    HRDOW
 L0000151         0   0.53191E-02  482323.9 3667948.7   175.7     3.40     4.00
3.16     NO    HRDOW
 L0000152         0   0.53191E-02  482323.3 3667957.3   175.7     3.40     4.00
3.16     NO    HRDOW
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 L0000153   0   0.53191E-02 482322.6 3667965.9   175.8   3.40   4.00
3.16   NO   HRDOW
 L0000154   0   0.53191E-02 482322.0 3667974.4   175.8   3.40   4.00
3.16   NO   HRDOW
 L0000155   0   0.53191E-02 482328.6 3667976.9   175.8   3.40   4.00
3.16   NO   HRDOW
 L0000156   0   0.53191E-02 482333.6 3667980.1   175.8   3.40   4.00
3.16   NO   HRDOW
 L0000157   0   0.53191E-02 482331.2 3667988.3   175.8   3.40   4.00
3.16   NO   HRDOW
 L0000158   0   0.53191E-02 482328.7 3667996.6   175.8   3.40   4.00
3.16   NO   HRDOW
 L0000159   0   0.53191E-02 482326.2 3668004.8   175.8   3.40   4.00
3.16   NO   HRDOW
 L0000160   0   0.53191E-02 482323.8 3668013.0   175.8   3.40   4.00
3.16   NO   HRDOW

                                                    *** VOLUME SOURCE DATA ***

               NUMBER EMISSION RATE   BASE   RELEASE   INIT.
INIT.   URBAN EMISSION RATE
   SOURCE   PART. (GRAMS/SEC)   X   Y   ELEV.   HEIGHT   SY
SZ   SOURCE SCALAR VARY
     ID   CATS.   (METERS) (METERS) (METERS) (METERS) (METERS)
(METERS)   BY
 -
- -

 L0000161   0   0.53191E-02 482321.3 3668021.3   175.8   3.40   4.00
3.16   NO   HRDOW
 L0000162   0   0.53191E-02 482318.9 3668029.5   175.7   3.40   4.00
3.16   NO   HRDOW
 L0000163   0   0.53191E-02 482316.0 3668030.4   175.8   3.40   4.00
3.16   NO   HRDOW
 L0000164   0   0.53191E-02 482312.5 3668022.5   175.7   3.40   4.00
3.16   NO   HRDOW
 L0000165   0   0.53191E-02 482309.1 3668014.6   175.7   3.40   4.00
3.16   NO   HRDOW
 L0000166   0   0.53191E-02 482305.7 3668006.7   175.7   3.40   4.00
3.16   NO   HRDOW
 L0000167   0   0.53191E-02 482302.3 3667998.9   175.7   3.40   4.00
3.16   NO   HRDOW

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 L0000168         0   0.53191E-02  482298.8 3667991.0   175.8     3.40     4.00
3.16     NO    HRDOW
 L0000169         0   0.53191E-02  482295.4 3667983.1   175.9     3.40     4.00
3.16     NO    HRDOW
 L0000170         0   0.53191E-02  482292.0 3667975.2   175.9     3.40     4.00
3.16     NO    HRDOW
 L0000171         0   0.53191E-02  482288.5 3667967.3   176.0     3.40     4.00
3.16     NO    HRDOW
 L0000172         0   0.53191E-02  482285.1 3667959.4   176.0     3.40     4.00
3.16     NO    HRDOW
 L0000173         0   0.53191E-02  482281.7 3667951.5   175.9     3.40     4.00
3.16     NO    HRDOW
 L0000174         0   0.53191E-02  482278.3 3667943.6   175.9     3.40     4.00
3.16     NO    HRDOW
 L0000175         0   0.53191E-02  482278.5 3667938.5   175.9     3.40     4.00
3.16     NO    HRDOW
 L0000176         0   0.53191E-02  482287.1 3667939.6   175.9     3.40     4.00
3.16     NO    HRDOW
 L0000177         0   0.53191E-02  482295.6 3667940.7   175.7     3.40     4.00
3.16     NO    HRDOW
 L0000178         0   0.53191E-02  482304.1 3667941.8   175.6     3.40     4.00
3.16     NO    HRDOW
 L0000179         0   0.53191E-02  482312.7 3667942.9   175.6     3.40     4.00
3.16     NO    HRDOW
 L0000180         0   0.53191E-02  482312.1 3667951.3   175.7     3.40     4.00
3.16     NO    HRDOW
 L0000181         0   0.53191E-02  482309.6 3667957.6   175.7     3.40     4.00
3.16     NO    HRDOW
 L0000182         0   0.53191E-02  482301.0 3667956.6   175.8     3.40     4.00
3.16     NO    HRDOW
 L0000183         0   0.53191E-02  482295.8 3667957.9   175.9     3.40     4.00
3.16     NO    HRDOW
 L0000184         0   0.53191E-02  482299.7 3667965.6   175.9     3.40     4.00
3.16     NO    HRDOW
 L0000185         0   0.53191E-02  482303.6 3667973.2   175.9     3.40     4.00
3.16     NO    HRDOW
 L0000186         0   0.53191E-02  482307.5 3667980.9   175.8     3.40     4.00
3.16     NO    HRDOW
 L0000187         0   0.53191E-02  482311.4 3667988.6   175.8     3.40     4.00
3.16     NO    HRDOW
 L0000188         0   0.53191E-02  482315.3 3667996.2   175.7     3.40     4.00
3.16     NO    HRDOW
↟ *** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
Vista\Gran Vista\Gran Vista.i ***        04/27/22
 *** AERMET - VERSION  19191 ***   ***
                       ***        08:26:34

                                  PAGE   7
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL  SigA Data
```

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID	SOURCE IDs
ALL	L0000001 , L0000002 , L0000003 , L0000004 , L0000005 , L0000006 , L0000007 , L0000008 ,
	L0000009 , L0000010 , L0000011 , L0000012 , L0000013 , L0000014 , L0000015 , L0000016 ,
	L0000017 , L0000018 , L0000019 , L0000020 , L0000021 , L0000022 , L0000023 , L0000024 ,
	L0000025 , L0000026 , L0000027 , L0000028 , L0000029 , L0000030 , L0000031 , L0000032 ,
	L0000033 , L0000034 , L0000035 , L0000036 , L0000037 , L0000038 , L0000039 , L0000040 ,
	L0000041 , L0000042 , L0000043 , L0000044 , L0000045 , L0000046 , L0000047 , L0000048 ,
	L0000049 , L0000050 , L0000051 , L0000052 , L0000053 , L0000054 , L0000055 , L0000056 ,
	L0000057 , L0000058 , L0000059 , L0000060 , L0000061 , L0000062 , L0000063 , L0000064 ,
	L0000065 , L0000066 , L0000067 , L0000068 , L0000069 , L0000070 , L0000071 , L0000072 ,
	L0000073 , L0000074 , L0000075 , L0000076 , L0000077 , L0000078 , L0000079 , L0000080 ,
	L0000081 , L0000082 , L0000083 , L0000084 , L0000085 , L0000086 , L0000087 , L0000088 ,
	L0000089 , L0000090 , L0000091 , L0000092 , L0000093 , L0000094 , L0000095 , L0000096 ,
	L0000097 , L0000098 , L0000099 , L0000100 , L0000101 , L0000102 , L0000103 , L0000104 ,
	L0000105 , L0000106 , L0000107 , L0000108 , L0000109 , L0000110 , L0000111 , L0000112 ,
	L0000113 , L0000114 , L0000115 , L0000116 , L0000117 ,

L0000118   , L0000119   , L0000120   ,

             L0000121   , L0000122   , L0000123   , L0000124   , L0000125   ,
L0000126   , L0000127   , L0000128   ,

             L0000129   , L0000130   , L0000131   , L0000132   , L0000133   ,
L0000134   , L0000135   , L0000136   ,

             L0000137   , L0000138   , L0000139   , L0000140   , L0000141   ,
L0000142   , L0000143   , L0000144   ,

             L0000145   , L0000146   , L0000147   , L0000148   , L0000149   ,
L0000150   , L0000151   , L0000152   ,

             L0000153   , L0000154   , L0000155   , L0000156   , L0000157   ,
L0000158   , L0000159   , L0000160   ,

                                          *** SOURCE IDs DEFINING SOURCE GROUPS ***

 SRCGROUP ID   SOURCE IDs
 -----------   ----------

             L0000161   , L0000162   , L0000163   , L0000164   , L0000165   ,
L0000166   , L0000167   , L0000168   ,

             L0000169   , L0000170   , L0000171   , L0000172   , L0000173   ,
L0000174   , L0000175   , L0000176   ,

             L0000177   , L0000178   , L0000179   , L0000180   , L0000181   ,
L0000182   , L0000183   , L0000184   ,

             L0000185   , L0000186   , L0000187   , L0000188   ,

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF

WEEK (HRDOW) *

 SOURCE ID = L0000001   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - -

22 .0000E+00   23 .0000E+00   24 .0000E+00

DAY OF WEEK = SATURDAY

1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

DAY OF WEEK = SUNDAY

1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000003   ; SOURCE TYPE = VOLUME   :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .7200E+01
9 .7200E+01   10 .7200E+01   11 .7200E+01   12 .7200E+01   13 .7200E+01
14 .7200E+01   15 .7200E+01   16 .7200E+01
17 .7200E+01   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

DAY OF WEEK = SATURDAY

1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

DAY OF WEEK = SUNDAY

1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
WEEK (HRDOW) *

 SOURCE ID = L0000004   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - -

```
 SOURCE ID = L0000005     ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .7200E+01
    9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01
14  .7200E+01   15  .7200E+01   16  .7200E+01
   17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
Vista\Gran Vista\Gran Vista.i ***        04/27/22
 *** AERMET - VERSION  19191 ***   ***
                      ***        08:26:34

                                  PAGE  14
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL  SigA Data

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
WEEK (HRDOW) *

 SOURCE ID = L0000006     ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .7200E+01
    9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01
14  .7200E+01   15  .7200E+01   16  .7200E+01
   17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
```

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    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
Vista\Gran Vista\Gran Vista.i ***        04/27/22
 *** AERMET - VERSION  19191 ***   ***
                      ***        08:26:34

                                  PAGE  15
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL  SigA Data

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
WEEK (HRDOW) *

 SOURCE ID = L0000007     ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .7200E+01
    9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01
14  .7200E+01   15  .7200E+01   16  .7200E+01
   17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
```

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

 SOURCE ID = L0000008   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -

                                                  DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00   6 .0000E+00   7 .0000E+00   8 .7200E+01
    9 .7200E+01   10 .7200E+01   11 .7200E+01   12 .7200E+01   13 .7200E+01   14 .7200E+01   15 .7200E+01   16 .7200E+01
   17 .7200E+01   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00   22 .0000E+00   23 .0000E+00   24 .0000E+00

                                                  DAY OF WEEK = SATURDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00   6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00   14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00   22 .0000E+00   23 .0000E+00   24 .0000E+00

                                                  DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00   6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00   14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00   22 .0000E+00   23 .0000E+00   24 .0000E+00

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

 SOURCE ID = L0000009   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR

HOUR SCALAR HOUR SCALAR HOUR SCALAR

DAY OF WEEK = WEEKDAY

1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00 5 .0000E+00
6 .0000E+00 7 .0000E+00 8 .7200E+01
9 .7200E+01 10 .7200E+01 11 .7200E+01 12 .7200E+01 13 .7200E+01
14 .7200E+01 15 .7200E+01 16 .7200E+01
17 .7200E+01 18 .0000E+00 19 .0000E+00 20 .0000E+00 21 .0000E+00
22 .0000E+00 23 .0000E+00 24 .0000E+00

DAY OF WEEK = SATURDAY

1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00 5 .0000E+00
6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00 13 .0000E+00
14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00 21 .0000E+00
22 .0000E+00 23 .0000E+00 24 .0000E+00

DAY OF WEEK = SUNDAY

1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00 5 .0000E+00
6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00 13 .0000E+00
14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00 21 .0000E+00
22 .0000E+00 23 .0000E+00 24 .0000E+00

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000010 ; SOURCE TYPE = VOLUME :

HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR

DAY OF WEEK = WEEKDAY

1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00 5 .0000E+00
6 .0000E+00 7 .0000E+00 8 .7200E+01
9 .7200E+01 10 .7200E+01 11 .7200E+01 12 .7200E+01 13 .7200E+01
14 .7200E+01 15 .7200E+01 16 .7200E+01
17 .7200E+01 18 .0000E+00 19 .0000E+00 20 .0000E+00 21 .0000E+00
22 .0000E+00 23 .0000E+00 24 .0000E+00

DAY OF WEEK = SATURDAY

1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00 5 .0000E+00
6 .0000E+00 7 .0000E+00 8 .0000E+00

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    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↑ *** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
Vista\Gran Vista\Gran Vista.i ***        04/27/22
 *** AERMET - VERSION  19191 ***   ***
                       ***        08:26:34

                                  PAGE  19
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL  SigA Data

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
WEEK (HRDOW) *

 SOURCE ID = L0000011     ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .7200E+01
    9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01
14  .7200E+01   15  .7200E+01   16  .7200E+01
   17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↑ *** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
Vista\Gran Vista\Gran Vista.i ***        04/27/22
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* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000012   ; SOURCE TYPE = VOLUME   :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.7200E+01
9	.7200E+01	10	.7200E+01	11	.7200E+01	12	.7200E+01	13	.7200E+01	14	.7200E+01	15	.7200E+01	16	.7200E+01
17	.7200E+01	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SATURDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SUNDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000013   ; SOURCE TYPE = VOLUME   :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

```
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                                    DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .7200E+01
    9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01
14  .7200E+01   15  .7200E+01   16  .7200E+01
   17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                    DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                    DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
Vista\Gran Vista\Gran Vista.i ***        04/27/22
 *** AERMET - VERSION  19191 ***   ***
                      ***        08:26:34

                                  PAGE  22
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL  SigA Data

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
WEEK (HRDOW) *

 SOURCE ID = L0000014     ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                                    DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .7200E+01
    9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01
14  .7200E+01   15  .7200E+01   16  .7200E+01
   17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                    DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
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                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
WEEK (HRDOW) *

 SOURCE ID = L0000015   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -
                                                DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .7200E+01
    9 .7200E+01   10 .7200E+01   11 .7200E+01   12 .7200E+01   13 .7200E+01
14 .7200E+01   15 .7200E+01   16 .7200E+01
   17 .7200E+01   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SATURDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

 SOURCE ID = L0000016   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -

                                                    DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00   6 .0000E+00   7 .0000E+00   8 .7200E+01
    9 .7200E+01   10 .7200E+01   11 .7200E+01   12 .7200E+01   13 .7200E+01   14 .7200E+01   15 .7200E+01   16 .7200E+01
   17 .7200E+01   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00   22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                    DAY OF WEEK = SATURDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00   6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00   14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00   22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                    DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00   6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00   14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00   22 .0000E+00   23 .0000E+00   24 .0000E+00

                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

 SOURCE ID = L0000017   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -

                                                    DAY OF WEEK = WEEKDAY

```
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .7200E+01
    9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01
14  .7200E+01   15  .7200E+01   16  .7200E+01
   17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00

                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00

                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
Vista\Gran Vista\Gran Vista.i ***        04/27/22
 *** AERMET - VERSION  19191 ***   ***
                       ***        08:26:34

                                  PAGE  26
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL  SigA Data

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
WEEK (HRDOW) *

 SOURCE ID = L0000018     ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - -

                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .7200E+01
    9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01
14  .7200E+01   15  .7200E+01   16  .7200E+01
   17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00

                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
```

1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00 5 .0000E+00
6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00 13 .0000E+00
14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00 21 .0000E+00
22 .0000E+00 23 .0000E+00 24 .0000E+00

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000019 ; SOURCE TYPE = VOLUME :
HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR
- - - -

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000020 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.7200E+01
9	.7200E+01	10	.7200E+01	11	.7200E+01	12	.7200E+01	13	.7200E+01	14	.7200E+01	15	.7200E+01	16	.7200E+01
17	.7200E+01	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SATURDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SUNDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000021 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.7200E+01

```
    9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01
14  .7200E+01   15  .7200E+01   16  .7200E+01
   17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
Vista\Gran Vista\Gran Vista.i ***        04/27/22
 *** AERMET - VERSION  19191 ***   ***
                      ***        08:26:34

                                  PAGE  30
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL  SigA Data

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
WEEK (HRDOW) *

 SOURCE ID = L0000022     ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .7200E+01
    9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01
14  .7200E+01   15  .7200E+01   16  .7200E+01
   17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
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6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

 SOURCE ID = L0000023   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -

                                                DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .7200E+01
    9 .7200E+01   10 .7200E+01   11 .7200E+01   12 .7200E+01   13 .7200E+01
14 .7200E+01   15 .7200E+01   16 .7200E+01
   17 .7200E+01   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SATURDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000024 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.7200E+01
9	.7200E+01	10	.7200E+01	11	.7200E+01	12	.7200E+01	13	.7200E+01	14	.7200E+01	15	.7200E+01	16	.7200E+01
17	.7200E+01	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SATURDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SUNDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000025 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.7200E+01
9	.7200E+01	10	.7200E+01	11	.7200E+01	12	.7200E+01	13	.7200E+01	14	.7200E+01	15	.7200E+01	16	.7200E+01

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
WEEK (HRDOW) *

 SOURCE ID = L0000026   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -
                                                DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .7200E+01
    9 .7200E+01   10 .7200E+01   11 .7200E+01   12 .7200E+01   13 .7200E+01
14 .7200E+01   15 .7200E+01   16 .7200E+01
   17 .7200E+01   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SATURDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00

14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

 SOURCE ID = L0000027   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - -

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 SOURCE ID = L0000028     ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .7200E+01
    9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01
14  .7200E+01   15  .7200E+01   16  .7200E+01
   17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
Vista\Gran Vista\Gran Vista.i ***        04/27/22
 *** AERMET - VERSION  19191 ***   ***
                      ***        08:26:34

                                  PAGE  37
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL  SigA Data

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
WEEK (HRDOW) *

 SOURCE ID = L0000029     ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .7200E+01
    9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01
14  .7200E+01   15  .7200E+01   16  .7200E+01
   17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
```

1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00 5 .0000E+00
6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00 13 .0000E+00
14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00 21 .0000E+00
22 .0000E+00 23 .0000E+00 24 .0000E+00

DAY OF WEEK = SUNDAY

1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00 5 .0000E+00
6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00 13 .0000E+00
14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00 21 .0000E+00
22 .0000E+00 23 .0000E+00 24 .0000E+00

*** MODELOPTs: RegDFAULT CONC ELEV RURAL SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000030 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR				

DAY OF WEEK = WEEKDAY

1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00 5 .0000E+00
6 .0000E+00 7 .0000E+00 8 .7200E+01
9 .7200E+01 10 .7200E+01 11 .7200E+01 12 .7200E+01 13 .7200E+01
14 .7200E+01 15 .7200E+01 16 .7200E+01
17 .7200E+01 18 .0000E+00 19 .0000E+00 20 .0000E+00 21 .0000E+00
22 .0000E+00 23 .0000E+00 24 .0000E+00

DAY OF WEEK = SATURDAY

1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00 5 .0000E+00
6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00 13 .0000E+00
14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00 21 .0000E+00
22 .0000E+00 23 .0000E+00 24 .0000E+00

DAY OF WEEK = SUNDAY

1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00 5 .0000E+00
6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00 13 .0000E+00
14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00 21 .0000E+00

22 .0000E+00   23 .0000E+00   24 .0000E+00

                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

 SOURCE ID = L0000031   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
                                                DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00   6 .0000E+00   7 .0000E+00   8 .7200E+01
    9 .7200E+01   10 .7200E+01   11 .7200E+01   12 .7200E+01   13 .7200E+01   14 .7200E+01   15 .7200E+01   16 .7200E+01
   17 .7200E+01   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00   22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SATURDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00   6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00   14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00   22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00   6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00   14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00   22 .0000E+00   23 .0000E+00   24 .0000E+00

                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

 SOURCE ID = L0000032   ; SOURCE TYPE = VOLUME   :

```
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .7200E+01
    9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01
14  .7200E+01   15  .7200E+01   16  .7200E+01
   17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
Vista\Gran Vista\Gran Vista.i ***        04/27/22
 *** AERMET - VERSION  19191 ***   ***
                      ***        08:26:34

                                  PAGE  41
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL  SigA Data

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
WEEK (HRDOW) *

 SOURCE ID = L0000033     ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .7200E+01
    9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01
14  .7200E+01   15  .7200E+01   16  .7200E+01
   17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
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6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                              DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
WEEK (HRDOW) *

 SOURCE ID = L0000034   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -
                                              DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .7200E+01
    9 .7200E+01   10 .7200E+01   11 .7200E+01   12 .7200E+01   13 .7200E+01
14 .7200E+01   15 .7200E+01   16 .7200E+01
   17 .7200E+01   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                              DAY OF WEEK = SATURDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                              DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

 SOURCE ID = L0000035   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -

                                                DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00   6 .0000E+00   7 .0000E+00   8 .7200E+01
    9 .7200E+01   10 .7200E+01   11 .7200E+01   12 .7200E+01   13 .7200E+01   14 .7200E+01   15 .7200E+01   16 .7200E+01
   17 .7200E+01   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00   22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SATURDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00   6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00   14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00   22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00   6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00   14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00   22 .0000E+00   23 .0000E+00   24 .0000E+00

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

 SOURCE ID = L0000036   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR

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 - - -
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* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000038 ; SOURCE TYPE = VOLUME :
HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR
HOUR SCALAR HOUR SCALAR HOUR SCALAR
- - - -

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000039 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.7200E+01
9	.7200E+01	10	.7200E+01	11	.7200E+01	12	.7200E+01	13	.7200E+01	14	.7200E+01	15	.7200E+01	16	.7200E+01
17	.7200E+01	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000040 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000041 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00 5 .0000E+00
6 .0000E+00 7 .0000E+00 8 .7200E+01
9 .7200E+01 10 .7200E+01 11 .7200E+01 12 .7200E+01 13 .7200E+01
14 .7200E+01 15 .7200E+01 16 .7200E+01
17 .7200E+01 18 .0000E+00 19 .0000E+00 20 .0000E+00 21 .0000E+00
22 .0000E+00 23 .0000E+00 24 .0000E+00
DAY OF WEEK = SATURDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00 5 .0000E+00
6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00 13 .0000E+00
14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00 21 .0000E+00

22 .0000E+00   23 .0000E+00   24 .0000E+00

DAY OF WEEK = SUNDAY

1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

*** MODELOPTs: RegDFAULT CONC ELEV RURAL SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000042   ; SOURCE TYPE = VOLUME   :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .7200E+01
9 .7200E+01   10 .7200E+01   11 .7200E+01   12 .7200E+01   13 .7200E+01
14 .7200E+01   15 .7200E+01   16 .7200E+01
17 .7200E+01   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

DAY OF WEEK = SATURDAY

1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

DAY OF WEEK = SUNDAY

1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

*** MODELOPTs: RegDFAULT CONC ELEV RURAL SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000043 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.7200E+01
9	.7200E+01	10	.7200E+01	11	.7200E+01	12	.7200E+01	13	.7200E+01	14	.7200E+01	15	.7200E+01	16	.7200E+01
17	.7200E+01	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

*** MODELOPTs: RegDFAULT CONC ELEV RURAL SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000044 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00						

```
6  .0000E+00    7  .0000E+00    8  .7200E+01
    9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01
14  .7200E+01   15  .7200E+01   16  .7200E+01
   17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
Vista\Gran Vista\Gran Vista.i ***        04/27/22
 *** AERMET - VERSION  19191 ***   ***
                      ***        08:26:34

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL  SigA Data

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
WEEK (HRDOW) *

 SOURCE ID = L0000045     ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .7200E+01
    9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01
14  .7200E+01   15  .7200E+01   16  .7200E+01
   17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
```

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    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↑ *** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
Vista\Gran Vista\Gran Vista.i ***        04/27/22
 *** AERMET - VERSION  19191 ***   ***
                      ***        08:26:34

                                  PAGE  54
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL  SigA Data

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
WEEK (HRDOW) *

 SOURCE ID = L0000046     ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .7200E+01
    9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01
14  .7200E+01   15  .7200E+01   16  .7200E+01
   17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↑ *** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
Vista\Gran Vista\Gran Vista.i ***        04/27/22
 *** AERMET - VERSION  19191 ***   ***
                      ***        08:26:34

                                  PAGE  55
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL  SigA Data
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* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000047 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.7200E+01
9	.7200E+01	10	.7200E+01	11	.7200E+01	12	.7200E+01	13	.7200E+01	14	.7200E+01	15	.7200E+01	16	.7200E+01
17	.7200E+01	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SATURDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SUNDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000048 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.7200E+01
9	.7200E+01	10	.7200E+01	11	.7200E+01	12	.7200E+01	13	.7200E+01						

```
14  .7200E+01   15  .7200E+01   16  .7200E+01
   17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
Vista\Gran Vista\Gran Vista.i ***        04/27/22
 *** AERMET - VERSION  19191 ***   ***
                      ***       08:26:34

                                PAGE  57
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL  SigA Data

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
WEEK (HRDOW) *

 SOURCE ID = L0000049     ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .7200E+01
    9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01
14  .7200E+01   15  .7200E+01   16  .7200E+01
   17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
```

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
WEEK (HRDOW) *

 SOURCE ID = L0000050   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -
                                              DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .7200E+01
    9 .7200E+01   10 .7200E+01   11 .7200E+01   12 .7200E+01   13 .7200E+01
14 .7200E+01   15 .7200E+01   16 .7200E+01
   17 .7200E+01   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                              DAY OF WEEK = SATURDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                              DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF

WEEK (HRDOW) *

 SOURCE ID = L0000051   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - -

22 .0000E+00   23 .0000E+00   24 .0000E+00

DAY OF WEEK = SATURDAY

1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

DAY OF WEEK = SUNDAY

1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000053   ; SOURCE TYPE = VOLUME   :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .7200E+01
9 .7200E+01   10 .7200E+01   11 .7200E+01   12 .7200E+01   13 .7200E+01
14 .7200E+01   15 .7200E+01   16 .7200E+01
17 .7200E+01   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

DAY OF WEEK = SATURDAY

1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

DAY OF WEEK = SUNDAY

1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
WEEK (HRDOW) *

 SOURCE ID = L0000054   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - -

```
 SOURCE ID = L0000055     ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .7200E+01
    9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01
14  .7200E+01   15  .7200E+01   16  .7200E+01
   17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
Vista\Gran Vista\Gran Vista.i ***        04/27/22
 *** AERMET - VERSION  19191 ***   ***
                      ***        08:26:34

                                 PAGE  64
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL  SigA Data

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
WEEK (HRDOW) *

 SOURCE ID = L0000056     ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .7200E+01
    9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01
14  .7200E+01   15  .7200E+01   16  .7200E+01
   17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
```

```
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
Vista\Gran Vista\Gran Vista.i ***        04/27/22
 *** AERMET - VERSION  19191 ***   ***
                      ***        08:26:34

                                  PAGE  65
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL  SigA Data

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
WEEK (HRDOW) *

 SOURCE ID = L0000057     ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .7200E+01
    9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01
14  .7200E+01   15  .7200E+01   16  .7200E+01
   17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
```

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

 SOURCE ID = L0000058   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - -

HOUR SCALAR HOUR SCALAR HOUR SCALAR
- - - -

```
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↑ *** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
Vista\Gran Vista\Gran Vista.i ***        04/27/22
 *** AERMET - VERSION  19191 ***   ***
                       ***        08:26:34

                                  PAGE  69
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL  SigA Data

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
WEEK (HRDOW) *

 SOURCE ID = L0000061     ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - -
                                            DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .7200E+01
    9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01
14  .7200E+01   15  .7200E+01   16  .7200E+01
   17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↑ *** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
Vista\Gran Vista\Gran Vista.i ***        04/27/22
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* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000062   ; SOURCE TYPE = VOLUME   :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.7200E+01
9	.7200E+01	10	.7200E+01	11	.7200E+01	12	.7200E+01	13	.7200E+01	14	.7200E+01	15	.7200E+01	16	.7200E+01
17	.7200E+01	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SATURDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SUNDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000063   ; SOURCE TYPE = VOLUME   :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

```
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                                  DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .7200E+01
    9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01
14  .7200E+01   15  .7200E+01   16  .7200E+01
   17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                  DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                  DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
Vista\Gran Vista\Gran Vista.i ***        04/27/22
 *** AERMET - VERSION  19191 ***   ***
                      ***        08:26:34

                                  PAGE  72
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL  SigA Data

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
WEEK (HRDOW) *

 SOURCE ID = L0000064     ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                                  DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .7200E+01
    9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01
14  .7200E+01   15  .7200E+01   16  .7200E+01
   17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                  DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
```

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
WEEK (HRDOW) *

 SOURCE ID = L0000065   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -
                                                DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .7200E+01
    9 .7200E+01   10 .7200E+01   11 .7200E+01   12 .7200E+01   13 .7200E+01
14 .7200E+01   15 .7200E+01   16 .7200E+01
   17 .7200E+01   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SATURDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000066   ; SOURCE TYPE = VOLUME   :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.7200E+01
9	.7200E+01	10	.7200E+01	11	.7200E+01	12	.7200E+01	13	.7200E+01	14	.7200E+01	15	.7200E+01	16	.7200E+01
17	.7200E+01	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SATURDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SUNDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000067   ; SOURCE TYPE = VOLUME   :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

```
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .7200E+01
    9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01
14  .7200E+01   15  .7200E+01   16  .7200E+01
   17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
Vista\Gran Vista\Gran Vista.i ***        04/27/22
 *** AERMET - VERSION  19191 ***   ***
                      ***        08:26:34

                                  PAGE  76
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL  SigA Data

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
WEEK (HRDOW) *

 SOURCE ID = L0000068     ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .7200E+01
    9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01
14  .7200E+01   15  .7200E+01   16  .7200E+01
   17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
```

1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00 5 .0000E+00
6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00 13 .0000E+00
14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00 21 .0000E+00
22 .0000E+00 23 .0000E+00 24 .0000E+00

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000069 ; SOURCE TYPE = VOLUME :
HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR
- - - -

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000070 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.7200E+01
9	.7200E+01	10	.7200E+01	11	.7200E+01	12	.7200E+01	13	.7200E+01	14	.7200E+01	15	.7200E+01	16	.7200E+01
17	.7200E+01	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

*** MODELOPTs: RegDFAULT CONC ELEV RURAL SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000071 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.7200E+01

```
    9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01
14  .7200E+01   15  .7200E+01   16  .7200E+01
   17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
*** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
Vista\Gran Vista\Gran Vista.i ***        04/27/22
 *** AERMET - VERSION  19191 ***   ***
                      ***        08:26:34

                                  PAGE  80
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL  SigA Data

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
WEEK (HRDOW) *

 SOURCE ID = L0000072     ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .7200E+01
    9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01
14  .7200E+01   15  .7200E+01   16  .7200E+01
   17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
```

6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

 SOURCE ID = L0000073   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - -

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000074 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.7200E+01
9	.7200E+01	10	.7200E+01	11	.7200E+01	12	.7200E+01	13	.7200E+01	14	.7200E+01	15	.7200E+01	16	.7200E+01
17	.7200E+01	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SATURDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SUNDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000075 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.7200E+01
9	.7200E+01	10	.7200E+01	11	.7200E+01	12	.7200E+01	13	.7200E+01	14	.7200E+01	15	.7200E+01	16	.7200E+01

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
WEEK (HRDOW) *

 SOURCE ID = L0000076   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -
                                                DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .7200E+01
    9 .7200E+01   10 .7200E+01   11 .7200E+01   12 .7200E+01   13 .7200E+01
14 .7200E+01   15 .7200E+01   16 .7200E+01
   17 .7200E+01   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SATURDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00

14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

 SOURCE ID = L0000077   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - -

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 SOURCE ID = L0000078     ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .7200E+01
    9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01
14  .7200E+01   15  .7200E+01   16  .7200E+01
   17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↑ *** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
Vista\Gran Vista\Gran Vista.i ***        04/27/22
 *** AERMET - VERSION  19191 ***   ***
                      ***        08:26:34

                                  PAGE  87
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL  SigA Data

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
WEEK (HRDOW) *

 SOURCE ID = L0000079     ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .7200E+01
    9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01
14  .7200E+01   15  .7200E+01   16  .7200E+01
   17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
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* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000080 ; SOURCE TYPE = VOLUME :
HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR
- - - -

                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

 SOURCE ID = L0000081   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
                                                DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00   6 .0000E+00   7 .0000E+00   8 .7200E+01
    9 .7200E+01   10 .7200E+01   11 .7200E+01   12 .7200E+01   13 .7200E+01   14 .7200E+01   15 .7200E+01   16 .7200E+01
   17 .7200E+01   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00   22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SATURDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00   6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00   14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00   22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00   6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00   14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00   22 .0000E+00   23 .0000E+00   24 .0000E+00

                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

 SOURCE ID = L0000082   ; SOURCE TYPE = VOLUME   :

```
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .7200E+01
    9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01
14  .7200E+01   15  .7200E+01   16  .7200E+01
   17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
Vista\Gran Vista\Gran Vista.i ***        04/27/22
 *** AERMET - VERSION  19191 ***   ***
                      ***        08:26:34

                                  PAGE  91
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL  SigA Data

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
WEEK (HRDOW) *

 SOURCE ID = L0000083     ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .7200E+01
    9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01
14  .7200E+01   15  .7200E+01   16  .7200E+01
   17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
```

6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                              DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
WEEK (HRDOW) *

 SOURCE ID = L0000084   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -
                                              DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .7200E+01
    9 .7200E+01   10 .7200E+01   11 .7200E+01   12 .7200E+01   13 .7200E+01
14 .7200E+01   15 .7200E+01   16 .7200E+01
   17 .7200E+01   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                              DAY OF WEEK = SATURDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                              DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

 SOURCE ID = L0000085   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -

                                                DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00   6 .0000E+00   7 .0000E+00   8 .7200E+01
    9 .7200E+01   10 .7200E+01   11 .7200E+01   12 .7200E+01   13 .7200E+01   14 .7200E+01   15 .7200E+01   16 .7200E+01
   17 .7200E+01   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00   22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SATURDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00   6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00   14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00   22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00   6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00   14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00   22 .0000E+00   23 .0000E+00   24 .0000E+00

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

 SOURCE ID = L0000086   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR

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 - - -
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14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

                                              DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

 SOURCE ID = L0000088   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - -

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000089 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.7200E+01
9	.7200E+01	10	.7200E+01	11	.7200E+01	12	.7200E+01	13	.7200E+01	14	.7200E+01	15	.7200E+01	16	.7200E+01
17	.7200E+01	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SATURDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SUNDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000090 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00 5 .0000E+00
6 .0000E+00 7 .0000E+00 8 .7200E+01
9 .7200E+01 10 .7200E+01 11 .7200E+01 12 .7200E+01 13 .7200E+01
14 .7200E+01 15 .7200E+01 16 .7200E+01
17 .7200E+01 18 .0000E+00 19 .0000E+00 20 .0000E+00 21 .0000E+00
22 .0000E+00 23 .0000E+00 24 .0000E+00

DAY OF WEEK = SATURDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00 5 .0000E+00
6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00 13 .0000E+00
14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00 21 .0000E+00
22 .0000E+00 23 .0000E+00 24 .0000E+00

DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00 5 .0000E+00
6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00 13 .0000E+00
14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00 21 .0000E+00
22 .0000E+00 23 .0000E+00 24 .0000E+00

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000091 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00 5 .0000E+00
6 .0000E+00 7 .0000E+00 8 .7200E+01
9 .7200E+01 10 .7200E+01 11 .7200E+01 12 .7200E+01 13 .7200E+01
14 .7200E+01 15 .7200E+01 16 .7200E+01
17 .7200E+01 18 .0000E+00 19 .0000E+00 20 .0000E+00 21 .0000E+00
22 .0000E+00 23 .0000E+00 24 .0000E+00

DAY OF WEEK = SATURDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00 5 .0000E+00
6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00 13 .0000E+00
14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00 21 .0000E+00

22 .0000E+00   23 .0000E+00   24 .0000E+00

DAY OF WEEK = SUNDAY

1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

*** MODELOPTs: RegDFAULT CONC ELEV RURAL SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000092   ; SOURCE TYPE = VOLUME   :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .7200E+01
9 .7200E+01   10 .7200E+01   11 .7200E+01   12 .7200E+01   13 .7200E+01
14 .7200E+01   15 .7200E+01   16 .7200E+01
17 .7200E+01   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

DAY OF WEEK = SATURDAY

1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

DAY OF WEEK = SUNDAY

1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

*** MODELOPTs: RegDFAULT CONC ELEV RURAL SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000093 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.7200E+01
9	.7200E+01	10	.7200E+01	11	.7200E+01	12	.7200E+01	13	.7200E+01	14	.7200E+01	15	.7200E+01	16	.7200E+01
17	.7200E+01	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SATURDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SUNDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

*** MODELOPTs: RegDFAULT CONC ELEV RURAL SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000094 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00

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6  .0000E+00    7  .0000E+00    8  .7200E+01
    9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01
14  .7200E+01   15  .7200E+01   16  .7200E+01
   17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
Vista\Gran Vista\Gran Vista.i ***        04/27/22
 *** AERMET - VERSION  19191 ***   ***
                      ***        08:26:34

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL  SigA Data

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
WEEK (HRDOW) *

 SOURCE ID = L0000095     ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .7200E+01
    9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01
14  .7200E+01   15  .7200E+01   16  .7200E+01
   17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
```

```
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↑ *** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
Vista\Gran Vista\Gran Vista.i ***        04/27/22
 *** AERMET - VERSION  19191 ***   ***
                       ***        08:26:34

                                  PAGE 104
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL  SigA Data

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
WEEK (HRDOW) *

 SOURCE ID = L0000096     ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .7200E+01
    9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01
14  .7200E+01   15  .7200E+01   16  .7200E+01
   17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↑ *** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
Vista\Gran Vista\Gran Vista.i ***        04/27/22
 *** AERMET - VERSION  19191 ***   ***
                       ***        08:26:34

                                  PAGE 105
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL  SigA Data
```

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000097 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.7200E+01
9	.7200E+01	10	.7200E+01	11	.7200E+01	12	.7200E+01	13	.7200E+01	14	.7200E+01	15	.7200E+01	16	.7200E+01
17	.7200E+01	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SATURDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SUNDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000098 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.7200E+01
9	.7200E+01	10	.7200E+01	11	.7200E+01	12	.7200E+01	13	.7200E+01						

14 .7200E+01   15 .7200E+01   16 .7200E+01
   17 .7200E+01   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                              DAY OF WEEK = SATURDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                              DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

 SOURCE ID = L0000099   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
                                              DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .7200E+01
    9 .7200E+01   10 .7200E+01   11 .7200E+01   12 .7200E+01   13 .7200E+01
14 .7200E+01   15 .7200E+01   16 .7200E+01
   17 .7200E+01   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                              DAY OF WEEK = SATURDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                              DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
WEEK (HRDOW) *

 SOURCE ID = L0000100   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -
                                          DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .7200E+01
    9 .7200E+01   10 .7200E+01   11 .7200E+01   12 .7200E+01   13 .7200E+01
14 .7200E+01   15 .7200E+01   16 .7200E+01
   17 .7200E+01   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                          DAY OF WEEK = SATURDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                          DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF

WEEK (HRDOW) *

 SOURCE ID = L0000101   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - -

22 .0000E+00   23 .0000E+00   24 .0000E+00

DAY OF WEEK = SATURDAY

1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

DAY OF WEEK = SUNDAY

1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000103   ; SOURCE TYPE = VOLUME   :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .7200E+01
9 .7200E+01   10 .7200E+01   11 .7200E+01   12 .7200E+01   13 .7200E+01
14 .7200E+01   15 .7200E+01   16 .7200E+01
17 .7200E+01   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

DAY OF WEEK = SATURDAY

1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

DAY OF WEEK = SUNDAY

1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
WEEK (HRDOW) *

 SOURCE ID = L0000104   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - -

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 SOURCE ID = L0000105     ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .7200E+01
    9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01
14  .7200E+01   15  .7200E+01   16  .7200E+01
   17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
Vista\Gran Vista\Gran Vista.i ***        04/27/22
 *** AERMET - VERSION  19191 ***   ***
                      ***        08:26:34

                                PAGE 114
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL  SigA Data

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
WEEK (HRDOW) *

 SOURCE ID = L0000106     ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .7200E+01
    9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01
14  .7200E+01   15  .7200E+01   16  .7200E+01
   17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
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    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
Vista\Gran Vista\Gran Vista.i ***        04/27/22
 *** AERMET - VERSION  19191 ***   ***
                      ***        08:26:34

                                  PAGE 115
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL  SigA Data

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
WEEK (HRDOW) *

 SOURCE ID = L0000107     ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .7200E+01
    9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01
14  .7200E+01   15  .7200E+01   16  .7200E+01
   17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
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                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

 SOURCE ID = L0000108   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -

                                                  DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00   6 .0000E+00   7 .0000E+00   8 .7200E+01
    9 .7200E+01   10 .7200E+01   11 .7200E+01   12 .7200E+01   13 .7200E+01   14 .7200E+01   15 .7200E+01   16 .7200E+01
   17 .7200E+01   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00   22 .0000E+00   23 .0000E+00   24 .0000E+00

                                                  DAY OF WEEK = SATURDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00   6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00   14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00   22 .0000E+00   23 .0000E+00   24 .0000E+00

                                                  DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00   6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00   14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00   22 .0000E+00   23 .0000E+00   24 .0000E+00

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

 SOURCE ID = L0000109   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR

HOUR SCALAR HOUR SCALAR HOUR SCALAR
- - - -

```
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↑ *** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
Vista\Gran Vista\Gran Vista.i ***        04/27/22
 *** AERMET - VERSION  19191 ***   ***
                       ***        08:26:34

                                  PAGE 119
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL  SigA Data

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
WEEK (HRDOW) *

 SOURCE ID = L0000111     ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .7200E+01
    9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01
14  .7200E+01   15  .7200E+01   16  .7200E+01
   17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↑ *** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
Vista\Gran Vista\Gran Vista.i ***        04/27/22
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* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000112   ; SOURCE TYPE = VOLUME   :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.7200E+01
9	.7200E+01	10	.7200E+01	11	.7200E+01	12	.7200E+01	13	.7200E+01	14	.7200E+01	15	.7200E+01	16	.7200E+01
17	.7200E+01	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SATURDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SUNDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000113   ; SOURCE TYPE = VOLUME   :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

- - - -

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
WEEK (HRDOW) *

 SOURCE ID = L0000115   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -
                                                DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .7200E+01
    9 .7200E+01   10 .7200E+01   11 .7200E+01   12 .7200E+01   13 .7200E+01
14 .7200E+01   15 .7200E+01   16 .7200E+01
   17 .7200E+01   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SATURDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000116 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.7200E+01
9	.7200E+01	10	.7200E+01	11	.7200E+01	12	.7200E+01	13	.7200E+01	14	.7200E+01	15	.7200E+01	16	.7200E+01
17	.7200E+01	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000117 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = WEEKDAY															

```
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .7200E+01
    9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01
14  .7200E+01   15  .7200E+01   16  .7200E+01
   17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
Vista\Gran Vista\Gran Vista.i ***        04/27/22
 *** AERMET - VERSION  19191 ***   ***
                       ***        08:26:34

                                  PAGE 126
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL  SigA Data

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
WEEK (HRDOW) *

 SOURCE ID = L0000118     ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .7200E+01
    9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01
14  .7200E+01   15  .7200E+01   16  .7200E+01
   17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
```

DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00 5 .0000E+00
6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00 13 .0000E+00
14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00 21 .0000E+00
22 .0000E+00 23 .0000E+00 24 .0000E+00

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000119 ; SOURCE TYPE = VOLUME :
HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR
- - - -

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000120 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.7200E+01
9	.7200E+01	10	.7200E+01	11	.7200E+01	12	.7200E+01	13	.7200E+01	14	.7200E+01	15	.7200E+01	16	.7200E+01
17	.7200E+01	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

*** MODELOPTs: RegDFAULT CONC ELEV RURAL SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000121 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.7200E+01

```
    9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01
14  .7200E+01   15  .7200E+01   16  .7200E+01
   17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
Vista\Gran Vista\Gran Vista.i ***        04/27/22
 *** AERMET - VERSION  19191 ***   ***
                      ***        08:26:34

                                  PAGE 130
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL  SigA Data

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
WEEK (HRDOW) *

 SOURCE ID = L0000122     ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .7200E+01
    9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01
14  .7200E+01   15  .7200E+01   16  .7200E+01
   17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
```

6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

 SOURCE ID = L0000123   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - -

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000124 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.7200E+01
9	.7200E+01	10	.7200E+01	11	.7200E+01	12	.7200E+01	13	.7200E+01	14	.7200E+01	15	.7200E+01	16	.7200E+01
17	.7200E+01	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SATURDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SUNDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000125 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.7200E+01
9	.7200E+01	10	.7200E+01	11	.7200E+01	12	.7200E+01	13	.7200E+01	14	.7200E+01	15	.7200E+01	16	.7200E+01

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000126 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.7200E+01
9	.7200E+01	10	.7200E+01	11	.7200E+01	12	.7200E+01	13	.7200E+01	14	.7200E+01	15	.7200E+01	16	.7200E+01
17	.7200E+01	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SATURDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SUNDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00						

14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

 SOURCE ID = L0000127   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
                                                DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00   6 .0000E+00   7 .0000E+00   8 .7200E+01
    9 .7200E+01   10 .7200E+01   11 .7200E+01   12 .7200E+01   13 .7200E+01   14 .7200E+01   15 .7200E+01   16 .7200E+01
   17 .7200E+01   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00   22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SATURDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00   6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00   14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00   22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00   6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00   14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00   22 .0000E+00   23 .0000E+00   24 .0000E+00

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

```
 SOURCE ID = L0000128     ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .7200E+01
    9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01
14  .7200E+01   15  .7200E+01   16  .7200E+01
   17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
Vista\Gran Vista\Gran Vista.i ***        04/27/22
 *** AERMET - VERSION  19191 ***   ***
                      ***        08:26:34

                                  PAGE 137
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL  SigA Data

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
WEEK (HRDOW) *

 SOURCE ID = L0000129     ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .7200E+01
    9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01
14  .7200E+01   15  .7200E+01   16  .7200E+01
   17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
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    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

 *** MODELOPTs: RegDFAULT CONC ELEV RURAL SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

 SOURCE ID = L0000130   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -

DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .7200E+01
    9 .7200E+01   10 .7200E+01   11 .7200E+01   12 .7200E+01   13 .7200E+01
14 .7200E+01   15 .7200E+01   16 .7200E+01
   17 .7200E+01   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

DAY OF WEEK = SATURDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00

22 .0000E+00   23 .0000E+00   24 .0000E+00

                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

 SOURCE ID = L0000131   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
                                                DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00   6 .0000E+00   7 .0000E+00   8 .7200E+01
    9 .7200E+01   10 .7200E+01   11 .7200E+01   12 .7200E+01   13 .7200E+01   14 .7200E+01   15 .7200E+01   16 .7200E+01
   17 .7200E+01   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00   22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SATURDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00   6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00   14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00   22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00   6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00   14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00   22 .0000E+00   23 .0000E+00   24 .0000E+00

                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

 SOURCE ID = L0000132   ; SOURCE TYPE = VOLUME   :

```
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .7200E+01
    9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01
14  .7200E+01   15  .7200E+01   16  .7200E+01
   17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
Vista\Gran Vista\Gran Vista.i ***        04/27/22
 *** AERMET - VERSION  19191 ***   ***
                       ***        08:26:34

                                  PAGE 141
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL  SigA Data

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
WEEK (HRDOW) *

 SOURCE ID = L0000133     ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .7200E+01
    9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01
14  .7200E+01   15  .7200E+01   16  .7200E+01
   17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
```

6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                              DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
WEEK (HRDOW) *

 SOURCE ID = L0000134   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -
                                              DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .7200E+01
    9 .7200E+01   10 .7200E+01   11 .7200E+01   12 .7200E+01   13 .7200E+01
14 .7200E+01   15 .7200E+01   16 .7200E+01
   17 .7200E+01   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                              DAY OF WEEK = SATURDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                              DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

 SOURCE ID = L0000135   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -

                                                DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00   6 .0000E+00   7 .0000E+00   8 .7200E+01
    9 .7200E+01   10 .7200E+01   11 .7200E+01   12 .7200E+01   13 .7200E+01   14 .7200E+01   15 .7200E+01   16 .7200E+01
   17 .7200E+01   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00   22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SATURDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00   6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00   14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00   22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00   6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00   14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00   22 .0000E+00   23 .0000E+00   24 .0000E+00

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

 SOURCE ID = L0000136   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR

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 - - -
```

14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

                                                DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

 SOURCE ID = L0000138   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - -

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000139 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.7200E+01
9	.7200E+01	10	.7200E+01	11	.7200E+01	12	.7200E+01	13	.7200E+01	14	.7200E+01	15	.7200E+01	16	.7200E+01
17	.7200E+01	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000140 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000141 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00 5 .0000E+00
6 .0000E+00 7 .0000E+00 8 .7200E+01
9 .7200E+01 10 .7200E+01 11 .7200E+01 12 .7200E+01 13 .7200E+01
14 .7200E+01 15 .7200E+01 16 .7200E+01
17 .7200E+01 18 .0000E+00 19 .0000E+00 20 .0000E+00 21 .0000E+00
22 .0000E+00 23 .0000E+00 24 .0000E+00
DAY OF WEEK = SATURDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00 5 .0000E+00
6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00 13 .0000E+00
14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00 21 .0000E+00

22 .0000E+00   23 .0000E+00   24 .0000E+00

DAY OF WEEK = SUNDAY

1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

*** MODELOPTs: RegDFAULT CONC ELEV RURAL SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000142   ; SOURCE TYPE = VOLUME   :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .7200E+01
9 .7200E+01   10 .7200E+01   11 .7200E+01   12 .7200E+01   13 .7200E+01
14 .7200E+01   15 .7200E+01   16 .7200E+01
17 .7200E+01   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

DAY OF WEEK = SATURDAY

1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

DAY OF WEEK = SUNDAY

1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000143 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.7200E+01
9	.7200E+01	10	.7200E+01	11	.7200E+01	12	.7200E+01	13	.7200E+01	14	.7200E+01	15	.7200E+01	16	.7200E+01
17	.7200E+01	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SATURDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SUNDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000144 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00

```
6  .0000E+00    7  .0000E+00    8  .7200E+01
    9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01
14  .7200E+01   15  .7200E+01   16  .7200E+01
   17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
Vista\Gran Vista\Gran Vista.i ***        04/27/22
 *** AERMET - VERSION  19191 ***   ***
                      ***       08:26:34

                                  PAGE 153
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL  SigA Data

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
WEEK (HRDOW) *

 SOURCE ID = L0000145     ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - -
                                            DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .7200E+01
    9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01
14  .7200E+01   15  .7200E+01   16  .7200E+01
   17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
```

```
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
Vista\Gran Vista\Gran Vista.i ***        04/27/22
 *** AERMET - VERSION  19191 ***   ***
                       ***        08:26:34

                                  PAGE 154
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL  SigA Data

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
WEEK (HRDOW) *

 SOURCE ID = L0000146     ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .7200E+01
    9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01
14  .7200E+01   15  .7200E+01   16  .7200E+01
   17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
Vista\Gran Vista\Gran Vista.i ***        04/27/22
 *** AERMET - VERSION  19191 ***   ***
                       ***        08:26:34

                                  PAGE 155
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL  SigA Data
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SOURCE ID = L0000147 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.7200E+01
9	.7200E+01	10	.7200E+01	11	.7200E+01	12	.7200E+01	13	.7200E+01	14	.7200E+01	15	.7200E+01	16	.7200E+01
17	.7200E+01	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SATURDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SUNDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000148 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.7200E+01
9	.7200E+01	10	.7200E+01	11	.7200E+01	12	.7200E+01	13	.7200E+01						

14 .7200E+01   15 .7200E+01   16 .7200E+01
   17 .7200E+01   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                          DAY OF WEEK = SATURDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                          DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

 SOURCE ID = L0000149   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
                                          DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .7200E+01
    9 .7200E+01   10 .7200E+01   11 .7200E+01   12 .7200E+01   13 .7200E+01
14 .7200E+01   15 .7200E+01   16 .7200E+01
   17 .7200E+01   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                          DAY OF WEEK = SATURDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                          DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
WEEK (HRDOW) *

 SOURCE ID = L0000150   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -
                                              DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .7200E+01
    9 .7200E+01   10 .7200E+01   11 .7200E+01   12 .7200E+01   13 .7200E+01
14 .7200E+01   15 .7200E+01   16 .7200E+01
   17 .7200E+01   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                              DAY OF WEEK = SATURDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                              DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF

WEEK (HRDOW) *

 SOURCE ID = L0000151   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - -

22 .0000E+00   23 .0000E+00   24 .0000E+00

DAY OF WEEK = SATURDAY

1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

DAY OF WEEK = SUNDAY

1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000153   ; SOURCE TYPE = VOLUME   :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .7200E+01
9 .7200E+01   10 .7200E+01   11 .7200E+01   12 .7200E+01   13 .7200E+01
14 .7200E+01   15 .7200E+01   16 .7200E+01
17 .7200E+01   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

DAY OF WEEK = SATURDAY

1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

DAY OF WEEK = SUNDAY

1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
WEEK (HRDOW) *

 SOURCE ID = L0000154   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - -

```
 SOURCE ID = L0000155     ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .7200E+01
    9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01
14  .7200E+01   15  .7200E+01   16  .7200E+01
   17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
Vista\Gran Vista\Gran Vista.i ***        04/27/22
 *** AERMET - VERSION  19191 ***   ***
                      ***        08:26:34

                                PAGE 164
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL  SigA Data

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
WEEK (HRDOW) *

 SOURCE ID = L0000156     ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .7200E+01
    9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01
14  .7200E+01   15  .7200E+01   16  .7200E+01
   17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
```

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    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
*** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
Vista\Gran Vista\Gran Vista.i ***        04/27/22
 *** AERMET - VERSION  19191 ***   ***
                      ***        08:26:34

                                  PAGE 165
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL  SigA Data

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
WEEK (HRDOW) *

 SOURCE ID = L0000157     ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .7200E+01
    9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01
14  .7200E+01   15  .7200E+01   16  .7200E+01
   17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
```

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

 SOURCE ID = L0000158   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
                                                  DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00   6 .0000E+00   7 .0000E+00   8 .7200E+01
    9 .7200E+01   10 .7200E+01   11 .7200E+01   12 .7200E+01   13 .7200E+01   14 .7200E+01   15 .7200E+01   16 .7200E+01
   17 .7200E+01   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00   22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                  DAY OF WEEK = SATURDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00   6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00   14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00   22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                  DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00   6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00   14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00   22 .0000E+00   23 .0000E+00   24 .0000E+00

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

 SOURCE ID = L0000159   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR

HOUR SCALAR HOUR SCALAR HOUR SCALAR

DAY OF WEEK = WEEKDAY

1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00 5 .0000E+00
6 .0000E+00 7 .0000E+00 8 .7200E+01
9 .7200E+01 10 .7200E+01 11 .7200E+01 12 .7200E+01 13 .7200E+01
14 .7200E+01 15 .7200E+01 16 .7200E+01
17 .7200E+01 18 .0000E+00 19 .0000E+00 20 .0000E+00 21 .0000E+00
22 .0000E+00 23 .0000E+00 24 .0000E+00

DAY OF WEEK = SATURDAY

1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00 5 .0000E+00
6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00 13 .0000E+00
14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00 21 .0000E+00
22 .0000E+00 23 .0000E+00 24 .0000E+00

DAY OF WEEK = SUNDAY

1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00 5 .0000E+00
6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00 13 .0000E+00
14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00 21 .0000E+00
22 .0000E+00 23 .0000E+00 24 .0000E+00

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000160 ; SOURCE TYPE = VOLUME :

HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR

DAY OF WEEK = WEEKDAY

1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00 5 .0000E+00
6 .0000E+00 7 .0000E+00 8 .7200E+01
9 .7200E+01 10 .7200E+01 11 .7200E+01 12 .7200E+01 13 .7200E+01
14 .7200E+01 15 .7200E+01 16 .7200E+01
17 .7200E+01 18 .0000E+00 19 .0000E+00 20 .0000E+00 21 .0000E+00
22 .0000E+00 23 .0000E+00 24 .0000E+00

DAY OF WEEK = SATURDAY

1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00 5 .0000E+00
6 .0000E+00 7 .0000E+00 8 .0000E+00

```
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↑ *** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
Vista\Gran Vista\Gran Vista.i ***        04/27/22
 *** AERMET - VERSION  19191 ***   ***
                       ***        08:26:34

                                  PAGE 169
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL  SigA Data

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
WEEK (HRDOW) *

 SOURCE ID = L0000161     ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .7200E+01
    9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01
14  .7200E+01   15  .7200E+01   16  .7200E+01
   17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↑ *** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
Vista\Gran Vista\Gran Vista.i ***        04/27/22
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* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000162   ; SOURCE TYPE = VOLUME   :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.7200E+01
9	.7200E+01	10	.7200E+01	11	.7200E+01	12	.7200E+01	13	.7200E+01	14	.7200E+01	15	.7200E+01	16	.7200E+01
17	.7200E+01	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SATURDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SUNDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000163   ; SOURCE TYPE = VOLUME   :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

```
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                                    DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .7200E+01
    9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01
14  .7200E+01   15  .7200E+01   16  .7200E+01
   17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                    DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                    DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
Vista\Gran Vista\Gran Vista.i ***        04/27/22
 *** AERMET - VERSION  19191 ***   ***
                      ***        08:26:34

                                  PAGE 172
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL  SigA Data

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
WEEK (HRDOW) *

 SOURCE ID = L0000164     ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                                    DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .7200E+01
    9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01
14  .7200E+01   15  .7200E+01   16  .7200E+01
   17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                    DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
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                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
WEEK (HRDOW) *

 SOURCE ID = L0000165   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -
                                                DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .7200E+01
    9 .7200E+01   10 .7200E+01   11 .7200E+01   12 .7200E+01   13 .7200E+01
14 .7200E+01   15 .7200E+01   16 .7200E+01
   17 .7200E+01   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SATURDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000166 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.7200E+01
9	.7200E+01	10	.7200E+01	11	.7200E+01	12	.7200E+01	13	.7200E+01	14	.7200E+01	15	.7200E+01	16	.7200E+01
17	.7200E+01	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000167 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = WEEKDAY															

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    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .7200E+01
    9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01
14  .7200E+01   15  .7200E+01   16  .7200E+01
   17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00

                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00

                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
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                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
WEEK (HRDOW) *

 SOURCE ID = L0000168     ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -

                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .7200E+01
    9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01
14  .7200E+01   15  .7200E+01   16  .7200E+01
   17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00

                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
```

DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00 5 .0000E+00
6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00 13 .0000E+00
14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00 21 .0000E+00
22 .0000E+00 23 .0000E+00 24 .0000E+00

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000169 ; SOURCE TYPE = VOLUME :
HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR
- - - -

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000170 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.7200E+01
9	.7200E+01	10	.7200E+01	11	.7200E+01	12	.7200E+01	13	.7200E+01	14	.7200E+01	15	.7200E+01	16	.7200E+01
17	.7200E+01	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

*** MODELOPTs: RegDFAULT CONC ELEV RURAL SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000171 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.7200E+01

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    9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01
14  .7200E+01   15  .7200E+01   16  .7200E+01
   17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
Vista\Gran Vista\Gran Vista.i ***        04/27/22
 *** AERMET - VERSION  19191 ***   ***
                      ***        08:26:34

                                  PAGE 180
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL  SigA Data

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
WEEK (HRDOW) *

 SOURCE ID = L0000172     ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .7200E+01
    9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01
14  .7200E+01   15  .7200E+01   16  .7200E+01
   17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
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6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
WEEK (HRDOW) *

 SOURCE ID = L0000173   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -
                                                DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .7200E+01
    9 .7200E+01   10 .7200E+01   11 .7200E+01   12 .7200E+01   13 .7200E+01
14 .7200E+01   15 .7200E+01   16 .7200E+01
   17 .7200E+01   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SATURDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000174 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.7200E+01
9	.7200E+01	10	.7200E+01	11	.7200E+01	12	.7200E+01	13	.7200E+01	14	.7200E+01	15	.7200E+01	16	.7200E+01
17	.7200E+01	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SATURDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SUNDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000175 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.7200E+01
9	.7200E+01	10	.7200E+01	11	.7200E+01	12	.7200E+01	13	.7200E+01	14	.7200E+01	15	.7200E+01	16	.7200E+01

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
WEEK (HRDOW) *

 SOURCE ID = L0000176   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -
                                                DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .7200E+01
    9 .7200E+01   10 .7200E+01   11 .7200E+01   12 .7200E+01   13 .7200E+01
14 .7200E+01   15 .7200E+01   16 .7200E+01
   17 .7200E+01   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SATURDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00

14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

 SOURCE ID = L0000177   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
                                                DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00   6 .0000E+00   7 .0000E+00   8 .7200E+01
    9 .7200E+01   10 .7200E+01   11 .7200E+01   12 .7200E+01   13 .7200E+01   14 .7200E+01   15 .7200E+01   16 .7200E+01
   17 .7200E+01   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00   22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SATURDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00   6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00   14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00   22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00   6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00   14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00   22 .0000E+00   23 .0000E+00   24 .0000E+00

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

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 SOURCE ID = L0000178     ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .7200E+01
    9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01
14  .7200E+01   15  .7200E+01   16  .7200E+01
   17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↑ *** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
Vista\Gran Vista\Gran Vista.i ***        04/27/22
 *** AERMET - VERSION  19191 ***   ***
                      ***        08:26:34

                                  PAGE 187
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL  SigA Data

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
WEEK (HRDOW) *

 SOURCE ID = L0000179     ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .7200E+01
    9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01
14  .7200E+01   15  .7200E+01   16  .7200E+01
   17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
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                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
WEEK (HRDOW) *

 SOURCE ID = L0000180   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -
                                                DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .7200E+01
    9 .7200E+01   10 .7200E+01   11 .7200E+01   12 .7200E+01   13 .7200E+01
14 .7200E+01   15 .7200E+01   16 .7200E+01
   17 .7200E+01   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SATURDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00

22 .0000E+00   23 .0000E+00   24 .0000E+00

                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

 SOURCE ID = L0000181   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
                                                DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00   6 .0000E+00   7 .0000E+00   8 .7200E+01
    9 .7200E+01   10 .7200E+01   11 .7200E+01   12 .7200E+01   13 .7200E+01   14 .7200E+01   15 .7200E+01   16 .7200E+01
   17 .7200E+01   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00   22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SATURDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00   6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00   14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00   22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00   6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00   14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00   22 .0000E+00   23 .0000E+00   24 .0000E+00

                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

 SOURCE ID = L0000182   ; SOURCE TYPE = VOLUME   :

```
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .7200E+01
    9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01
14  .7200E+01   15  .7200E+01   16  .7200E+01
   17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
Vista\Gran Vista\Gran Vista.i ***        04/27/22
 *** AERMET - VERSION  19191 ***   ***
                      ***        08:26:34

                                  PAGE 191
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL  SigA Data

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
WEEK (HRDOW) *

 SOURCE ID = L0000183     ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                 DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .7200E+01
    9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01
14  .7200E+01   15  .7200E+01   16  .7200E+01
   17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                 DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
```

6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                              DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
WEEK (HRDOW) *

 SOURCE ID = L0000184   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -
                                              DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .7200E+01
    9 .7200E+01   10 .7200E+01   11 .7200E+01   12 .7200E+01   13 .7200E+01
14 .7200E+01   15 .7200E+01   16 .7200E+01
   17 .7200E+01   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                              DAY OF WEEK = SATURDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                              DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

 SOURCE ID = L0000185   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -

                                                DAY OF WEEK = WEEKDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00   6 .0000E+00   7 .0000E+00   8 .7200E+01
    9 .7200E+01   10 .7200E+01   11 .7200E+01   12 .7200E+01   13 .7200E+01   14 .7200E+01   15 .7200E+01   16 .7200E+01
   17 .7200E+01   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00   22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SATURDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00   6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00   14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00   22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00   6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00   14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00   22 .0000E+00   23 .0000E+00   24 .0000E+00

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

 SOURCE ID = L0000186   ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR

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 - - -
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14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
Vista\Gran Vista\Gran Vista.i ***        04/27/22
 *** AERMET - VERSION  19191 ***   ***
                       ***        08:26:34

                                  PAGE 196
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL  SigA Data

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
WEEK (HRDOW) *

 SOURCE ID = L0000188     ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .7200E+01
    9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01
14  .7200E+01   15  .7200E+01   16  .7200E+01
   17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
Vista\Gran Vista\Gran Vista.i ***        04/27/22
 *** AERMET - VERSION  19191 ***   ***
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*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

(481885.9, 3667832.4, 174.4, 174.4, 0.0); (481905.9, 3667832.4, 173.9, 173.9, 0.0);
(481925.9, 3667832.4, 173.2, 173.2, 0.0); (482565.9, 3667832.4, 177.6, 365.8, 0.0);
(482585.9, 3667832.4, 177.6, 365.8, 0.0); (481845.9, 3667852.4, 175.7, 175.7, 0.0);
(481865.9, 3667852.4, 175.0, 175.0, 0.0); (481885.9, 3667852.4, 174.4, 174.4, 0.0);
(481905.9, 3667852.4, 174.0, 174.0, 0.0); (481925.9, 3667852.4, 173.5, 173.5, 0.0);
(482545.9, 3667852.4, 177.8, 365.8, 0.0); (482565.9, 3667852.4, 177.9, 365.8, 0.0);
(482585.9, 3667852.4, 178.3, 365.8, 0.0); (482605.9, 3667852.4, 177.8, 365.8, 0.0);
(481785.9, 3667872.4, 177.1, 177.1, 0.0); (481805.9, 3667872.4, 176.7, 176.7, 0.0);
(481825.9, 3667872.4, 176.2, 176.2, 0.0); (481845.9, 3667872.4, 175.7, 175.7, 0.0);
(481865.9, 3667872.4, 175.2, 175.2, 0.0); (481885.9, 3667872.4, 174.9, 174.9, 0.0);
(481905.9, 3667872.4, 174.5, 174.5, 0.0); (481925.9, 3667872.4, 173.6, 173.6, 0.0);
(481945.9, 3667872.4, 173.0, 173.0, 0.0); (482525.9, 3667872.4, 179.4, 365.8, 0.0);
(482545.9, 3667872.4, 178.4, 365.8, 0.0); (482565.9, 3667872.4, 178.0, 365.8, 0.0);
(482585.9, 3667872.4, 178.5, 365.8, 0.0); (482605.9, 3667872.4, 178.1, 365.8, 0.0);
(482625.9, 3667872.4, 177.5, 365.8, 0.0); (481745.9, 3667892.4, 178.0, 178.0, 0.0);
(481765.9, 3667892.4, 177.6, 177.6, 0.0); (481785.9, 3667892.4, 177.3, 177.3, 0.0);
(481805.9, 3667892.4, 176.9, 176.9, 0.0); (481825.9, 3667892.4, 176.6, 176.6, 0.0);
(481845.9, 3667892.4, 176.1, 176.1, 0.0); (481865.9, 3667892.4, 175.6, 175.6, 0.0);
(481885.9, 3667892.4, 174.9, 174.9, 0.0); (481905.9, 3667892.4, 174.3, 174.3, 0.0);
(481925.9, 3667892.4, 173.9, 173.9, 0.0); (481945.9, 3667892.4, 173.4, 173.4, 0.0);
(482485.9, 3667892.4, 182.5, 365.8, 0.0); (482505.9,

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3667892.4,     181.8,     365.8,       0.0);
     ( 482525.9, 3667892.4,     180.6,     365.8,       0.0);         ( 482545.9,
3667892.4,     179.0,     365.8,       0.0);
     ( 482565.9, 3667892.4,     178.9,     365.8,       0.0);         ( 482585.9,
3667892.4,     179.2,     365.8,       0.0);
     ( 482605.9, 3667892.4,     178.8,     365.8,       0.0);         ( 482625.9,
3667892.4,     178.6,     365.8,       0.0);
     ( 482645.9, 3667892.4,     177.8,     365.8,       0.0);         ( 481745.9,
3667912.4,     178.2,     181.0,       0.0);
     ( 481765.9, 3667912.4,     178.0,     178.0,       0.0);         ( 481785.9,
3667912.4,     177.8,     177.8,       0.0);
     ( 481805.9, 3667912.4,     177.6,     177.6,       0.0);         ( 481825.9,
3667912.4,     176.8,     176.8,       0.0);
     ( 481845.9, 3667912.4,     176.2,     176.2,       0.0);         ( 481865.9,
3667912.4,     175.7,     175.7,       0.0);
     ( 481885.9, 3667912.4,     175.2,     175.2,       0.0);         ( 481905.9,
3667912.4,     174.8,     174.8,       0.0);
     ( 481925.9, 3667912.4,     174.3,     174.3,       0.0);         ( 481945.9,
3667912.4,     173.5,     173.5,       0.0);
     ( 482465.9, 3667912.4,     183.5,     365.8,       0.0);         ( 482485.9,
3667912.4,     183.8,     365.8,       0.0);
     ( 482505.9, 3667912.4,     182.7,     365.8,       0.0);         ( 482525.9,
3667912.4,     181.6,     365.8,       0.0);
     ( 482545.9, 3667912.4,     180.7,     365.8,       0.0);         ( 482565.9,
3667912.4,     180.1,     365.8,       0.0);
     ( 482585.9, 3667912.4,     179.8,     365.8,       0.0);         ( 482605.9,
3667912.4,     179.4,     365.8,       0.0);
     ( 482625.9, 3667912.4,     179.0,     365.8,       0.0);         ( 482645.9,
3667912.4,     178.5,     365.8,       0.0);
     ( 482665.9, 3667912.4,     178.0,     365.8,       0.0);         ( 481745.9,
3667932.4,     179.4,     181.1,       0.0);
     ( 481765.9, 3667932.4,     178.2,     181.0,       0.0);         ( 481785.9,
3667932.4,     178.0,     178.0,       0.0);
     ( 481805.9, 3667932.4,     177.5,     177.5,       0.0);         ( 481825.9,
3667932.4,     177.0,     177.0,       0.0);
     ( 481845.9, 3667932.4,     176.7,     176.7,       0.0);         ( 481865.9,
3667932.4,     176.2,     176.2,       0.0);
     ( 481885.9, 3667932.4,     175.7,     175.7,       0.0);         ( 481905.9,
3667932.4,     175.0,     175.0,       0.0);
     ( 481925.9, 3667932.4,     174.4,     174.4,       0.0);         ( 481945.9,
3667932.4,     174.0,     174.0,       0.0);
     ( 481965.9, 3667932.4,     174.3,     174.3,       0.0);         ( 482485.9,
3667932.4,     184.9,     365.8,       0.0);
     ( 482505.9, 3667932.4,     183.7,     365.8,       0.0);         ( 482525.9,
3667932.4,     182.4,     365.8,       0.0);
     ( 482545.9, 3667932.4,     181.5,     365.8,       0.0);         ( 482565.9,
3667932.4,     181.0,     365.8,       0.0);
     ( 482585.9, 3667932.4,     180.3,     365.8,       0.0);         ( 482605.9,
3667932.4,     180.1,     365.8,       0.0);
 *** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
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*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

(482625.9, 3667932.4, 179.6, 365.8, 0.0); (482645.9, 3667932.4, 179.1, 365.8, 0.0);
(482665.9, 3667932.4, 178.6, 365.8, 0.0); (482685.9, 3667932.4, 178.8, 365.8, 0.0);
(481745.9, 3667952.4, 180.6, 180.6, 0.0); (481765.9, 3667952.4, 178.4, 181.1, 0.0);
(481785.9, 3667952.4, 178.2, 178.2, 0.0); (481805.9, 3667952.4, 178.0, 178.0, 0.0);
(481825.9, 3667952.4, 177.5, 177.5, 0.0); (481845.9, 3667952.4, 176.9, 176.9, 0.0);
(481865.9, 3667952.4, 176.3, 176.3, 0.0); (481885.9, 3667952.4, 175.9, 175.9, 0.0);
(481905.9, 3667952.4, 175.3, 175.3, 0.0); (481925.9, 3667952.4, 174.8, 174.8, 0.0);
(481945.9, 3667952.4, 174.4, 174.4, 0.0); (481965.9, 3667952.4, 174.4, 174.4, 0.0);
(482485.9, 3667952.4, 185.4, 365.8, 0.0); (482505.9, 3667952.4, 184.3, 365.8, 0.0);
(482525.9, 3667952.4, 183.2, 365.8, 0.0); (482545.9, 3667952.4, 182.1, 365.8, 0.0);
(482565.9, 3667952.4, 181.5, 365.8, 0.0); (482585.9, 3667952.4, 180.8, 365.8, 0.0);
(482605.9, 3667952.4, 180.4, 365.8, 0.0); (482625.9, 3667952.4, 180.0, 365.8, 0.0);
(482645.9, 3667952.4, 179.4, 365.8, 0.0); (482665.9, 3667952.4, 179.2, 365.8, 0.0);
(482685.9, 3667952.4, 179.4, 365.8, 0.0); (482705.9, 3667952.4, 179.7, 365.8, 0.0);
(481765.9, 3667972.4, 178.8, 181.0, 0.0); (481785.9, 3667972.4, 178.4, 178.4, 0.0);
(481805.9, 3667972.4, 178.4, 178.4, 0.0); (481825.9, 3667972.4, 177.5, 177.5, 0.0);
(481845.9, 3667972.4, 177.1, 177.1, 0.0); (481865.9, 3667972.4, 176.6, 176.6, 0.0);
(481885.9, 3667972.4, 176.5, 176.5, 0.0); (481905.9, 3667972.4, 175.9, 175.9, 0.0);
(481925.9, 3667972.4, 175.4, 175.4, 0.0); (481945.9, 3667972.4, 174.5, 174.5, 0.0);
(482505.9, 3667972.4, 184.6, 365.8, 0.0); (482525.9,

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3667972.4,     183.9,     365.8,       0.0);
     ( 482545.9, 3667972.4,     182.5,     365.8,       0.0);         ( 482565.9,
3667972.4,     181.5,     365.8,       0.0);
     ( 482585.9, 3667972.4,     181.1,     365.8,       0.0);         ( 482605.9,
3667972.4,     180.7,     365.8,       0.0);
     ( 482625.9, 3667972.4,     180.1,     365.8,       0.0);         ( 482645.9,
3667972.4,     179.7,     365.8,       0.0);
     ( 482665.9, 3667972.4,     179.9,     365.8,       0.0);         ( 482685.9,
3667972.4,     179.8,     365.8,       0.0);
     ( 482705.9, 3667972.4,     180.1,     365.8,       0.0);         ( 482725.9,
3667972.4,     180.6,     365.8,       0.0);
     ( 482745.9, 3667972.4,     181.2,     365.8,       0.0);         ( 481765.9,
3667992.4,     180.7,     180.7,       0.0);
     ( 481785.9, 3667992.4,     178.6,     180.7,       0.0);         ( 481805.9,
3667992.4,     178.5,     178.5,       0.0);
     ( 481825.9, 3667992.4,     177.9,     177.9,       0.0);         ( 481845.9,
3667992.4,     177.5,     177.5,       0.0);
     ( 481865.9, 3667992.4,     177.1,     177.1,       0.0);         ( 481885.9,
3667992.4,     176.6,     176.6,       0.0);
     ( 481905.9, 3667992.4,     176.0,     176.0,       0.0);         ( 482505.9,
3667992.4,     184.4,     365.8,       0.0);
     ( 482525.9, 3667992.4,     182.8,     365.8,       0.0);         ( 482545.9,
3667992.4,     182.6,     365.8,       0.0);
     ( 482565.9, 3667992.4,     181.3,     365.8,       0.0);         ( 482585.9,
3667992.4,     181.0,     365.8,       0.0);
     ( 482605.9, 3667992.4,     180.5,     365.8,       0.0);         ( 482625.9,
3667992.4,     180.1,     365.8,       0.0);
     ( 482645.9, 3667992.4,     180.1,     365.8,       0.0);         ( 482665.9,
3667992.4,     180.1,     365.8,       0.0);
     ( 482685.9, 3667992.4,     180.5,     365.8,       0.0);         ( 482705.9,
3667992.4,     180.7,     365.8,       0.0);
     ( 482725.9, 3667992.4,     181.2,     365.8,       0.0);         ( 481785.9,
3668012.4,     178.8,     180.5,       0.0);
     ( 481805.9, 3668012.4,     178.6,     178.6,       0.0);         ( 481825.9,
3668012.4,     178.5,     178.5,       0.0);
     ( 481845.9, 3668012.4,     177.7,     177.7,       0.0);         ( 481865.9,
3668012.4,     177.3,     177.3,       0.0);
     ( 482185.9, 3668012.4,     173.4,     365.8,       0.0);         ( 482485.9,
3668012.4,     183.7,     365.8,       0.0);
     ( 482505.9, 3668012.4,     183.6,     365.8,       0.0);         ( 482525.9,
3668012.4,     182.6,     365.8,       0.0);
     ( 482545.9, 3668012.4,     181.5,     365.8,       0.0);         ( 482565.9,
3668012.4,     181.2,     365.8,       0.0);
     ( 482585.9, 3668012.4,     180.6,     365.8,       0.0);         ( 482605.9,
3668012.4,     180.3,     365.8,       0.0);
     ( 482625.9, 3668012.4,     180.1,     365.8,       0.0);         ( 482645.9,
3668012.4,     180.3,     365.8,       0.0);
     ( 482665.9, 3668012.4,     180.7,     365.8,       0.0);         ( 482685.9,
3668012.4,     181.4,     365.8,       0.0);
     ( 482705.9, 3668012.4,     181.6,     365.8,       0.0);         ( 482725.9,
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3668012.4,   181.9,   365.8,   0.0);

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

     (481785.9, 3668032.4,   180.1,   180.1,   0.0);   (481805.9, 3668032.4,   178.9,   178.9,   0.0);
     (481825.9, 3668032.4,   178.7,   178.7,   0.0);   (482165.9, 3668032.4,   173.9,   365.8,   0.0);
     (482185.9, 3668032.4,   173.7,   365.8,   0.0);   (482465.9, 3668032.4,   182.6,   365.8,   0.0);
     (482485.9, 3668032.4,   182.9,   365.8,   0.0);   (482505.9, 3668032.4,   182.2,   365.8,   0.0);
     (482525.9, 3668032.4,   181.6,   365.8,   0.0);   (482545.9, 3668032.4,   180.9,   365.8,   0.0);
     (482565.9, 3668032.4,   180.3,   365.8,   0.0);   (482585.9, 3668032.4,   180.1,   365.8,   0.0);
     (482605.9, 3668032.4,   180.0,   365.8,   0.0);   (482625.9, 3668032.4,   180.0,   365.8,   0.0);
     (482645.9, 3668032.4,   180.7,   365.8,   0.0);   (482665.9, 3668032.4,   180.9,   365.8,   0.0);
     (482685.9, 3668032.4,   181.5,   365.8,   0.0);   (482705.9, 3668032.4,   181.7,   365.8,   0.0);
     (481785.9, 3668052.4,   180.2,   180.2,   0.0);   (482145.9, 3668052.4,   174.1,   365.4,   0.0);
     (482165.9, 3668052.4,   174.0,   365.8,   0.0);   (482185.9, 3668052.4,   173.7,   365.8,   0.0);
     (482445.9, 3668052.4,   177.1,   365.8,   0.0);   (482465.9, 3668052.4,   179.3,   365.8,   0.0);
     (482485.9, 3668052.4,   180.4,   365.8,   0.0);   (482505.9, 3668052.4,   180.5,   365.8,   0.0);
     (482525.9, 3668052.4,   180.6,   365.8,   0.0);   (482545.9, 3668052.4,   180.1,   365.8,   0.0);
     (482565.9, 3668052.4,   179.8,   365.8,   0.0);   (482585.9, 3668052.4,   179.7,   365.8,   0.0);
     (482605.9, 3668052.4,   179.6,   365.8,   0.0);   (482625.9, 3668052.4,   179.8,   365.8,   0.0);
     (482645.9, 3668052.4,   180.2,   365.8,   0.0);   (482665.9, 3668052.4,   180.9,   365.8,   0.0);
     (482685.9, 3668052.4,   181.0,   365.8,   0.0);   (482125.9, 3668072.4,   174.4,   364.3,   0.0);
     (482145.9, 3668072.4,   174.2,   365.5,   0.0);   (482165.9,

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3668072.4,     174.0,     365.8,       0.0);
     ( 482185.9, 3668072.4,     173.8,     365.8,       0.0);         ( 482205.9,
3668072.4,     174.1,     365.8,       0.0);
     ( 482425.9, 3668072.4,     175.9,     365.8,       0.0);         ( 482445.9,
3668072.4,     176.9,     365.8,       0.0);
     ( 482465.9, 3668072.4,     177.4,     365.8,       0.0);         ( 482485.9,
3668072.4,     178.8,     365.8,       0.0);
     ( 482505.9, 3668072.4,     178.7,     365.8,       0.0);         ( 482525.9,
3668072.4,     179.7,     365.8,       0.0);
     ( 482545.9, 3668072.4,     178.9,     365.8,       0.0);         ( 482565.9,
3668072.4,     179.2,     365.8,       0.0);
     ( 482585.9, 3668072.4,     179.2,     365.8,       0.0);         ( 482605.9,
3668072.4,     179.0,     365.8,       0.0);
     ( 482625.9, 3668072.4,     179.2,     365.8,       0.0);         ( 482645.9,
3668072.4,     180.0,     365.8,       0.0);
     ( 482665.9, 3668072.4,     180.6,     365.8,       0.0);         ( 482105.9,
3668092.4,     174.0,     174.0,       0.0);
     ( 482125.9, 3668092.4,     174.4,     364.9,       0.0);         ( 482145.9,
3668092.4,     174.4,     365.8,       0.0);
     ( 482165.9, 3668092.4,     174.6,     365.8,       0.0);         ( 482185.9,
3668092.4,     174.3,     365.8,       0.0);
     ( 482205.9, 3668092.4,     174.2,     365.8,       0.0);         ( 482405.9,
3668092.4,     175.4,     365.8,       0.0);
     ( 482425.9, 3668092.4,     175.7,     365.8,       0.0);         ( 482445.9,
3668092.4,     176.1,     365.8,       0.0);
     ( 482465.9, 3668092.4,     177.0,     365.8,       0.0);         ( 482485.9,
3668092.4,     177.2,     365.8,       0.0);
     ( 482505.9, 3668092.4,     177.6,     365.8,       0.0);         ( 482525.9,
3668092.4,     177.9,     365.8,       0.0);
     ( 482545.9, 3668092.4,     178.3,     365.8,       0.0);         ( 482565.9,
3668092.4,     178.5,     365.8,       0.0);
     ( 482585.9, 3668092.4,     178.8,     365.8,       0.0);         ( 482605.9,
3668092.4,     178.9,     365.8,       0.0);
     ( 482625.9, 3668092.4,     179.2,     365.8,       0.0);         ( 482645.9,
3668092.4,     180.0,     365.8,       0.0);
     ( 482065.9, 3668112.4,     175.4,     175.4,       0.0);         ( 482085.9,
3668112.4,     174.8,     174.8,       0.0);
     ( 482105.9, 3668112.4,     174.3,     174.3,       0.0);         ( 482125.9,
3668112.4,     174.3,     365.4,       0.0);
     ( 482145.9, 3668112.4,     174.7,     365.8,       0.0);         ( 482165.9,
3668112.4,     175.0,     365.8,       0.0);
     ( 482185.9, 3668112.4,     175.4,     365.8,       0.0);         ( 482205.9,
3668112.4,     174.4,     365.8,       0.0);
     ( 482225.9, 3668112.4,     174.4,     365.8,       0.0);         ( 482385.9,
3668112.4,     175.4,     365.8,       0.0);
     ( 482405.9, 3668112.4,     175.6,     365.8,       0.0);         ( 482425.9,
3668112.4,     175.7,     365.8,       0.0);
     ( 482445.9, 3668112.4,     176.1,     365.8,       0.0);         ( 482465.9,
3668112.4,     176.4,     365.8,       0.0);
     ( 482485.9, 3668112.4,     176.6,     365.8,       0.0);         ( 482505.9,
```

3668112.4,   177.2,   365.8,   0.0);
     (482525.9, 3668112.4,   177.8,   365.8,   0.0);   (482545.9,
3668112.4,   178.0,   365.8,   0.0);

 *** MODELOPTs: RegDFAULT CONC ELEV RURAL SigA Data

                                          *** DISCRETE CARTESIAN RECEPTORS ***
                                       (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                                (METERS)

     (482565.9, 3668112.4,   178.4,   365.8,   0.0);   (482585.9,
3668112.4,   178.7,   365.8,   0.0);
     (482605.9, 3668112.4,   178.9,   365.8,   0.0);   (482625.9,
3668112.4,   179.3,   365.8,   0.0);
     (482045.9, 3668132.4,   175.9,   175.9,   0.0);   (482065.9,
3668132.4,   175.8,   175.8,   0.0);
     (482085.9, 3668132.4,   175.2,   211.3,   0.0);   (482105.9,
3668132.4,   174.9,   363.7,   0.0);
     (482125.9, 3668132.4,   175.3,   365.4,   0.0);   (482145.9,
3668132.4,   174.6,   365.8,   0.0);
     (482165.9, 3668132.4,   174.9,   365.8,   0.0);   (482185.9,
3668132.4,   175.4,   365.8,   0.0);
     (482205.9, 3668132.4,   175.6,   365.8,   0.0);   (482225.9,
3668132.4,   174.8,   365.8,   0.0);
     (482405.9, 3668132.4,   175.6,   365.8,   0.0);   (482425.9,
3668132.4,   175.9,   365.8,   0.0);
     (482445.9, 3668132.4,   176.1,   365.8,   0.0);   (482465.9,
3668132.4,   176.2,   365.8,   0.0);
     (482485.9, 3668132.4,   176.7,   365.8,   0.0);   (482505.9,
3668132.4,   177.0,   365.8,   0.0);
     (482525.9, 3668132.4,   177.3,   365.8,   0.0);   (482545.9,
3668132.4,   177.4,   365.8,   0.0);
     (482565.9, 3668132.4,   177.8,   365.8,   0.0);   (482585.9,
3668132.4,   178.3,   365.8,   0.0);
     (482605.9, 3668132.4,   178.7,   365.8,   0.0);   (482025.9,
3668152.4,   176.8,   211.3,   0.0);
     (482045.9, 3668152.4,   176.8,   211.9,   0.0);   (482065.9,
3668152.4,   175.9,   216.4,   0.0);
     (482085.9, 3668152.4,   175.9,   216.4,   0.0);   (482105.9,
3668152.4,   175.9,   215.7,   0.0);
     (482125.9, 3668152.4,   175.6,   365.5,   0.0);   (482145.9,
3668152.4,   175.3,   365.8,   0.0);
     (482165.9, 3668152.4,   174.8,   365.8,   0.0);   (482185.9,
3668152.4,   175.2,   365.8,   0.0);
     (482205.9, 3668152.4,   175.7,   365.8,   0.0);   (482225.9,

3668152.4,   175.8,   365.8,   0.0);
     (482245.9, 3668152.4,   174.6,   365.8,   0.0);   (482425.9,
3668152.4,   175.8,   365.8,   0.0);
     (482445.9, 3668152.4,   175.9,   365.8,   0.0);   (482465.9,
3668152.4,   176.3,   365.8,   0.0);
     (482485.9, 3668152.4,   176.6,   365.8,   0.0);   (482505.9,
3668152.4,   176.7,   365.8,   0.0);
     (482525.9, 3668152.4,   177.3,   365.8,   0.0);   (482545.9,
3668152.4,   177.6,   365.8,   0.0);
     (482565.9, 3668152.4,   177.9,   365.8,   0.0);   (482585.9,
3668152.4,   178.5,   365.8,   0.0);
     (481545.9, 3668172.4,   192.5,   192.5,   0.0);   (481565.9,
3668172.4,   192.0,   194.4,   0.0);
     (481585.9, 3668172.4,   191.7,   194.5,   0.0);   (482005.9,
3668172.4,   177.8,   216.4,   0.0);
     (482025.9, 3668172.4,   177.4,   217.7,   0.0);   (482045.9,
3668172.4,   176.6,   219.0,   0.0);
     (482065.9, 3668172.4,   177.5,   216.9,   0.0);   (482085.9,
3668172.4,   176.5,   218.3,   0.0);
     (482105.9, 3668172.4,   176.2,   363.7,   0.0);   (482125.9,
3668172.4,   175.5,   365.8,   0.0);
     (482145.9, 3668172.4,   175.6,   365.8,   0.0);   (482165.9,
3668172.4,   175.6,   365.8,   0.0);
     (482185.9, 3668172.4,   175.2,   365.8,   0.0);   (482205.9,
3668172.4,   175.5,   365.8,   0.0);
     (482225.9, 3668172.4,   176.0,   365.8,   0.0);   (482245.9,
3668172.4,   176.1,   365.8,   0.0);
     (482445.9, 3668172.4,   176.3,   365.8,   0.0);   (482465.9,
3668172.4,   176.7,   365.8,   0.0);
     (482485.9, 3668172.4,   176.9,   365.8,   0.0);   (482505.9,
3668172.4,   177.1,   365.8,   0.0);
     (482525.9, 3668172.4,   177.4,   365.8,   0.0);   (482545.9,
3668172.4,   177.8,   365.8,   0.0);
     (482565.9, 3668172.4,   178.3,   365.8,   0.0);   (481505.9,
3668192.4,   191.9,   191.9,   0.0);
     (481525.9, 3668192.4,   192.9,   192.9,   0.0);   (481545.9,
3668192.4,   193.2,   194.2,   0.0);
     (481565.9, 3668192.4,   194.0,   194.0,   0.0);   (481585.9,
3668192.4,   194.4,   194.4,   0.0);
     (481985.9, 3668192.4,   178.7,   218.3,   0.0);   (482005.9,
3668192.4,   178.0,   220.3,   0.0);
     (482025.9, 3668192.4,   177.4,   221.0,   0.0);   (482045.9,
3668192.4,   177.1,   221.7,   0.0);
     (482065.9, 3668192.4,   177.9,   219.8,   0.0);   (482085.9,
3668192.4,   178.1,   219.8,   0.0);
     (482105.9, 3668192.4,   178.1,   218.3,   0.0);   (482125.9,
3668192.4,   178.0,   364.9,   0.0);
     (482145.9, 3668192.4,   177.7,   365.8,   0.0);   (482165.9,
3668192.4,   175.7,   365.8,   0.0);
     (482185.9, 3668192.4,   175.8,   365.8,   0.0);   (482205.9,

3668192.4,   175.5,   365.8,   0.0);
     (482225.9, 3668192.4,   175.7,   365.8,   0.0);   (482245.9,
3668192.4,   176.2,   365.8,   0.0);
     (482265.9, 3668192.4,   176.3,   365.8,   0.0);   (482465.9,
3668192.4,   176.6,   365.8,   0.0);

                                                *** DISCRETE CARTESIAN RECEPTORS ***
                                              (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                                          (METERS)

     (482485.9, 3668192.4,   176.9,   365.8,   0.0);   (482505.9,
3668192.4,   177.6,   365.8,   0.0);
     (482525.9, 3668192.4,   177.8,   365.8,   0.0);   (482545.9,
3668192.4,   178.3,   365.8,   0.0);
     (481445.9, 3668212.4,   186.2,   192.8,   0.0);   (481465.9,
3668212.4,   189.1,   192.3,   0.0);
     (481485.9, 3668212.4,   190.7,   192.2,   0.0);   (481505.9,
3668212.4,   192.0,   192.0,   0.0);
     (481525.9, 3668212.4,   192.8,   194.0,   0.0);   (481545.9,
3668212.4,   193.9,   193.9,   0.0);
     (481565.9, 3668212.4,   194.0,   194.0,   0.0);   (481585.9,
3668212.4,   194.4,   194.4,   0.0);
     (481605.9, 3668212.4,   191.9,   194.5,   0.0);   (481965.9,
3668212.4,   180.0,   219.0,   0.0);
     (481985.9, 3668212.4,   179.0,   221.7,   0.0);   (482005.9,
3668212.4,   178.1,   222.6,   0.0);
     (482025.9, 3668212.4,   177.8,   222.6,   0.0);   (482045.9,
3668212.4,   177.7,   222.6,   0.0);
     (482065.9, 3668212.4,   177.7,   222.6,   0.0);   (482085.9,
3668212.4,   178.0,   221.7,   0.0);
     (482105.9, 3668212.4,   178.2,   221.7,   0.0);   (482125.9,
3668212.4,   178.4,   364.9,   0.0);
     (482145.9, 3668212.4,   178.7,   365.8,   0.0);   (482165.9,
3668212.4,   178.7,   365.8,   0.0);
     (482185.9, 3668212.4,   176.0,   365.8,   0.0);   (482205.9,
3668212.4,   176.1,   365.8,   0.0);
     (482225.9, 3668212.4,   175.8,   365.8,   0.0);   (482245.9,
3668212.4,   176.0,   365.8,   0.0);
     (482265.9, 3668212.4,   176.5,   365.8,   0.0);   (482485.9,
3668212.4,   177.7,   365.8,   0.0);
     (482505.9, 3668212.4,   177.9,   365.8,   0.0);   (482525.9,
3668212.4,   178.0,   365.8,   0.0);
     (481405.9, 3668232.4,   182.0,   193.0,   0.0);   (481425.9,

3668232.4,   183.8,   193.0,   0.0);
     (481445.9, 3668232.4,   185.7,   193.0,   0.0);   (481465.9,
3668232.4,   190.3,   192.4,   0.0);
     (481485.9, 3668232.4,   192.1,   192.1,   0.0);   (481505.9,
3668232.4,   192.1,   192.1,   0.0);
     (481525.9, 3668232.4,   192.7,   192.7,   0.0);   (481545.9,
3668232.4,   193.5,   193.5,   0.0);
     (481565.9, 3668232.4,   193.4,   193.4,   0.0);   (481585.9,
3668232.4,   193.3,   193.3,   0.0);
     (481605.9, 3668232.4,   193.3,   193.7,   0.0);   (481945.9,
3668232.4,   181.7,   219.0,   0.0);
     (481965.9, 3668232.4,   180.7,   221.7,   0.0);   (481985.9,
3668232.4,   179.2,   222.7,   0.0);
     (482005.9, 3668232.4,   179.2,   222.6,   0.0);   (482025.9,
3668232.4,   179.2,   222.7,   0.0);
     (482045.9, 3668232.4,   178.1,   224.0,   0.0);   (482065.9,
3668232.4,   178.1,   224.0,   0.0);
     (482085.9, 3668232.4,   178.1,   223.1,   0.0);   (482105.9,
3668232.4,   178.2,   222.6,   0.0);
     (482125.9, 3668232.4,   178.7,   365.4,   0.0);   (482145.9,
3668232.4,   178.8,   365.8,   0.0);
     (482165.9, 3668232.4,   179.1,   365.8,   0.0);   (482185.9,
3668232.4,   178.0,   365.8,   0.0);
     (482205.9, 3668232.4,   176.4,   365.8,   0.0);   (482225.9,
3668232.4,   176.5,   365.8,   0.0);
     (482245.9, 3668232.4,   176.1,   365.8,   0.0);   (482265.9,
3668232.4,   176.1,   365.8,   0.0);
     (482505.9, 3668232.4,   178.2,   365.8,   0.0);   (481365.9,
3668252.4,   177.1,   193.0,   0.0);
     (481385.9, 3668252.4,   179.2,   193.0,   0.0);   (481405.9,
3668252.4,   182.8,   193.0,   0.0);
     (481425.9, 3668252.4,   184.2,   193.0,   0.0);   (481445.9,
3668252.4,   186.5,   193.0,   0.0);
     (481465.9, 3668252.4,   189.4,   192.8,   0.0);   (481485.9,
3668252.4,   192.6,   192.6,   0.0);
     (481505.9, 3668252.4,   192.3,   192.3,   0.0);   (481525.9,
3668252.4,   192.6,   192.6,   0.0);
     (481545.9, 3668252.4,   193.1,   193.1,   0.0);   (481565.9,
3668252.4,   193.7,   193.7,   0.0);
     (481585.9, 3668252.4,   192.6,   192.6,   0.0);   (481605.9,
3668252.4,   192.7,   192.7,   0.0);
     (481925.9, 3668252.4,   183.3,   218.6,   0.0);   (481945.9,
3668252.4,   182.3,   221.7,   0.0);
     (481965.9, 3668252.4,   180.8,   222.7,   0.0);   (481985.9,
3668252.4,   180.9,   222.7,   0.0);
     (482005.9, 3668252.4,   181.5,   222.6,   0.0);   (482025.9,
3668252.4,   182.1,   222.6,   0.0);
     (482045.9, 3668252.4,   181.6,   222.6,   0.0);   (482065.9,
3668252.4,   180.8,   222.7,   0.0);
     (482085.9, 3668252.4,   179.9,   224.0,   0.0);   (482105.9,

3668252.4,   178.6,   363.7,   0.0);
     (482125.9, 3668252.4,   179.0,   365.4,   0.0);   (482145.9,
3668252.4,   179.5,   365.8,   0.0);
     (482165.9, 3668252.4,   180.3,   365.8,   0.0);   (482185.9,
3668252.4,   180.0,   365.8,   0.0);
     (482205.9, 3668252.4,   178.8,   365.8,   0.0);   (482225.9,
3668252.4,   176.6,   365.8,   0.0);

                                                *** DISCRETE CARTESIAN RECEPTORS ***
                                              (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                                          (METERS)

     (482245.9, 3668252.4,   176.8,   365.8,   0.0);   (481325.9,
3668272.4,   173.8,   193.0,   0.0);
     (481345.9, 3668272.4,   178.4,   192.8,   0.0);   (481365.9,
3668272.4,   178.5,   193.0,   0.0);
     (481385.9, 3668272.4,   181.9,   193.0,   0.0);   (481405.9,
3668272.4,   182.8,   193.0,   0.0);
     (481425.9, 3668272.4,   184.2,   193.0,   0.0);   (481445.9,
3668272.4,   185.4,   193.0,   0.0);
     (481465.9, 3668272.4,   185.6,   193.0,   0.0);   (481485.9,
3668272.4,   192.7,   192.7,   0.0);
     (481505.9, 3668272.4,   192.3,   192.3,   0.0);   (481525.9,
3668272.4,   192.0,   192.0,   0.0);
     (481545.9, 3668272.4,   192.2,   192.2,   0.0);   (481565.9,
3668272.4,   192.7,   193.7,   0.0);
     (481585.9, 3668272.4,   191.7,   191.7,   0.0);   (481605.9,
3668272.4,   191.3,   192.1,   0.0);
     (481625.9, 3668272.4,   189.7,   192.8,   0.0);   (481905.9,
3668272.4,   184.8,   218.6,   0.0);
     (481925.9, 3668272.4,   184.2,   221.6,   0.0);   (481945.9,
3668272.4,   182.8,   222.7,   0.0);
     (481965.9, 3668272.4,   182.9,   222.7,   0.0);   (481985.9,
3668272.4,   181.6,   224.0,   0.0);
     (482005.9, 3668272.4,   181.7,   224.0,   0.0);   (482025.9,
3668272.4,   182.4,   224.0,   0.0);
     (482045.9, 3668272.4,   182.8,   222.7,   0.0);   (482065.9,
3668272.4,   183.1,   222.6,   0.0);
     (482085.9, 3668272.4,   183.2,   222.6,   0.0);   (482105.9,
3668272.4,   183.2,   221.9,   0.0);
     (482125.9, 3668272.4,   182.4,   222.6,   0.0);   (482145.9,
3668272.4,   180.6,   365.5,   0.0);
     (482165.9, 3668272.4,   181.5,   365.8,   0.0);   (482185.9,

```
3668272.4,     181.5,     365.8,       0.0);
     ( 482205.9, 3668272.4,     179.7,     365.8,       0.0);         ( 482225.9,
3668272.4,     178.3,     365.8,       0.0);
     ( 481265.9, 3668292.4,     165.3,     194.0,       0.0);         ( 481285.9,
3668292.4,     167.2,     194.0,       0.0);
     ( 481305.9, 3668292.4,     169.9,     193.0,       0.0);         ( 481325.9,
3668292.4,     173.2,     193.0,       0.0);
     ( 481345.9, 3668292.4,     178.2,     193.0,       0.0);         ( 481365.9,
3668292.4,     180.5,     192.8,       0.0);
     ( 481385.9, 3668292.4,     180.8,     193.0,       0.0);         ( 481405.9,
3668292.4,     182.2,     193.0,       0.0);
     ( 481425.9, 3668292.4,     183.7,     193.0,       0.0);         ( 481445.9,
3668292.4,     184.5,     193.0,       0.0);
     ( 481465.9, 3668292.4,     185.4,     193.0,       0.0);         ( 481485.9,
3668292.4,     191.1,     193.0,       0.0);
     ( 481505.9, 3668292.4,     192.0,     192.0,       0.0);         ( 481525.9,
3668292.4,     190.9,     190.9,       0.0);
     ( 481545.9, 3668292.4,     191.1,     191.1,       0.0);         ( 481565.9,
3668292.4,     191.1,     193.7,       0.0);
     ( 481585.9, 3668292.4,     190.6,     192.3,       0.0);         ( 481605.9,
3668292.4,     189.7,     190.6,       0.0);
     ( 481625.9, 3668292.4,     189.6,     190.9,       0.0);         ( 481885.9,
3668292.4,     186.2,     216.5,       0.0);
     ( 481905.9, 3668292.4,     186.3,     220.3,       0.0);         ( 481925.9,
3668292.4,     184.8,     222.6,       0.0);
     ( 481945.9, 3668292.4,     185.0,     222.6,       0.0);         ( 481965.9,
3668292.4,     183.4,     224.0,       0.0);
     ( 481985.9, 3668292.4,     182.2,     224.1,       0.0);         ( 482005.9,
3668292.4,     182.0,     224.1,       0.0);
     ( 482025.9, 3668292.4,     182.1,     224.1,       0.0);         ( 482045.9,
3668292.4,     182.2,     224.1,       0.0);
     ( 482065.9, 3668292.4,     182.6,     224.1,       0.0);         ( 482085.9,
3668292.4,     182.9,     224.1,       0.0);
     ( 482105.9, 3668292.4,     182.9,     224.0,       0.0);         ( 482125.9,
3668292.4,     182.6,     224.0,       0.0);
     ( 482145.9, 3668292.4,     182.0,     365.4,       0.0);         ( 482165.9,
3668292.4,     182.1,     365.8,       0.0);
     ( 482185.9, 3668292.4,     181.7,     365.8,       0.0);         ( 482205.9,
3668292.4,     180.1,     365.8,       0.0);
     ( 481225.9, 3668312.4,     161.9,     208.1,       0.0);         ( 481245.9,
3668312.4,     163.9,     193.0,       0.0);
     ( 481265.9, 3668312.4,     166.9,     193.0,       0.0);         ( 481285.9,
3668312.4,     168.7,     193.0,       0.0);
     ( 481305.9, 3668312.4,     169.8,     193.0,       0.0);         ( 481325.9,
3668312.4,     172.9,     193.0,       0.0);
     ( 481345.9, 3668312.4,     174.4,     193.0,       0.0);         ( 481365.9,
3668312.4,     181.5,     181.5,       0.0);
     ( 481385.9, 3668312.4,     181.6,     193.0,       0.0);         ( 481405.9,
3668312.4,     182.7,     193.0,       0.0);
     ( 481425.9, 3668312.4,     183.4,     193.0,       0.0);         ( 481445.9,
```

3668312.4,   184.6,   193.0,   0.0);
     (481465.9, 3668312.4,   185.6,   193.0,   0.0);   (481485.9,
3668312.4,   186.5,   193.0,   0.0);
     (481505.9, 3668312.4,   191.2,   191.2,   0.0);   (481525.9,
3668312.4,   189.5,   191.0,   0.0);
     (481545.9, 3668312.4,   188.8,   193.7,   0.0);   (481565.9,
3668312.4,   189.0,   193.7,   0.0);
     (481585.9, 3668312.4,   189.2,   192.3,   0.0);   (481605.9,
3668312.4,   188.0,   192.3,   0.0);

                                                *** DISCRETE CARTESIAN RECEPTORS ***
                                               (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                                          (METERS)

     (481625.9, 3668312.4,   187.8,   190.9,   0.0);   (481885.9,
3668312.4,   188.1,   218.1,   0.0);
     (481905.9, 3668312.4,   187.0,   221.7,   0.0);   (481925.9,
3668312.4,   186.3,   222.7,   0.0);
     (481945.9, 3668312.4,   186.4,   222.7,   0.0);   (481965.9,
3668312.4,   184.0,   224.1,   0.0);
     (481985.9, 3668312.4,   182.3,   224.2,   0.0);   (482005.9,
3668312.4,   182.4,   224.2,   0.0);
     (482025.9, 3668312.4,   182.6,   224.2,   0.0);   (482045.9,
3668312.4,   182.9,   224.1,   0.0);
     (482065.9, 3668312.4,   183.0,   224.1,   0.0);   (482085.9,
3668312.4,   183.0,   224.1,   0.0);
     (482105.9, 3668312.4,   183.0,   224.1,   0.0);   (482125.9,
3668312.4,   182.9,   224.1,   0.0);
     (482145.9, 3668312.4,   182.4,   365.4,   0.0);   (482165.9,
3668312.4,   181.6,   365.8,   0.0);
     (482185.9, 3668312.4,   181.0,   365.8,   0.0);   (482285.9,
3668312.4,   182.4,   365.8,   0.0);
     (482305.9, 3668312.4,   180.2,   365.8,   0.0);   (482325.9,
3668312.4,   177.0,   365.8,   0.0);
     (482345.9, 3668312.4,   177.0,   365.8,   0.0);   (482365.9,
3668312.4,   176.2,   365.8,   0.0);
     (482385.9, 3668312.4,   178.6,   365.8,   0.0);   (482405.9,
3668312.4,   178.6,   365.8,   0.0);
     (482425.9, 3668312.4,   178.8,   365.8,   0.0);   (482445.9,
3668312.4,   179.1,   365.8,   0.0);
     (482465.9, 3668312.4,   179.3,   365.8,   0.0);   (482485.9,
3668312.4,   179.5,   365.8,   0.0);
     (482505.9, 3668312.4,   179.6,   365.8,   0.0);   (482525.9,

```
3668312.4,     179.9,     365.8,       0.0);
     ( 482545.9, 3668312.4,     180.0,     365.8,       0.0);         ( 482565.9,
3668312.4,     180.8,     365.8,       0.0);
     ( 482585.9, 3668312.4,     181.4,     365.8,       0.0);         ( 482605.9,
3668312.4,     182.0,     365.8,       0.0);
     ( 482625.9, 3668312.4,     183.0,     365.8,       0.0);         ( 482645.9,
3668312.4,     184.6,     365.8,       0.0);
     ( 482665.9, 3668312.4,     185.7,     365.8,       0.0);         ( 482685.9,
3668312.4,     187.5,     365.8,       0.0);
     ( 482705.9, 3668312.4,     190.1,     365.8,       0.0);         ( 482725.9,
3668312.4,     191.1,     365.8,       0.0);
     ( 482745.9, 3668312.4,     192.2,     365.8,       0.0);         ( 482765.9,
3668312.4,     193.5,     365.8,       0.0);
     ( 482785.9, 3668312.4,     194.7,     365.8,       0.0);         ( 482805.9,
3668312.4,     195.4,     365.8,       0.0);
     ( 482825.9, 3668312.4,     196.8,     365.8,       0.0);         ( 482845.9,
3668312.4,     198.1,     365.8,       0.0);
     ( 482865.9, 3668312.4,     200.3,     365.8,       0.0);         ( 481205.9,
3668332.4,     160.7,     208.1,       0.0);
     ( 481225.9, 3668332.4,     163.0,     193.0,       0.0);         ( 481245.9,
3668332.4,     165.9,     193.0,       0.0);
     ( 481265.9, 3668332.4,     168.1,     193.0,       0.0);         ( 481285.9,
3668332.4,     169.5,     193.0,       0.0);
     ( 481305.9, 3668332.4,     171.2,     193.0,       0.0);         ( 481325.9,
3668332.4,     173.0,     193.0,       0.0);
     ( 481345.9, 3668332.4,     173.5,     193.0,       0.0);         ( 481365.9,
3668332.4,     181.6,     182.7,       0.0);
     ( 481385.9, 3668332.4,     182.3,     182.3,       0.0);         ( 481405.9,
3668332.4,     182.3,     193.0,       0.0);
     ( 481425.9, 3668332.4,     182.7,     193.0,       0.0);         ( 481445.9,
3668332.4,     184.0,     193.0,       0.0);
     ( 481465.9, 3668332.4,     183.2,     193.0,       0.0);         ( 481485.9,
3668332.4,     183.5,     193.8,       0.0);
     ( 481505.9, 3668332.4,     188.2,     193.0,       0.0);         ( 481525.9,
3668332.4,     188.5,     191.1,       0.0);
     ( 481545.9, 3668332.4,     187.1,     192.3,       0.0);         ( 481565.9,
3668332.4,     186.5,     193.7,       0.0);
     ( 481585.9, 3668332.4,     187.8,     189.8,       0.0);         ( 481605.9,
3668332.4,     186.8,     192.3,       0.0);
     ( 481625.9, 3668332.4,     185.7,     190.9,       0.0);         ( 481645.9,
3668332.4,     185.7,     190.9,       0.0);
     ( 481865.9, 3668332.4,     189.3,     216.2,       0.0);         ( 481885.9,
3668332.4,     189.6,     220.3,       0.0);
     ( 481905.9, 3668332.4,     187.9,     222.8,       0.0);         ( 481925.9,
3668332.4,     188.4,     222.7,       0.0);
     ( 481945.9, 3668332.4,     188.4,     222.7,       0.0);         ( 481965.9,
3668332.4,     190.3,     221.7,       0.0);
     ( 481985.9, 3668332.4,     189.8,     222.6,       0.0);         ( 482005.9,
3668332.4,     188.8,     222.7,       0.0);
     ( 482025.9, 3668332.4,     187.7,     224.0,       0.0);         ( 482045.9,
```

3668332.4,   186.6,   224.1,   0.0);
     (482065.9, 3668332.4,   185.8,   224.1,   0.0);   (482085.9,
3668332.4,   184.9,   224.1,   0.0);
     (482105.9, 3668332.4,   183.8,   224.2,   0.0);   (482125.9,
3668332.4,   183.4,   224.2,   0.0);
     (482145.9, 3668332.4,   182.8,   365.4,   0.0);   (482165.9,
3668332.4,   182.2,   365.8,   0.0);
     (482245.9, 3668332.4,   186.1,   365.8,   0.0);   (482265.9,
3668332.4,   186.0,   365.8,   0.0);
     (482285.9, 3668332.4,   184.3,   365.8,   0.0);   (482305.9,
3668332.4,   180.1,   365.8,   0.0);

                                                  *** DISCRETE CARTESIAN RECEPTORS ***
                                                (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                                          (METERS)

     (482325.9, 3668332.4,   177.4,   365.8,   0.0);   (482345.9,
3668332.4,   177.2,   365.8,   0.0);
     (482365.9, 3668332.4,   176.8,   365.8,   0.0);   (482385.9,
3668332.4,   178.8,   365.8,   0.0);
     (482405.9, 3668332.4,   179.1,   365.8,   0.0);   (482425.9,
3668332.4,   179.3,   365.8,   0.0);
     (482445.9, 3668332.4,   179.7,   365.8,   0.0);   (482465.9,
3668332.4,   180.0,   365.8,   0.0);
     (482485.9, 3668332.4,   180.2,   365.8,   0.0);   (482505.9,
3668332.4,   180.6,   365.8,   0.0);
     (482525.9, 3668332.4,   180.8,   365.8,   0.0);   (482545.9,
3668332.4,   180.2,   365.8,   0.0);
     (482565.9, 3668332.4,   180.9,   365.8,   0.0);   (482585.9,
3668332.4,   181.1,   375.4,   0.0);
     (482605.9, 3668332.4,   185.7,   365.8,   0.0);   (482625.9,
3668332.4,   184.9,   365.8,   0.0);
     (482645.9, 3668332.4,   184.7,   378.3,   0.0);   (482665.9,
3668332.4,   185.9,   378.3,   0.0);
     (482685.9, 3668332.4,   187.6,   366.2,   0.0);   (482705.9,
3668332.4,   189.6,   365.8,   0.0);
     (482725.9, 3668332.4,   191.0,   365.8,   0.0);   (482745.9,
3668332.4,   192.2,   366.2,   0.0);
     (482765.9, 3668332.4,   194.0,   365.8,   0.0);   (482785.9,
3668332.4,   195.3,   365.8,   0.0);
     (482805.9, 3668332.4,   197.0,   365.8,   0.0);   (482825.9,
3668332.4,   197.9,   365.8,   0.0);
     (482845.9, 3668332.4,   199.7,   365.8,   0.0);   (482865.9,

3668332.4,   200.4,   365.8,   0.0);
     (482885.9, 3668332.4,   203.0,   365.8,   0.0);   (481185.9,
3668352.4,   162.6,   183.1,   0.0);
     (481205.9, 3668352.4,   161.8,   193.0,   0.0);   (481225.9,
3668352.4,   163.8,   193.0,   0.0);
     (481245.9, 3668352.4,   167.2,   193.0,   0.0);   (481265.9,
3668352.4,   169.3,   193.0,   0.0);
     (481285.9, 3668352.4,   170.4,   193.0,   0.0);   (481305.9,
3668352.4,   171.9,   193.0,   0.0);
     (481325.9, 3668352.4,   173.1,   193.0,   0.0);   (481345.9,
3668352.4,   175.2,   193.0,   0.0);
     (481365.9, 3668352.4,   179.8,   182.8,   0.0);   (481385.9,
3668352.4,   182.7,   182.7,   0.0);
     (481405.9, 3668352.4,   182.0,   193.0,   0.0);   (481425.9,
3668352.4,   181.7,   193.0,   0.0);
     (481445.9, 3668352.4,   182.1,   193.0,   0.0);   (481465.9,
3668352.4,   182.2,   193.0,   0.0);
     (481485.9, 3668352.4,   182.9,   193.0,   0.0);   (481505.9,
3668352.4,   185.0,   193.0,   0.0);
     (481525.9, 3668352.4,   185.5,   193.0,   0.0);   (481545.9,
3668352.4,   185.0,   193.7,   0.0);
     (481565.9, 3668352.4,   185.5,   192.3,   0.0);   (481585.9,
3668352.4,   185.9,   189.8,   0.0);
     (481605.9, 3668352.4,   185.5,   188.0,   0.0);   (481625.9,
3668352.4,   184.1,   192.3,   0.0);
     (481645.9, 3668352.4,   183.9,   190.9,   0.0);   (481865.9,
3668352.4,   191.3,   216.2,   0.0);
     (481885.9, 3668352.4,   189.8,   221.7,   0.0);   (481905.9,
3668352.4,   189.9,   222.8,   0.0);
     (481925.9, 3668352.4,   189.4,   223.9,   0.0);   (481945.9,
3668352.4,   193.4,   220.3,   0.0);
     (481965.9, 3668352.4,   197.0,   197.0,   0.0);   (481985.9,
3668352.4,   197.3,   197.3,   0.0);
     (482005.9, 3668352.4,   197.2,   197.2,   0.0);   (482025.9,
3668352.4,   196.8,   197.6,   0.0);
     (482045.9, 3668352.4,   196.0,   216.4,   0.0);   (482065.9,
3668352.4,   195.6,   216.4,   0.0);
     (482085.9, 3668352.4,   193.1,   220.3,   0.0);   (482245.9,
3668352.4,   188.7,   365.8,   0.0);
     (482265.9, 3668352.4,   188.3,   365.8,   0.0);   (482285.9,
3668352.4,   185.2,   365.8,   0.0);
     (482305.9, 3668352.4,   179.2,   365.8,   0.0);   (482325.9,
3668352.4,   177.8,   365.8,   0.0);
     (482345.9, 3668352.4,   177.5,   365.8,   0.0);   (482365.9,
3668352.4,   177.2,   365.8,   0.0);
     (482385.9, 3668352.4,   178.3,   365.8,   0.0);   (482405.9,
3668352.4,   178.5,   365.8,   0.0);
     (482425.9, 3668352.4,   178.7,   365.8,   0.0);   (482445.9,
3668352.4,   179.1,   365.8,   0.0);
     (482465.9, 3668352.4,   179.5,   365.8,   0.0);   (482485.9,

3668352.4,   179.8,   365.8,   0.0);
     (482505.9, 3668352.4,   180.1,   365.8,   0.0);   (482525.9,
3668352.4,   180.3,   365.8,   0.0);
     (482545.9, 3668352.4,   180.5,   365.8,   0.0);   (482565.9,
3668352.4,   181.2,   375.4,   0.0);
     (482585.9, 3668352.4,   181.5,   379.3,   0.0);   (482605.9,
3668352.4,   185.8,   365.8,   0.0);
     (482625.9, 3668352.4,   185.6,   365.8,   0.0);   (482645.9,
3668352.4,   185.2,   379.9,   0.0);
     (482665.9, 3668352.4,   186.7,   379.9,   0.0);   (482685.9,
3668352.4,   188.0,   379.9,   0.0);
     (482705.9, 3668352.4,   189.6,   379.4,   0.0);   (482725.9,
3668352.4,   191.0,   379.4,   0.0);

                                  *** DISCRETE CARTESIAN RECEPTORS ***
                                (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                          (METERS)

     (482745.9, 3668352.4,   192.3,   379.4,   0.0);   (482765.9,
3668352.4,   193.4,   379.8,   0.0);
     (482785.9, 3668352.4,   194.6,   379.9,   0.0);   (482805.9,
3668352.4,   195.8,   379.9,   0.0);
     (482825.9, 3668352.4,   197.2,   379.8,   0.0);   (482845.9,
3668352.4,   199.2,   378.9,   0.0);
     (482865.9, 3668352.4,   201.4,   366.2,   0.0);   (482885.9,
3668352.4,   203.1,   366.2,   0.0);
     (482905.9, 3668352.4,   204.7,   365.8,   0.0);   (482925.9,
3668352.4,   208.3,   365.8,   0.0);
     (481165.9, 3668372.4,   162.3,   182.7,   0.0);   (481185.9,
3668372.4,   162.8,   183.1,   0.0);
     (481205.9, 3668372.4,   163.9,   183.1,   0.0);   (481225.9,
3668372.4,   165.0,   193.0,   0.0);
     (481245.9, 3668372.4,   167.2,   192.8,   0.0);   (481265.9,
3668372.4,   169.3,   183.1,   0.0);
     (481285.9, 3668372.4,   170.9,   183.1,   0.0);   (481305.9,
3668372.4,   174.0,   183.1,   0.0);
     (481325.9, 3668372.4,   174.0,   193.0,   0.0);   (481345.9,
3668372.4,   176.5,   183.1,   0.0);
     (481365.9, 3668372.4,   178.9,   183.1,   0.0);   (481385.9,
3668372.4,   182.5,   182.5,   0.0);
     (481405.9, 3668372.4,   181.6,   181.6,   0.0);   (481425.9,
3668372.4,   180.9,   193.0,   0.0);
     (481445.9, 3668372.4,   180.9,   193.0,   0.0);   (481465.9,

3668372.4,   181.5,   193.0,   0.0);
     (481485.9, 3668372.4,   182.2,   193.0,   0.0);   (481505.9,
3668372.4,   182.8,   193.0,   0.0);
     (481525.9, 3668372.4,   184.3,   192.8,   0.0);   (481545.9,
3668372.4,   183.0,   193.7,   0.0);
     (481565.9, 3668372.4,   183.6,   192.3,   0.0);   (481585.9,
3668372.4,   184.2,   189.8,   0.0);
     (481605.9, 3668372.4,   182.2,   193.7,   0.0);   (481625.9,
3668372.4,   182.3,   192.3,   0.0);
     (481645.9, 3668372.4,   182.4,   186.2,   0.0);   (481665.9,
3668372.4,   181.8,   219.3,   0.0);
     (481865.9, 3668372.4,   191.2,   221.6,   0.0);   (481885.9,
3668372.4,   190.7,   223.0,   0.0);
     (481905.9, 3668372.4,   191.0,   223.0,   0.0);   (481925.9,
3668372.4,   191.9,   222.8,   0.0);
     (481945.9, 3668372.4,   195.9,   216.8,   0.0);   (481965.9,
3668372.4,   196.7,   216.3,   0.0);
     (481985.9, 3668372.4,   197.0,   216.9,   0.0);   (482005.9,
3668372.4,   197.3,   216.9,   0.0);
     (482025.9, 3668372.4,   197.5,   216.9,   0.0);   (482045.9,
3668372.4,   197.5,   216.9,   0.0);
     (482065.9, 3668372.4,   197.8,   216.4,   0.0);   (482225.9,
3668372.4,   190.8,   365.8,   0.0);
     (482245.9, 3668372.4,   190.6,   365.8,   0.0);   (482265.9,
3668372.4,   189.5,   365.8,   0.0);
     (482285.9, 3668372.4,   184.6,   365.8,   0.0);   (482305.9,
3668372.4,   179.0,   365.8,   0.0);
     (482325.9, 3668372.4,   178.1,   365.8,   0.0);   (482345.9,
3668372.4,   177.8,   365.8,   0.0);
     (482365.9, 3668372.4,   178.5,   365.8,   0.0);   (482385.9,
3668372.4,   178.7,   365.8,   0.0);
     (482405.9, 3668372.4,   179.2,   365.8,   0.0);   (482425.9,
3668372.4,   179.4,   365.8,   0.0);
     (482445.9, 3668372.4,   179.7,   365.8,   0.0);   (482465.9,
3668372.4,   179.9,   365.8,   0.0);
     (482485.9, 3668372.4,   180.1,   365.8,   0.0);   (482505.9,
3668372.4,   180.4,   365.8,   0.0);
     (482525.9, 3668372.4,   180.6,   365.8,   0.0);   (482545.9,
3668372.4,   180.7,   376.5,   0.0);
     (482565.9, 3668372.4,   181.3,   379.9,   0.0);   (482585.9,
3668372.4,   181.8,   380.1,   0.0);
     (482605.9, 3668372.4,   186.0,   365.8,   0.0);   (482625.9,
3668372.4,   185.6,   379.4,   0.0);
     (482645.9, 3668372.4,   186.6,   379.9,   0.0);   (482665.9,
3668372.4,   187.3,   380.1,   0.0);
     (482685.9, 3668372.4,   188.6,   380.1,   0.0);   (482705.9,
3668372.4,   190.3,   380.0,   0.0);
     (482725.9, 3668372.4,   191.8,   380.0,   0.0);   (482745.9,
3668372.4,   193.1,   380.0,   0.0);
     (482765.9, 3668372.4,   194.1,   380.1,   0.0);   (482785.9,

3668372.4,   195.4,   380.1,   0.0);
     (482805.9, 3668372.4,   196.6,   380.1,   0.0);   (482825.9,
3668372.4,   200.2,   366.2,   0.0);
     (482845.9, 3668372.4,   200.1,   379.4,   0.0);   (482865.9,
3668372.4,   201.8,   378.9,   0.0);
     (482885.9, 3668372.4,   203.6,   368.1,   0.0);   (482905.9,
3668372.4,   206.1,   365.8,   0.0);
     (482925.9, 3668372.4,   208.0,   365.8,   0.0);   (481145.9,
3668392.4,   161.4,   181.4,   0.0);
     (481165.9, 3668392.4,   161.8,   183.0,   0.0);   (481185.9,
3668392.4,   162.9,   183.1,   0.0);
     (481205.9, 3668392.4,   166.3,   183.0,   0.0);   (481225.9,
3668392.4,   167.0,   183.1,   0.0);
     (481245.9, 3668392.4,   168.8,   183.1,   0.0);   (481265.9,
3668392.4,   171.8,   183.0,   0.0);

                                          *** DISCRETE CARTESIAN RECEPTORS ***
                                        (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                                  (METERS)

     (481285.9, 3668392.4,   173.5,   183.1,   0.0);   (481305.9,
3668392.4,   174.9,   183.1,   0.0);
     (481325.9, 3668392.4,   176.0,   183.1,   0.0);   (481345.9,
3668392.4,   180.1,   183.0,   0.0);
     (481365.9, 3668392.4,   182.7,   182.7,   0.0);   (481385.9,
3668392.4,   181.9,   183.1,   0.0);
     (481405.9, 3668392.4,   181.2,   181.2,   0.0);   (481425.9,
3668392.4,   179.8,   193.0,   0.0);
     (481445.9, 3668392.4,   179.9,   193.0,   0.0);   (481465.9,
3668392.4,   181.7,   193.0,   0.0);
     (481485.9, 3668392.4,   182.2,   193.0,   0.0);   (481505.9,
3668392.4,   181.0,   193.0,   0.0);
     (481525.9, 3668392.4,   180.9,   193.0,   0.0);   (481545.9,
3668392.4,   180.8,   193.7,   0.0);
     (481565.9, 3668392.4,   182.1,   189.8,   0.0);   (481585.9,
3668392.4,   182.1,   189.8,   0.0);
     (481605.9, 3668392.4,   181.3,   192.3,   0.0);   (481625.9,
3668392.4,   180.8,   189.8,   0.0);
     (481645.9, 3668392.4,   181.1,   223.0,   0.0);   (481665.9,
3668392.4,   180.9,   223.8,   0.0);
     (481865.9, 3668392.4,   191.7,   223.8,   0.0);   (481885.9,
3668392.4,   191.9,   223.9,   0.0);
     (481905.9, 3668392.4,   192.8,   223.9,   0.0);   (481925.9,

3668392.4,   194.4,   222.6,   0.0);
     (481945.9, 3668392.4,   195.3,   222.6,   0.0);   (481965.9,
3668392.4,   196.5,   221.7,   0.0);
     (481985.9, 3668392.4,   196.9,   221.7,   0.0);   (482005.9,
3668392.4,   197.2,   221.7,   0.0);
     (482025.9, 3668392.4,   197.9,   220.3,   0.0);   (482045.9,
3668392.4,   197.6,   220.3,   0.0);
     (482065.9, 3668392.4,   197.6,   220.3,   0.0);   (482205.9,
3668392.4,   193.9,   215.7,   0.0);
     (482225.9, 3668392.4,   194.6,   206.5,   0.0);   (482245.9,
3668392.4,   192.0,   365.8,   0.0);
     (482265.9, 3668392.4,   189.6,   365.8,   0.0);   (482285.9,
3668392.4,   183.9,   365.8,   0.0);
     (482305.9, 3668392.4,   178.9,   365.8,   0.0);   (482325.9,
3668392.4,   178.3,   365.8,   0.0);
     (482345.9, 3668392.4,   177.7,   365.8,   0.0);   (482365.9,
3668392.4,   178.8,   365.8,   0.0);
     (482385.9, 3668392.4,   179.5,   365.8,   0.0);   (482405.9,
3668392.4,   179.7,   365.8,   0.0);
     (482425.9, 3668392.4,   180.0,   365.8,   0.0);   (482445.9,
3668392.4,   180.2,   365.8,   0.0);
     (482465.9, 3668392.4,   180.5,   365.8,   0.0);   (482485.9,
3668392.4,   180.7,   365.8,   0.0);
     (482505.9, 3668392.4,   181.0,   365.8,   0.0);   (482525.9,
3668392.4,   181.2,   375.5,   0.0);
     (482545.9, 3668392.4,   180.9,   379.9,   0.0);   (482565.9,
3668392.4,   181.5,   380.1,   0.0);
     (482585.9, 3668392.4,   182.3,   384.8,   0.0);   (482605.9,
3668392.4,   186.3,   376.0,   0.0);
     (482625.9, 3668392.4,   185.9,   380.1,   0.0);   (482645.9,
3668392.4,   186.8,   380.1,   0.0);
     (482665.9, 3668392.4,   187.8,   380.1,   0.0);   (482685.9,
3668392.4,   189.8,   380.1,   0.0);
     (482705.9, 3668392.4,   191.5,   380.1,   0.0);   (482725.9,
3668392.4,   192.6,   380.1,   0.0);
     (482745.9, 3668392.4,   193.8,   380.1,   0.0);   (482765.9,
3668392.4,   195.2,   380.1,   0.0);
     (482785.9, 3668392.4,   197.0,   380.1,   0.0);   (482805.9,
3668392.4,   198.4,   380.0,   0.0);
     (482825.9, 3668392.4,   200.5,   379.4,   0.0);   (482845.9,
3668392.4,   203.2,   366.2,   0.0);
     (482865.9, 3668392.4,   203.7,   378.3,   0.0);   (482885.9,
3668392.4,   204.8,   378.9,   0.0);
     (482905.9, 3668392.4,   206.6,   366.3,   0.0);   (482925.9,
3668392.4,   212.8,   365.8,   0.0);
     (481125.9, 3668412.4,   160.3,   177.6,   0.0);   (481145.9,
3668412.4,   160.7,   182.7,   0.0);
     (481165.9, 3668412.4,   161.6,   183.1,   0.0);   (481185.9,
3668412.4,   165.7,   177.8,   0.0);
     (481205.9, 3668412.4,   168.1,   177.6,   0.0);   (481225.9,

3668412.4, 168.9, 182.7, 0.0);
(481245.9, 3668412.4, 172.6, 177.6, 0.0); (481265.9, 3668412.4, 173.7, 177.7, 0.0);
(481285.9, 3668412.4, 175.4, 178.1, 0.0); (481305.9, 3668412.4, 176.7, 182.7, 0.0);
(481325.9, 3668412.4, 178.7, 182.7, 0.0); (481345.9, 3668412.4, 180.5, 182.7, 0.0);
(481365.9, 3668412.4, 182.4, 182.4, 0.0); (481385.9, 3668412.4, 182.9, 182.9, 0.0);
(481405.9, 3668412.4, 179.2, 183.1, 0.0); (481425.9, 3668412.4, 178.2, 193.0, 0.0);
(481445.9, 3668412.4, 177.1, 193.0, 0.0); (481465.9, 3668412.4, 177.2, 193.0, 0.0);
(481485.9, 3668412.4, 179.5, 193.0, 0.0); (481505.9, 3668412.4, 177.0, 193.8, 0.0);
(481525.9, 3668412.4, 178.3, 193.7, 0.0); (481545.9, 3668412.4, 179.3, 193.0, 0.0);

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

(481565.9, 3668412.4, 180.1, 191.1, 0.0); (481585.9, 3668412.4, 179.1, 192.3, 0.0);
(481605.9, 3668412.4, 178.9, 223.8, 0.0); (481625.9, 3668412.4, 178.8, 224.0, 0.0);
(481645.9, 3668412.4, 179.4, 224.0, 0.0); (481665.9, 3668412.4, 176.2, 224.7, 0.0);
(481865.9, 3668412.4, 193.8, 223.8, 0.0); (481885.9, 3668412.4, 192.4, 224.1, 0.0);
(481905.9, 3668412.4, 197.6, 220.3, 0.0); (481925.9, 3668412.4, 199.5, 212.2, 0.0);
(481945.9, 3668412.4, 198.1, 221.7, 0.0); (481965.9, 3668412.4, 197.6, 222.6, 0.0);
(481985.9, 3668412.4, 197.7, 222.6, 0.0); (482005.9, 3668412.4, 197.8, 222.6, 0.0);
(482025.9, 3668412.4, 199.6, 221.0, 0.0); (482045.9, 3668412.4, 198.6, 221.7, 0.0);
(482065.9, 3668412.4, 198.7, 221.7, 0.0); (482085.9, 3668412.4, 198.9, 220.3, 0.0);
(482185.9, 3668412.4, 195.5, 218.1, 0.0); (482205.9, 3668412.4, 195.9, 214.2, 0.0);
(482225.9, 3668412.4, 196.4, 196.4, 0.0); (482245.9,

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3668412.4,     195.5,     364.9,       0.0);
     ( 482265.9, 3668412.4,     191.5,     365.8,       0.0);         ( 482285.9,
3668412.4,     184.6,     365.8,       0.0);
     ( 482305.9, 3668412.4,     178.7,     365.8,       0.0);         ( 482325.9,
3668412.4,     178.7,     365.8,       0.0);
     ( 482345.9, 3668412.4,     177.7,     365.8,       0.0);         ( 482365.9,
3668412.4,     180.1,     365.8,       0.0);
     ( 482385.9, 3668412.4,     180.2,     365.8,       0.0);         ( 482405.9,
3668412.4,     180.3,     365.8,       0.0);
     ( 482425.9, 3668412.4,     180.5,     365.8,       0.0);         ( 482445.9,
3668412.4,     180.8,     365.8,       0.0);
     ( 482465.9, 3668412.4,     181.0,     365.8,       0.0);         ( 482485.9,
3668412.4,     181.1,     365.8,       0.0);
     ( 482505.9, 3668412.4,     181.5,     375.5,       0.0);         ( 482525.9,
3668412.4,     181.7,     378.3,       0.0);
     ( 482545.9, 3668412.4,     181.1,     380.1,       0.0);         ( 482565.9,
3668412.4,     181.7,     385.8,       0.0);
     ( 482585.9, 3668412.4,     182.8,     386.0,       0.0);         ( 482605.9,
3668412.4,     186.6,     379.9,       0.0);
     ( 482625.9, 3668412.4,     186.1,     385.8,       0.0);         ( 482645.9,
3668412.4,     186.5,     386.0,       0.0);
     ( 482665.9, 3668412.4,     187.7,     386.0,       0.0);         ( 482685.9,
3668412.4,     189.5,     386.0,       0.0);
     ( 482705.9, 3668412.4,     191.7,     384.8,       0.0);         ( 482725.9,
3668412.4,     193.0,     384.8,       0.0);
     ( 482745.9, 3668412.4,     194.4,     384.8,       0.0);         ( 482765.9,
3668412.4,     200.2,     365.8,       0.0);
     ( 482785.9, 3668412.4,     204.8,     365.8,       0.0);         ( 482805.9,
3668412.4,     206.4,     365.8,       0.0);
     ( 482825.9, 3668412.4,     204.5,     365.8,       0.0);         ( 482845.9,
3668412.4,     204.2,     366.3,       0.0);
     ( 482865.9, 3668412.4,     205.9,     366.2,       0.0);         ( 482885.9,
3668412.4,     206.0,     379.3,       0.0);
     ( 482905.9, 3668412.4,     209.6,     365.8,       0.0);         ( 481105.9,
3668432.4,     158.8,     177.6,       0.0);
     ( 481125.9, 3668432.4,     159.6,     178.1,       0.0);         ( 481145.9,
3668432.4,     160.6,     182.7,       0.0);
     ( 481165.9, 3668432.4,     162.8,     181.4,       0.0);         ( 481185.9,
3668432.4,     165.4,     178.1,       0.0);
     ( 481205.9, 3668432.4,     167.2,     178.1,       0.0);         ( 481225.9,
3668432.4,     169.1,     178.1,       0.0);
     ( 481245.9, 3668432.4,     173.9,     177.2,       0.0);         ( 481265.9,
3668432.4,     177.1,     177.1,       0.0);
     ( 481285.9, 3668432.4,     177.4,     177.4,       0.0);         ( 481305.9,
3668432.4,     177.8,     177.8,       0.0);
     ( 481325.9, 3668432.4,     178.2,     181.3,       0.0);         ( 481345.9,
3668432.4,     179.2,     182.9,       0.0);
     ( 481365.9, 3668432.4,     179.2,     183.1,       0.0);         ( 481385.9,
3668432.4,     180.7,     183.0,       0.0);
     ( 481405.9, 3668432.4,     178.4,     183.1,       0.0);         ( 481425.9,
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3668432.4,   176.0,   193.0,   0.0);
     (481445.9, 3668432.4,   175.1,   193.0,   0.0);   (481465.9,
3668432.4,   173.8,   193.8,   0.0);
     (481485.9, 3668432.4,   174.5,   193.8,   0.0);   (481505.9,
3668432.4,   175.3,   193.8,   0.0);
     (481525.9, 3668432.4,   176.5,   193.7,   0.0);   (481545.9,
3668432.4,   177.6,   192.8,   0.0);
     (481565.9, 3668432.4,   179.1,   180.0,   0.0);   (481585.9,
3668432.4,   176.4,   224.0,   0.0);
     (481605.9, 3668432.4,   176.3,   224.4,   0.0);   (481625.9,
3668432.4,   177.2,   224.4,   0.0);
     (481645.9, 3668432.4,   178.3,   224.4,   0.0);   (481865.9,
3668432.4,   196.4,   222.8,   0.0);
     (481885.9, 3668432.4,   198.3,   220.3,   0.0);   (481905.9,
3668432.4,   202.2,   211.2,   0.0);
     (481925.9, 3668432.4,   201.6,   212.2,   0.0);   (481945.9,
3668432.4,   199.4,   221.7,   0.0);
     (481965.9, 3668432.4,   199.2,   222.6,   0.0);   (481985.9,
3668432.4,   199.3,   222.6,   0.0);

                                                *** DISCRETE CARTESIAN RECEPTORS ***
                                              (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                                          (METERS)

     (482005.9, 3668432.4,   201.7,   220.3,   0.0);   (482025.9,
3668432.4,   201.4,   221.0,   0.0);
     (482045.9, 3668432.4,   199.5,   222.6,   0.0);   (482065.9,
3668432.4,   200.1,   221.7,   0.0);
     (482085.9, 3668432.4,   201.7,   219.8,   0.0);   (482185.9,
3668432.4,   196.3,   219.8,   0.0);
     (482205.9, 3668432.4,   195.8,   218.1,   0.0);   (482225.9,
3668432.4,   196.3,   214.2,   0.0);
     (482245.9, 3668432.4,   196.5,   364.6,   0.0);   (482265.9,
3668432.4,   195.2,   365.8,   0.0);
     (482285.9, 3668432.4,   186.5,   365.8,   0.0);   (482305.9,
3668432.4,   178.9,   365.8,   0.0);
     (482325.9, 3668432.4,   179.0,   365.8,   0.0);   (482345.9,
3668432.4,   177.8,   365.8,   0.0);
     (482365.9, 3668432.4,   180.1,   365.8,   0.0);   (482385.9,
3668432.4,   179.9,   365.8,   0.0);
     (482405.9, 3668432.4,   179.7,   365.8,   0.0);   (482425.9,
3668432.4,   179.9,   365.8,   0.0);
     (482445.9, 3668432.4,   180.1,   365.8,   0.0);   (482465.9,

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3668432.4,     180.4,     375.4,       0.0);
     ( 482485.9, 3668432.4,     180.6,     376.7,       0.0);         ( 482505.9,
3668432.4,     180.9,     379.9,       0.0);
     ( 482525.9, 3668432.4,     181.2,     380.1,       0.0);         ( 482545.9,
3668432.4,     181.3,     386.0,       0.0);
     ( 482565.9, 3668432.4,     181.9,     394.5,       0.0);         ( 482585.9,
3668432.4,     183.2,     394.5,       0.0);
     ( 482605.9, 3668432.4,     186.8,     380.1,       0.0);         ( 482625.9,
3668432.4,     186.3,     386.0,       0.0);
     ( 482645.9, 3668432.4,     186.2,     397.5,       0.0);         ( 482665.9,
3668432.4,     187.5,     397.5,       0.0);
     ( 482685.9, 3668432.4,     189.3,     397.4,       0.0);         ( 482705.9,
3668432.4,     191.4,     394.5,       0.0);
     ( 482725.9, 3668432.4,     192.9,     386.0,       0.0);         ( 482745.9,
3668432.4,     198.1,     379.4,       0.0);
     ( 482825.9, 3668432.4,     210.9,     365.8,       0.0);         ( 482845.9,
3668432.4,     206.9,     365.8,       0.0);
     ( 482865.9, 3668432.4,     206.3,     378.9,       0.0);         ( 482885.9,
3668432.4,     207.2,     379.4,       0.0);
     ( 481085.9, 3668452.4,     157.3,     177.6,       0.0);         ( 481105.9,
3668452.4,     158.1,     177.6,       0.0);
     ( 481125.9, 3668452.4,     159.8,     177.8,       0.0);         ( 481145.9,
3668452.4,     161.0,     178.1,       0.0);
     ( 481165.9, 3668452.4,     162.6,     181.4,       0.0);         ( 481185.9,
3668452.4,     164.3,     182.7,       0.0);
     ( 481205.9, 3668452.4,     166.2,     182.7,       0.0);         ( 481225.9,
3668452.4,     167.2,     183.0,       0.0);
     ( 481245.9, 3668452.4,     170.7,     178.1,       0.0);         ( 481265.9,
3668452.4,     176.9,     176.9,       0.0);
     ( 481285.9, 3668452.4,     174.7,     178.0,       0.0);         ( 481305.9,
3668452.4,     174.5,     183.0,       0.0);
     ( 481325.9, 3668452.4,     175.8,     183.0,       0.0);         ( 481345.9,
3668452.4,     176.0,     183.1,       0.0);
     ( 481365.9, 3668452.4,     175.5,     183.1,       0.0);         ( 481385.9,
3668452.4,     176.1,     183.1,       0.0);
     ( 481405.9, 3668452.4,     176.7,     183.1,       0.0);         ( 481425.9,
3668452.4,     175.6,     192.8,       0.0);
     ( 481445.9, 3668452.4,     172.9,     193.0,       0.0);         ( 481465.9,
3668452.4,     173.1,     193.0,       0.0);
     ( 481485.9, 3668452.4,     173.0,     193.8,       0.0);         ( 481505.9,
3668452.4,     174.1,     193.7,       0.0);
     ( 481525.9, 3668452.4,     175.1,     223.0,       0.0);         ( 481545.9,
3668452.4,     177.4,     180.0,       0.0);
     ( 481565.9, 3668452.4,     173.8,     224.4,       0.0);         ( 481585.9,
3668452.4,     174.0,     224.7,       0.0);
     ( 481605.9, 3668452.4,     174.7,     224.7,       0.0);         ( 481625.9,
3668452.4,     176.1,     224.7,       0.0);
     ( 481885.9, 3668452.4,     204.4,     204.4,       0.0);         ( 481905.9,
3668452.4,     203.4,     212.2,       0.0);
     ( 481925.9, 3668452.4,     201.8,     220.3,       0.0);         ( 481945.9,
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3668452.4,   201.6,   221.7,   0.0);
     (481965.9, 3668452.4,   201.1,   222.6,   0.0);   (481985.9,
3668452.4,   204.1,   219.0,   0.0);
     (482005.9, 3668452.4,   203.5,   221.0,   0.0);   (482025.9,
3668452.4,   201.9,   222.6,   0.0);
     (482045.9, 3668452.4,   201.0,   222.6,   0.0);   (482065.9,
3668452.4,   201.9,   221.9,   0.0);
     (482165.9, 3668452.4,   200.6,   215.9,   0.0);   (482185.9,
3668452.4,   196.7,   221.7,   0.0);
     (482205.9, 3668452.4,   196.4,   219.8,   0.0);   (482225.9,
3668452.4,   196.0,   215.7,   0.0);
     (482245.9, 3668452.4,   196.5,   364.9,   0.0);   (482265.9,
3668452.4,   196.2,   365.8,   0.0);
     (482285.9, 3668452.4,   186.3,   365.8,   0.0);   (482305.9,
3668452.4,   179.2,   365.8,   0.0);
     (482325.9, 3668452.4,   179.2,   365.8,   0.0);   (482345.9,
3668452.4,   178.2,   365.8,   0.0);
     (482365.9, 3668452.4,   180.2,   365.8,   0.0);   (482385.9,
3668452.4,   180.0,   365.8,   0.0);
     (482405.9, 3668452.4,   179.7,   365.8,   0.0);   (482425.9,
3668452.4,   180.5,   365.8,   0.0);

                                          *** DISCRETE CARTESIAN RECEPTORS ***
                                       (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                                   (METERS)

     (482445.9, 3668452.4,   180.7,   374.1,   0.0);   (482465.9,
3668452.4,   180.9,   376.5,   0.0);
     (482485.9, 3668452.4,   181.2,   378.9,   0.0);   (482505.9,
3668452.4,   181.4,   380.1,   0.0);
     (482525.9, 3668452.4,   181.7,   385.8,   0.0);   (482545.9,
3668452.4,   181.5,   396.8,   0.0);
     (482565.9, 3668452.4,   182.2,   397.5,   0.0);   (482585.9,
3668452.4,   183.8,   397.5,   0.0);
     (482605.9, 3668452.4,   187.1,   386.0,   0.0);   (482625.9,
3668452.4,   186.6,   397.4,   0.0);
     (482645.9, 3668452.4,   187.1,   398.0,   0.0);   (482665.9,
3668452.4,   189.3,   397.4,   0.0);
     (482685.9, 3668452.4,   190.0,   398.0,   0.0);   (482705.9,
3668452.4,   191.8,   397.4,   0.0);
     (482725.9, 3668452.4,   194.9,   386.0,   0.0);   (482745.9,
3668452.4,   202.2,   365.8,   0.0);
     (482885.9, 3668452.4,   208.6,   379.9,   0.0);   (481065.9,

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3668472.4,     155.7,     177.2,       0.0);
     ( 481085.9, 3668472.4,     156.4,     177.6,       0.0);         ( 481105.9,
3668472.4,     158.0,     177.6,       0.0);
     ( 481125.9, 3668472.4,     159.1,     177.8,       0.0);         ( 481145.9,
3668472.4,     160.3,     180.2,       0.0);
     ( 481165.9, 3668472.4,     161.6,     182.7,       0.0);         ( 481185.9,
3668472.4,     164.7,     178.0,       0.0);
     ( 481205.9, 3668472.4,     165.9,     180.2,       0.0);         ( 481225.9,
3668472.4,     166.1,     183.1,       0.0);
     ( 481245.9, 3668472.4,     168.6,     182.9,       0.0);         ( 481265.9,
3668472.4,     170.9,     182.3,       0.0);
     ( 481285.9, 3668472.4,     172.3,     182.9,       0.0);         ( 481305.9,
3668472.4,     171.6,     183.1,       0.0);
     ( 481325.9, 3668472.4,     170.6,     183.1,       0.0);         ( 481345.9,
3668472.4,     171.7,     183.1,       0.0);
     ( 481365.9, 3668472.4,     171.9,     183.1,       0.0);         ( 481385.9,
3668472.4,     172.7,     183.1,       0.0);
     ( 481405.9, 3668472.4,     172.7,     192.8,       0.0);         ( 481425.9,
3668472.4,     173.1,     193.0,       0.0);
     ( 481445.9, 3668472.4,     172.3,     193.0,       0.0);         ( 481465.9,
3668472.4,     171.6,     193.0,       0.0);
     ( 481485.9, 3668472.4,     172.8,     193.0,       0.0);         ( 481505.9,
3668472.4,     173.4,     223.8,       0.0);
     ( 481525.9, 3668472.4,     175.1,     223.8,       0.0);         ( 481545.9,
3668472.4,     171.3,     224.7,       0.0);
     ( 481565.9, 3668472.4,     171.4,     224.8,       0.0);         ( 481585.9,
3668472.4,     172.3,     224.8,       0.0);
     ( 481605.9, 3668472.4,     173.5,     224.8,       0.0);         ( 481625.9,
3668472.4,     172.9,     224.8,       0.0);
     ( 481885.9, 3668472.4,     204.4,     212.2,       0.0);         ( 481905.9,
3668472.4,     203.8,     216.2,       0.0);
     ( 481925.9, 3668472.4,     204.5,     218.1,       0.0);         ( 481945.9,
3668472.4,     203.1,     221.7,       0.0);
     ( 481965.9, 3668472.4,     207.1,     209.4,       0.0);         ( 481985.9,
3668472.4,     205.5,     221.0,       0.0);
     ( 482005.9, 3668472.4,     204.4,     221.9,       0.0);         ( 482025.9,
3668472.4,     203.0,     222.7,       0.0);
     ( 482045.9, 3668472.4,     203.6,     222.6,       0.0);         ( 482065.9,
3668472.4,     203.9,     221.7,       0.0);
     ( 482145.9, 3668472.4,     204.4,     214.2,       0.0);         ( 482165.9,
3668472.4,     201.8,     215.9,       0.0);
     ( 482185.9, 3668472.4,     199.0,     219.8,       0.0);         ( 482205.9,
3668472.4,     196.7,     221.7,       0.0);
     ( 482225.9, 3668472.4,     196.0,     219.8,       0.0);         ( 482245.9,
3668472.4,     196.7,     364.9,       0.0);
     ( 482265.9, 3668472.4,     196.4,     365.8,       0.0);         ( 482285.9,
3668472.4,     187.1,     365.8,       0.0);
     ( 482305.9, 3668472.4,     179.5,     365.8,       0.0);         ( 482325.9,
3668472.4,     179.6,     365.8,       0.0);
     ( 482345.9, 3668472.4,     178.5,     365.8,       0.0);         ( 482365.9,
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3668472.4,   180.2,   365.8,   0.0);
     (482385.9, 3668472.4,   180.3,   365.8,   0.0);   (482405.9,
3668472.4,   180.3,   365.8,   0.0);
     (482425.9, 3668472.4,   180.7,   365.8,   0.0);   (482445.9,
3668472.4,   181.0,   376.5,   0.0);
     (482465.9, 3668472.4,   181.3,   378.3,   0.0);   (482485.9,
3668472.4,   181.6,   380.1,   0.0);
     (482505.9, 3668472.4,   181.8,   385.8,   0.0);   (482525.9,
3668472.4,   182.1,   394.5,   0.0);
     (482545.9, 3668472.4,   181.8,   398.0,   0.0);   (482565.9,
3668472.4,   182.5,   398.0,   0.0);
     (482585.9, 3668472.4,   184.9,   398.0,   0.0);   (482605.9,
3668472.4,   188.1,   386.0,   0.0);
     (482625.9, 3668472.4,   187.3,   398.0,   0.0);   (482645.9,
3668472.4,   187.8,   398.0,   0.0);
     (482665.9, 3668472.4,   189.2,   398.0,   0.0);   (482685.9,
3668472.4,   191.2,   398.0,   0.0);
     (482705.9, 3668472.4,   192.9,   398.0,   0.0);   (482725.9,
3668472.4,   198.5,   380.1,   0.0);
     (481045.9, 3668492.4,   154.8,   177.2,   0.0);   (481065.9,
3668492.4,   154.9,   177.2,   0.0);
     (481085.9, 3668492.4,   156.1,   177.6,   0.0);   (481105.9,
3668492.4,   157.2,   177.8,   0.0);

                                          *** DISCRETE CARTESIAN RECEPTORS ***
                                        (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                                    (METERS)

     (481125.9, 3668492.4,   158.2,   178.1,   0.0);   (481145.9,
3668492.4,   159.1,   182.7,   0.0);
     (481165.9, 3668492.4,   160.6,   182.9,   0.0);   (481185.9,
3668492.4,   163.5,   180.2,   0.0);
     (481205.9, 3668492.4,   165.9,   177.8,   0.0);   (481225.9,
3668492.4,   165.7,   183.0,   0.0);
     (481245.9, 3668492.4,   165.9,   183.1,   0.0);   (481265.9,
3668492.4,   167.4,   183.1,   0.0);
     (481285.9, 3668492.4,   167.9,   183.1,   0.0);   (481305.9,
3668492.4,   167.9,   183.1,   0.0);
     (481325.9, 3668492.4,   168.0,   183.1,   0.0);   (481345.9,
3668492.4,   168.7,   183.1,   0.0);
     (481365.9, 3668492.4,   166.9,   193.0,   0.0);   (481385.9,
3668492.4,   167.8,   193.0,   0.0);
     (481405.9, 3668492.4,   168.1,   193.0,   0.0);   (481425.9,

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3668492.4,     169.4,     193.0,       0.0);
     ( 481445.9, 3668492.4,     170.3,     193.0,       0.0);         ( 481465.9,
3668492.4,     171.7,     193.0,       0.0);
     ( 481485.9, 3668492.4,     172.3,     224.0,       0.0);         ( 481505.9,
3668492.4,     171.6,     224.4,       0.0);
     ( 481525.9, 3668492.4,     168.8,     224.8,       0.0);         ( 481545.9,
3668492.4,     169.0,     224.8,       0.0);
     ( 481565.9, 3668492.4,     169.9,     224.8,       0.0);         ( 481585.9,
3668492.4,     170.9,     224.8,       0.0);
     ( 481605.9, 3668492.4,     172.5,     224.8,       0.0);         ( 481885.9,
3668492.4,     204.5,     217.5,       0.0);
     ( 481905.9, 3668492.4,     204.8,     218.1,       0.0);         ( 481925.9,
3668492.4,     204.6,     221.6,       0.0);
     ( 481945.9, 3668492.4,     208.7,     211.2,       0.0);         ( 481965.9,
3668492.4,     207.7,     218.6,       0.0);
     ( 481985.9, 3668492.4,     206.9,     221.7,       0.0);         ( 482005.9,
3668492.4,     205.9,     222.6,       0.0);
     ( 482025.9, 3668492.4,     205.6,     222.6,       0.0);         ( 482045.9,
3668492.4,     205.5,     222.6,       0.0);
     ( 482125.9, 3668492.4,     204.9,     219.8,       0.0);         ( 482145.9,
3668492.4,     205.8,     214.2,       0.0);
     ( 482165.9, 3668492.4,     205.8,     205.8,       0.0);         ( 482185.9,
3668492.4,     200.1,     220.9,       0.0);
     ( 482205.9, 3668492.4,     196.7,     224.0,       0.0);         ( 482225.9,
3668492.4,     196.3,     221.7,       0.0);
     ( 482245.9, 3668492.4,     196.6,     365.0,       0.0);         ( 482265.9,
3668492.4,     196.8,     365.8,       0.0);
     ( 482285.9, 3668492.4,     189.1,     365.8,       0.0);         ( 482305.9,
3668492.4,     180.1,     365.8,       0.0);
     ( 482325.9, 3668492.4,     179.9,     365.8,       0.0);         ( 482345.9,
3668492.4,     179.0,     365.8,       0.0);
     ( 482365.9, 3668492.4,     181.7,     365.8,       0.0);         ( 482385.9,
3668492.4,     181.9,     365.8,       0.0);
     ( 482405.9, 3668492.4,     182.1,     365.8,       0.0);         ( 482425.9,
3668492.4,     182.4,     365.8,       0.0);
     ( 482445.9, 3668492.4,     182.5,     376.5,       0.0);         ( 482465.9,
3668492.4,     182.7,     377.3,       0.0);
     ( 482485.9, 3668492.4,     182.9,     380.1,       0.0);         ( 482505.9,
3668492.4,     183.0,     385.8,       0.0);
     ( 482525.9, 3668492.4,     183.0,     396.8,       0.0);         ( 482545.9,
3668492.4,     182.2,     398.0,       0.0);
     ( 482565.9, 3668492.4,     182.9,     398.0,       0.0);         ( 482585.9,
3668492.4,     185.9,     398.0,       0.0);
     ( 482605.9, 3668492.4,     189.3,     386.0,       0.0);         ( 482625.9,
3668492.4,     188.5,     398.0,       0.0);
     ( 482645.9, 3668492.4,     188.8,     398.0,       0.0);         ( 482665.9,
3668492.4,     189.1,     398.0,       0.0);
     ( 482685.9, 3668492.4,     191.5,     398.0,       0.0);         ( 482705.9,
3668492.4,     196.2,     386.0,       0.0);
     ( 481025.9, 3668512.4,     154.5,     154.5,       0.0);         ( 481045.9,
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3668512.4,   154.3,   177.2,   0.0);
     (481065.9, 3668512.4,   154.7,   177.2,   0.0);   (481085.9,
3668512.4,   155.4,   177.6,   0.0);
     (481105.9, 3668512.4,   156.4,   177.8,   0.0);   (481125.9,
3668512.4,   157.1,   180.2,   0.0);
     (481145.9, 3668512.4,   159.2,   178.4,   0.0);   (481165.9,
3668512.4,   159.4,   183.0,   0.0);
     (481185.9, 3668512.4,   161.9,   182.3,   0.0);   (481205.9,
3668512.4,   163.1,   183.0,   0.0);
     (481225.9, 3668512.4,   164.2,   183.0,   0.0);   (481245.9,
3668512.4,   164.2,   183.1,   0.0);
     (481265.9, 3668512.4,   164.7,   183.1,   0.0);   (481285.9,
3668512.4,   165.8,   183.1,   0.0);
     (481305.9, 3668512.4,   164.9,   183.1,   0.0);   (481325.9,
3668512.4,   164.0,   193.0,   0.0);
     (481345.9, 3668512.4,   164.7,   193.0,   0.0);   (481365.9,
3668512.4,   165.2,   193.0,   0.0);
     (481385.9, 3668512.4,   166.1,   193.0,   0.0);   (481405.9,
3668512.4,   167.2,   193.0,   0.0);
     (481425.9, 3668512.4,   169.1,   193.0,   0.0);   (481445.9,
3668512.4,   169.7,   223.8,   0.0);
     (481465.9, 3668512.4,   171.1,   224.0,   0.0);   (481485.9,
3668512.4,   167.1,   224.8,   0.0);
     (481505.9, 3668512.4,   166.0,   224.8,   0.0);   (481525.9,
3668512.4,   166.4,   224.8,   0.0);

                                          *** DISCRETE CARTESIAN RECEPTORS ***
                                        (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                                    (METERS)

     (481545.9, 3668512.4,   167.5,   224.8,   0.0);   (481565.9,
3668512.4,   168.7,   224.8,   0.0);
     (481585.9, 3668512.4,   170.8,   224.8,   0.0);   (481905.9,
3668512.4,   205.3,   222.8,   0.0);
     (481925.9, 3668512.4,   207.7,   218.1,   0.0);   (481945.9,
3668512.4,   210.7,   210.7,   0.0);
     (481965.9, 3668512.4,   209.0,   220.3,   0.0);   (481985.9,
3668512.4,   207.5,   222.6,   0.0);
     (482005.9, 3668512.4,   207.4,   222.6,   0.0);   (482025.9,
3668512.4,   207.4,   222.6,   0.0);
     (482105.9, 3668512.4,   206.8,   220.9,   0.0);   (482125.9,
3668512.4,   205.9,   220.9,   0.0);
     (482145.9, 3668512.4,   205.3,   219.8,   0.0);   (482165.9,

```
3668512.4,     205.8,     214.2,       0.0);
     ( 482185.9, 3668512.4,     203.4,     214.8,       0.0);         ( 482205.9,
3668512.4,     196.9,     224.1,       0.0);
     ( 482225.9, 3668512.4,     196.7,     224.0,       0.0);         ( 482245.9,
3668512.4,     196.5,     365.4,       0.0);
     ( 482265.9, 3668512.4,     197.0,     365.8,       0.0);         ( 482285.9,
3668512.4,     190.6,     365.8,       0.0);
     ( 482305.9, 3668512.4,     180.7,     365.8,       0.0);         ( 482325.9,
3668512.4,     180.2,     365.8,       0.0);
     ( 482345.9, 3668512.4,     179.3,     365.8,       0.0);         ( 482365.9,
3668512.4,     181.7,     365.8,       0.0);
     ( 482385.9, 3668512.4,     181.8,     365.8,       0.0);         ( 482405.9,
3668512.4,     182.1,     365.8,       0.0);
     ( 482425.9, 3668512.4,     182.1,     376.7,       0.0);         ( 482445.9,
3668512.4,     182.1,     379.4,       0.0);
     ( 482465.9, 3668512.4,     182.2,     384.8,       0.0);         ( 482485.9,
3668512.4,     182.4,     386.0,       0.0);
     ( 482505.9, 3668512.4,     182.7,     397.4,       0.0);         ( 482525.9,
3668512.4,     182.7,     398.0,       0.0);
     ( 482545.9, 3668512.4,     182.7,     398.0,       0.0);         ( 482565.9,
3668512.4,     183.2,     398.0,       0.0);
     ( 482585.9, 3668512.4,     187.4,     398.0,       0.0);         ( 482605.9,
3668512.4,     190.3,     395.0,       0.0);
     ( 482625.9, 3668512.4,     189.8,     398.0,       0.0);         ( 482645.9,
3668512.4,     189.7,     398.0,       0.0);
     ( 482665.9, 3668512.4,     190.1,     398.0,       0.0);         ( 482685.9,
3668512.4,     192.2,     398.0,       0.0);
     ( 482705.9, 3668512.4,     197.5,     394.5,       0.0);         ( 482885.9,
3668512.4,     214.6,     366.2,       0.0);
     ( 482905.9, 3668512.4,     214.8,     379.4,       0.0);         ( 482925.9,
3668512.4,     215.9,     379.9,       0.0);
     ( 481045.9, 3668532.4,     154.3,     154.3,       0.0);         ( 481065.9,
3668532.4,     154.1,     177.2,       0.0);
     ( 481085.9, 3668532.4,     154.8,     177.6,       0.0);         ( 481105.9,
3668532.4,     155.5,     177.8,       0.0);
     ( 481125.9, 3668532.4,     156.3,     180.2,       0.0);         ( 481145.9,
3668532.4,     157.2,     182.9,       0.0);
     ( 481165.9, 3668532.4,     158.7,     182.9,       0.0);         ( 481185.9,
3668532.4,     158.7,     183.1,       0.0);
     ( 481205.9, 3668532.4,     160.9,     183.1,       0.0);         ( 481225.9,
3668532.4,     161.9,     183.1,       0.0);
     ( 481245.9, 3668532.4,     162.1,     183.1,       0.0);         ( 481265.9,
3668532.4,     162.9,     183.1,       0.0);
     ( 481285.9, 3668532.4,     162.1,     183.1,       0.0);         ( 481305.9,
3668532.4,     161.8,     193.0,       0.0);
     ( 481325.9, 3668532.4,     162.7,     193.0,       0.0);         ( 481345.9,
3668532.4,     163.6,     193.0,       0.0);
     ( 481365.9, 3668532.4,     164.5,     193.0,       0.0);         ( 481385.9,
3668532.4,     166.0,     193.0,       0.0);
     ( 481405.9, 3668532.4,     167.9,     183.1,       0.0);         ( 481425.9,
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3668532.4,   168.4,   224.0,   0.0);
     (481445.9, 3668532.4,   166.2,   224.7,   0.0);   (481465.9,
3668532.4,   163.9,   224.8,   0.0);
     (481485.9, 3668532.4,   163.8,   224.8,   0.0);   (481505.9,
3668532.4,   163.8,   224.9,   0.0);
     (481525.9, 3668532.4,   165.5,   224.9,   0.0);   (481545.9,
3668532.4,   166.4,   224.9,   0.0);
     (481565.9, 3668532.4,   168.1,   224.9,   0.0);   (481905.9,
3668532.4,   206.1,   223.8,   0.0);
     (481925.9, 3668532.4,   212.0,   212.0,   0.0);   (481945.9,
3668532.4,   210.7,   218.1,   0.0);
     (481965.9, 3668532.4,   209.6,   221.7,   0.0);   (481985.9,
3668532.4,   210.2,   221.7,   0.0);
     (482005.9, 3668532.4,   209.2,   222.7,   0.0);   (482105.9,
3668532.4,   206.7,   222.6,   0.0);
     (482125.9, 3668532.4,   205.8,   222.3,   0.0);   (482145.9,
3668532.4,   205.3,   221.7,   0.0);
     (482165.9, 3668532.4,   205.7,   214.8,   0.0);   (482185.9,
3668532.4,   204.7,   214.8,   0.0);
     (482205.9, 3668532.4,   197.5,   224.2,   0.0);   (482225.9,
3668532.4,   196.9,   224.1,   0.0);
     (482245.9, 3668532.4,   196.5,   365.4,   0.0);   (482265.9,
3668532.4,   197.0,   365.8,   0.0);
     (482285.9, 3668532.4,   191.8,   365.8,   0.0);   (482305.9,
3668532.4,   181.6,   365.8,   0.0);
     (482325.9, 3668532.4,   180.4,   365.8,   0.0);   (482345.9,
3668532.4,   179.6,   365.8,   0.0);

                                                  *** DISCRETE CARTESIAN RECEPTORS ***
                                                 (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                                              (METERS)

     (482365.9, 3668532.4,   181.1,   365.8,   0.0);   (482385.9,
3668532.4,   181.5,   375.4,   0.0);
     (482405.9, 3668532.4,   181.5,   377.0,   0.0);   (482425.9,
3668532.4,   181.8,   379.4,   0.0);
     (482445.9, 3668532.4,   182.2,   380.1,   0.0);   (482465.9,
3668532.4,   182.5,   386.0,   0.0);
     (482485.9, 3668532.4,   182.6,   397.4,   0.0);   (482505.9,
3668532.4,   182.8,   398.0,   0.0);
     (482525.9, 3668532.4,   182.9,   398.0,   0.0);   (482545.9,
3668532.4,   183.3,   398.0,   0.0);
     (482565.9, 3668532.4,   183.7,   398.0,   0.0);   (482585.9,

3668532.4,   189.1,   398.0,   0.0);
     (482605.9, 3668532.4,   191.3,   397.4,   0.0);   (482625.9,
3668532.4,   190.8,   398.0,   0.0);
     (482645.9, 3668532.4,   190.8,   398.0,   0.0);   (482665.9,
3668532.4,   191.5,   398.0,   0.0);
     (482685.9, 3668532.4,   194.2,   398.0,   0.0);   (482705.9,
3668532.4,   199.2,   386.0,   0.0);
     (482845.9, 3668532.4,   210.7,   380.1,   0.0);   (482865.9,
3668532.4,   212.0,   380.1,   0.0);
     (482885.9, 3668532.4,   213.7,   380.1,   0.0);   (482905.9,
3668532.4,   214.8,   380.1,   0.0);
     (482925.9, 3668532.4,   215.8,   380.1,   0.0);   (482945.9,
3668532.4,   216.6,   380.1,   0.0);
     (481045.9, 3668552.4,   154.0,   154.0,   0.0);   (481065.9,
3668552.4,   154.0,   177.2,   0.0);
     (481085.9, 3668552.4,   154.2,   177.2,   0.0);   (481105.9,
3668552.4,   155.7,   177.4,   0.0);
     (481125.9, 3668552.4,   155.7,   178.0,   0.0);   (481145.9,
3668552.4,   155.9,   182.9,   0.0);
     (481165.9, 3668552.4,   158.2,   181.3,   0.0);   (481185.9,
3668552.4,   157.9,   183.1,   0.0);
     (481205.9, 3668552.4,   158.0,   183.1,   0.0);   (481225.9,
3668552.4,   160.8,   183.1,   0.0);
     (481245.9, 3668552.4,   160.4,   183.1,   0.0);   (481265.9,
3668552.4,   160.7,   183.1,   0.0);
     (481285.9, 3668552.4,   160.9,   183.1,   0.0);   (481305.9,
3668552.4,   160.7,   192.8,   0.0);
     (481325.9, 3668552.4,   161.9,   192.8,   0.0);   (481345.9,
3668552.4,   163.4,   192.8,   0.0);
     (481365.9, 3668552.4,   163.4,   223.8,   0.0);   (481385.9,
3668552.4,   166.0,   183.1,   0.0);
     (481405.9, 3668552.4,   164.7,   224.4,   0.0);   (481425.9,
3668552.4,   163.2,   224.8,   0.0);
     (481445.9, 3668552.4,   162.7,   224.8,   0.0);   (481465.9,
3668552.4,   162.4,   224.8,   0.0);
     (481485.9, 3668552.4,   162.5,   224.9,   0.0);   (481505.9,
3668552.4,   163.4,   224.9,   0.0);
     (481525.9, 3668552.4,   164.4,   224.9,   0.0);   (481905.9,
3668552.4,   211.3,   213.7,   0.0);
     (481925.9, 3668552.4,   212.2,   213.7,   0.0);   (481945.9,
3668552.4,   211.9,   220.3,   0.0);
     (481965.9, 3668552.4,   213.0,   220.3,   0.0);   (481985.9,
3668552.4,   211.2,   222.6,   0.0);
     (482085.9, 3668552.4,   213.5,   214.1,   0.0);   (482105.9,
3668552.4,   211.2,   214.8,   0.0);
     (482125.9, 3668552.4,   205.6,   224.1,   0.0);   (482145.9,
3668552.4,   205.1,   224.0,   0.0);
     (482165.9, 3668552.4,   205.4,   219.8,   0.0);   (482185.9,
3668552.4,   205.2,   214.9,   0.0);
     (482205.9, 3668552.4,   198.5,   224.5,   0.0);   (482225.9,

3668552.4,   196.8,   364.6,   0.0);
     (482245.9, 3668552.4,   196.5,   365.5,   0.0);   (482265.9,
3668552.4,   196.8,   365.8,   0.0);
     (482285.9, 3668552.4,   194.8,   365.8,   0.0);   (482305.9,
3668552.4,   184.3,   365.8,   0.0);
     (482325.9, 3668552.4,   180.8,   365.8,   0.0);   (482345.9,
3668552.4,   180.6,   365.8,   0.0);
     (482365.9, 3668552.4,   181.0,   376.0,   0.0);   (482385.9,
3668552.4,   181.7,   376.7,   0.0);
     (482405.9, 3668552.4,   182.1,   377.3,   0.0);   (482425.9,
3668552.4,   182.3,   380.1,   0.0);
     (482445.9, 3668552.4,   182.5,   386.0,   0.0);   (482465.9,
3668552.4,   182.6,   397.4,   0.0);
     (482485.9, 3668552.4,   182.8,   398.0,   0.0);   (482505.9,
3668552.4,   183.1,   398.0,   0.0);
     (482525.9, 3668552.4,   183.3,   398.0,   0.0);   (482545.9,
3668552.4,   184.1,   398.0,   0.0);
     (482565.9, 3668552.4,   184.3,   398.0,   0.0);   (482585.9,
3668552.4,   190.6,   398.0,   0.0);
     (482605.9, 3668552.4,   192.5,   397.4,   0.0);   (482625.9,
3668552.4,   191.9,   398.0,   0.0);
     (482645.9, 3668552.4,   191.8,   398.0,   0.0);   (482665.9,
3668552.4,   192.3,   398.0,   0.0);
     (482685.9, 3668552.4,   195.9,   398.0,   0.0);   (482785.9,
3668552.4,   207.6,   384.8,   0.0);
     (482805.9, 3668552.4,   208.4,   385.8,   0.0);   (482825.9,
3668552.4,   209.5,   385.8,   0.0);
     (482845.9, 3668552.4,   210.5,   386.0,   0.0);   (482865.9,
3668552.4,   211.8,   386.0,   0.0);

                                                *** DISCRETE CARTESIAN RECEPTORS ***
                                               (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                                           (METERS)

     (482885.9, 3668552.4,   213.4,   385.8,   0.0);   (482905.9,
3668552.4,   214.5,   385.8,   0.0);
     (482925.9, 3668552.4,   215.5,   386.0,   0.0);   (482945.9,
3668552.4,   216.6,   386.0,   0.0);
     (482965.9, 3668552.4,   217.9,   386.0,   0.0);   (481065.9,
3668572.4,   153.9,   177.2,   0.0);
     (481085.9, 3668572.4,   153.6,   177.2,   0.0);   (481105.9,
3668572.4,   154.0,   177.6,   0.0);
     (481125.9, 3668572.4,   155.2,   177.8,   0.0);   (481145.9,

```
3668572.4,     155.1,     182.9,       0.0);
     ( 481165.9, 3668572.4,     156.2,     183.0,       0.0);         ( 481185.9,
3668572.4,     156.9,     183.1,       0.0);
     ( 481205.9, 3668572.4,     157.1,     183.1,       0.0);         ( 481225.9,
3668572.4,     159.2,     183.1,       0.0);
     ( 481245.9, 3668572.4,     159.4,     183.1,       0.0);         ( 481265.9,
3668572.4,     159.5,     183.1,       0.0);
     ( 481285.9, 3668572.4,     159.9,     183.1,       0.0);         ( 481305.9,
3668572.4,     159.6,     192.8,       0.0);
     ( 481325.9, 3668572.4,     159.9,     224.0,       0.0);         ( 481345.9,
3668572.4,     162.7,     183.1,       0.0);
     ( 481365.9, 3668572.4,     162.3,     224.2,       0.0);         ( 481385.9,
3668572.4,     161.1,     224.7,       0.0);
     ( 481405.9, 3668572.4,     160.8,     224.8,       0.0);         ( 481425.9,
3668572.4,     161.8,     224.8,       0.0);
     ( 481445.9, 3668572.4,     162.0,     224.8,       0.0);         ( 481465.9,
3668572.4,     162.5,     224.8,       0.0);
     ( 481485.9, 3668572.4,     162.8,     224.9,       0.0);         ( 481505.9,
3668572.4,     162.6,     224.9,       0.0);
     ( 481905.9, 3668572.4,     212.7,     217.5,       0.0);         ( 481925.9,
3668572.4,     213.6,     217.4,       0.0);
     ( 481945.9, 3668572.4,     213.4,     219.6,       0.0);         ( 481965.9,
3668572.4,     215.0,     218.1,       0.0);
     ( 481985.9, 3668572.4,     215.9,     218.6,       0.0);         ( 482085.9,
3668572.4,     214.0,     214.0,       0.0);
     ( 482105.9, 3668572.4,     213.0,     214.8,       0.0);         ( 482125.9,
3668572.4,     205.5,     224.2,       0.0);
     ( 482145.9, 3668572.4,     205.1,     224.1,       0.0);         ( 482165.9,
3668572.4,     204.9,     224.0,       0.0);
     ( 482185.9, 3668572.4,     205.3,     215.0,       0.0);         ( 482205.9,
3668572.4,     199.4,     224.7,       0.0);
     ( 482225.9, 3668572.4,     196.8,     364.6,       0.0);         ( 482245.9,
3668572.4,     196.0,     365.8,       0.0);
     ( 482265.9, 3668572.4,     196.3,     365.8,       0.0);         ( 482285.9,
3668572.4,     196.0,     365.8,       0.0);
     ( 482305.9, 3668572.4,     187.2,     365.8,       0.0);         ( 482325.9,
3668572.4,     181.0,     365.8,       0.0);
     ( 482345.9, 3668572.4,     180.9,     375.5,       0.0);         ( 482365.9,
3668572.4,     180.3,     377.3,       0.0);
     ( 482385.9, 3668572.4,     181.9,     377.3,       0.0);         ( 482405.9,
3668572.4,     182.5,     379.9,       0.0);
     ( 482425.9, 3668572.4,     183.0,     385.2,       0.0);         ( 482445.9,
3668572.4,     183.8,     386.0,       0.0);
     ( 482465.9, 3668572.4,     184.2,     396.8,       0.0);         ( 482485.9,
3668572.4,     184.7,     398.0,       0.0);
     ( 482505.9, 3668572.4,     185.0,     398.0,       0.0);         ( 482525.9,
3668572.4,     184.3,     398.0,       0.0);
     ( 482545.9, 3668572.4,     184.6,     398.0,       0.0);         ( 482565.9,
3668572.4,     185.1,     398.0,       0.0);
     ( 482585.9, 3668572.4,     192.1,     397.5,       0.0);         ( 482605.9,
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3668572.4,   193.3,   398.0,   0.0);
     (482625.9, 3668572.4,   192.7,   398.0,   0.0);   (482645.9,
3668572.4,   193.7,   398.0,   0.0);
     (482665.9, 3668572.4,   194.4,   398.0,   0.0);   (482685.9,
3668572.4,   197.0,   398.0,   0.0);
     (482745.9, 3668572.4,   203.6,   397.4,   0.0);   (482765.9,
3668572.4,   204.8,   397.4,   0.0);
     (482785.9, 3668572.4,   205.9,   397.5,   0.0);   (482805.9,
3668572.4,   207.3,   397.5,   0.0);
     (482825.9, 3668572.4,   208.9,   397.4,   0.0);   (482845.9,
3668572.4,   210.3,   397.4,   0.0);
     (482865.9, 3668572.4,   211.6,   397.4,   0.0);   (482885.9,
3668572.4,   213.0,   397.4,   0.0);
     (482905.9, 3668572.4,   214.2,   397.4,   0.0);   (482925.9,
3668572.4,   215.4,   397.4,   0.0);
     (482945.9, 3668572.4,   216.5,   397.4,   0.0);   (482965.9,
3668572.4,   218.1,   396.8,   0.0);
     (481065.9, 3668592.4,   152.7,   177.2,   0.0);   (481085.9,
3668592.4,   153.1,   177.2,   0.0);
     (481105.9, 3668592.4,   152.9,   177.6,   0.0);   (481125.9,
3668592.4,   154.5,   177.4,   0.0);
     (481145.9, 3668592.4,   154.4,   181.3,   0.0);   (481165.9,
3668592.4,   154.7,   183.0,   0.0);
     (481185.9, 3668592.4,   156.1,   183.0,   0.0);   (481205.9,
3668592.4,   155.9,   183.1,   0.0);
     (481225.9, 3668592.4,   156.3,   183.1,   0.0);   (481245.9,
3668592.4,   158.4,   183.1,   0.0);
     (481265.9, 3668592.4,   157.9,   183.1,   0.0);   (481285.9,
3668592.4,   158.0,   183.1,   0.0);
     (481305.9, 3668592.4,   158.0,   224.0,   0.0);   (481325.9,
3668592.4,   157.6,   224.7,   0.0);

                                          *** DISCRETE CARTESIAN RECEPTORS ***
                                        (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                                    (METERS)

     (481345.9, 3668592.4,   161.8,   224.0,   0.0);   (481365.9,
3668592.4,   161.1,   224.7,   0.0);
     (481385.9, 3668592.4,   160.1,   224.8,   0.0);   (481405.9,
3668592.4,   160.1,   224.8,   0.0);
     (481425.9, 3668592.4,   161.5,   224.8,   0.0);   (481445.9,
3668592.4,   162.2,   224.8,   0.0);
     (481465.9, 3668592.4,   161.5,   224.9,   0.0);   (481485.9,

3668592.4,   158.8,   224.9,   0.0);
     (481925.9, 3668592.4,   215.2,   217.5,   0.0);   (481945.9,
3668592.4,   215.0,   219.6,   0.0);
     (481965.9, 3668592.4,   215.9,   220.3,   0.0);   (481985.9,
3668592.4,   217.7,   218.1,   0.0);
     (482085.9, 3668592.4,   214.6,   219.8,   0.0);   (482105.9,
3668592.4,   214.5,   214.8,   0.0);
     (482125.9, 3668592.4,   206.0,   224.7,   0.0);   (482145.9,
3668592.4,   205.1,   224.5,   0.0);
     (482165.9, 3668592.4,   204.6,   224.2,   0.0);   (482185.9,
3668592.4,   205.1,   221.4,   0.0);
     (482205.9, 3668592.4,   201.8,   224.2,   0.0);   (482225.9,
3668592.4,   196.4,   364.9,   0.0);
     (482245.9, 3668592.4,   195.8,   365.8,   0.0);   (482265.9,
3668592.4,   195.3,   365.8,   0.0);
     (482285.9, 3668592.4,   195.4,   365.8,   0.0);   (482305.9,
3668592.4,   189.4,   365.8,   0.0);
     (482325.9, 3668592.4,   181.5,   365.8,   0.0);   (482345.9,
3668592.4,   181.3,   376.7,   0.0);
     (482365.9, 3668592.4,   180.6,   379.9,   0.0);   (482385.9,
3668592.4,   182.4,   377.3,   0.0);
     (482405.9, 3668592.4,   182.6,   385.8,   0.0);   (482425.9,
3668592.4,   182.6,   395.0,   0.0);
     (482445.9, 3668592.4,   183.1,   398.0,   0.0);   (482465.9,
3668592.4,   183.6,   398.0,   0.0);
     (482485.9, 3668592.4,   184.0,   398.0,   0.0);   (482505.9,
3668592.4,   184.4,   398.0,   0.0);
     (482525.9, 3668592.4,   184.6,   398.0,   0.0);   (482545.9,
3668592.4,   185.2,   398.0,   0.0);
     (482565.9, 3668592.4,   185.6,   398.0,   0.0);   (482585.9,
3668592.4,   192.4,   398.0,   0.0);
     (482605.9, 3668592.4,   193.6,   398.0,   0.0);   (482625.9,
3668592.4,   193.0,   398.0,   0.0);
     (482645.9, 3668592.4,   194.3,   398.0,   0.0);   (482665.9,
3668592.4,   195.2,   398.0,   0.0);
     (482685.9, 3668592.4,   196.7,   398.0,   0.0);   (482705.9,
3668592.4,   200.1,   398.0,   0.0);
     (482725.9, 3668592.4,   201.2,   398.0,   0.0);   (482745.9,
3668592.4,   202.8,   398.0,   0.0);
     (482765.9, 3668592.4,   203.5,   398.0,   0.0);   (482785.9,
3668592.4,   205.0,   398.0,   0.0);
     (482805.9, 3668592.4,   207.3,   398.0,   0.0);   (482825.9,
3668592.4,   209.0,   398.0,   0.0);
     (482845.9, 3668592.4,   211.3,   397.5,   0.0);   (482865.9,
3668592.4,   212.4,   398.0,   0.0);
     (482885.9, 3668592.4,   213.6,   398.0,   0.0);   (482905.9,
3668592.4,   215.4,   397.5,   0.0);
     (482925.9, 3668592.4,   216.2,   398.0,   0.0);   (482945.9,
3668592.4,   216.6,   398.0,   0.0);
     (481065.9, 3668612.4,   149.4,   177.2,   0.0);   (481085.9,

3668612.4,   152.6,   177.2,   0.0);
     (481105.9, 3668612.4,   152.0,   177.3,   0.0);   (481125.9,
3668612.4,   153.1,   177.4,   0.0);
     (481145.9, 3668612.4,   154.0,   177.6,   0.0);   (481165.9,
3668612.4,   153.7,   182.9,   0.0);
     (481185.9, 3668612.4,   154.8,   183.0,   0.0);   (481205.9,
3668612.4,   154.8,   183.1,   0.0);
     (481225.9, 3668612.4,   155.0,   183.1,   0.0);   (481245.9,
3668612.4,   156.8,   183.1,   0.0);
     (481265.9, 3668612.4,   156.6,   183.1,   0.0);   (481285.9,
3668612.4,   156.8,   223.8,   0.0);
     (481305.9, 3668612.4,   156.2,   224.7,   0.0);   (481325.9,
3668612.4,   155.9,   224.8,   0.0);
     (481345.9, 3668612.4,   156.3,   224.8,   0.0);   (481365.9,
3668612.4,   160.6,   224.7,   0.0);
     (481385.9, 3668612.4,   160.4,   224.8,   0.0);   (481405.9,
3668612.4,   160.8,   224.8,   0.0);
     (481425.9, 3668612.4,   160.6,   224.8,   0.0);   (481445.9,
3668612.4,   157.2,   224.9,   0.0);
     (481465.9, 3668612.4,   156.0,   224.9,   0.0);   (481925.9,
3668612.4,   216.9,   217.5,   0.0);
     (481945.9, 3668612.4,   217.1,   217.1,   0.0);   (481965.9,
3668612.4,   216.9,   219.8,   0.0);
     (481985.9, 3668612.4,   218.5,   220.3,   0.0);   (482005.9,
3668612.4,   220.0,   220.0,   0.0);
     (482085.9, 3668612.4,   214.6,   222.0,   0.0);   (482105.9,
3668612.4,   214.8,   214.8,   0.0);
     (482125.9, 3668612.4,   207.9,   224.5,   0.0);   (482145.9,
3668612.4,   205.0,   224.8,   0.0);
     (482165.9, 3668612.4,   204.4,   224.8,   0.0);   (482185.9,
3668612.4,   204.7,   224.1,   0.0);
     (482205.9, 3668612.4,   204.0,   221.8,   0.0);   (482225.9,
3668612.4,   196.1,   365.4,   0.0);

                                                  *** DISCRETE CARTESIAN RECEPTORS ***
                                                (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                                             (METERS)

     (482245.9, 3668612.4,   195.1,   365.8,   0.0);   (482265.9,
3668612.4,   194.2,   365.8,   0.0);
     (482285.9, 3668612.4,   194.7,   365.8,   0.0);   (482305.9,
3668612.4,   192.3,   365.8,   0.0);
     (482325.9, 3668612.4,   182.8,   365.8,   0.0);   (482345.9,

```
3668612.4,     181.7,     377.3,       0.0);
     ( 482365.9, 3668612.4,     180.9,     384.8,       0.0);         ( 482385.9,
3668612.4,     182.3,     385.8,       0.0);
     ( 482405.9, 3668612.4,     182.7,     386.0,       0.0);         ( 482425.9,
3668612.4,     183.1,     398.0,       0.0);
     ( 482445.9, 3668612.4,     183.4,     398.0,       0.0);         ( 482465.9,
3668612.4,     183.8,     398.0,       0.0);
     ( 482485.9, 3668612.4,     184.3,     398.0,       0.0);         ( 482505.9,
3668612.4,     184.7,     398.0,       0.0);
     ( 482525.9, 3668612.4,     184.9,     398.0,       0.0);         ( 482545.9,
3668612.4,     185.4,     398.0,       0.0);
     ( 482565.9, 3668612.4,     185.8,     398.0,       0.0);         ( 482585.9,
3668612.4,     192.2,     398.0,       0.0);
     ( 482605.9, 3668612.4,     193.5,     398.0,       0.0);         ( 482625.9,
3668612.4,     192.8,     398.0,       0.0);
     ( 482645.9, 3668612.4,     193.3,     398.0,       0.0);         ( 482665.9,
3668612.4,     194.5,     398.0,       0.0);
     ( 482685.9, 3668612.4,     197.6,     398.0,       0.0);         ( 482705.9,
3668612.4,     199.5,     398.0,       0.0);
     ( 482725.9, 3668612.4,     200.3,     398.0,       0.0);         ( 482745.9,
3668612.4,     201.0,     398.0,       0.0);
     ( 482765.9, 3668612.4,     203.1,     398.0,       0.0);         ( 482785.9,
3668612.4,     204.7,     398.0,       0.0);
     ( 482805.9, 3668612.4,     205.9,     398.0,       0.0);         ( 482825.9,
3668612.4,     208.8,     398.0,       0.0);
     ( 482845.9, 3668612.4,     212.0,     398.0,       0.0);         ( 482865.9,
3668612.4,     213.7,     398.0,       0.0);
     ( 482885.9, 3668612.4,     215.9,     397.4,       0.0);         ( 482905.9,
3668612.4,     217.3,     397.4,       0.0);
     ( 482925.9, 3668612.4,     217.3,     398.0,       0.0);         ( 482945.9,
3668612.4,     217.1,     398.0,       0.0);
     ( 481085.9, 3668632.4,     151.5,     176.6,       0.0);         ( 481105.9,
3668632.4,     151.4,     177.2,       0.0);
     ( 481125.9, 3668632.4,     151.5,     177.4,       0.0);         ( 481145.9,
3668632.4,     153.3,     177.2,       0.0);
     ( 481165.9, 3668632.4,     153.1,     181.3,       0.0);         ( 481185.9,
3668632.4,     153.3,     183.0,       0.0);
     ( 481205.9, 3668632.4,     154.3,     183.0,       0.0);         ( 481225.9,
3668632.4,     154.0,     183.1,       0.0);
     ( 481245.9, 3668632.4,     154.8,     183.1,       0.0);         ( 481265.9,
3668632.4,     155.6,     183.1,       0.0);
     ( 481285.9, 3668632.4,     155.3,     224.4,       0.0);         ( 481305.9,
3668632.4,     154.8,     224.8,       0.0);
     ( 481325.9, 3668632.4,     153.9,     224.8,       0.0);         ( 481345.9,
3668632.4,     154.1,     224.8,       0.0);
     ( 481365.9, 3668632.4,     159.1,     224.8,       0.0);         ( 481385.9,
3668632.4,     159.6,     224.8,       0.0);
     ( 481405.9, 3668632.4,     156.4,     224.9,       0.0);         ( 481425.9,
3668632.4,     154.5,     224.9,       0.0);
     ( 481445.9, 3668632.4,     154.9,     224.9,       0.0);         ( 481465.9,
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3668632.4,   155.5,   224.9,   0.0);
     (481485.9, 3668632.4,   156.7,   224.9,   0.0);   (481925.9,
3668632.4,   218.6,   219.0,   0.0);
     (481945.9, 3668632.4,   218.7,   219.4,   0.0);   (481965.9,
3668632.4,   218.3,   219.6,   0.0);
     (481985.9, 3668632.4,   219.8,   219.8,   0.0);   (482005.9,
3668632.4,   221.0,   221.6,   0.0);
     (482105.9, 3668632.4,   214.9,   214.9,   0.0);   (482125.9,
3668632.4,   210.7,   224.1,   0.0);
     (482145.9, 3668632.4,   204.9,   224.8,   0.0);   (482165.9,
3668632.4,   204.3,   224.8,   0.0);
     (482185.9, 3668632.4,   204.2,   224.8,   0.0);   (482205.9,
3668632.4,   204.4,   224.0,   0.0);
     (482225.9, 3668632.4,   197.6,   364.6,   0.0);   (482245.9,
3668632.4,   194.6,   365.8,   0.0);
     (482265.9, 3668632.4,   193.6,   365.8,   0.0);   (482285.9,
3668632.4,   193.9,   365.8,   0.0);
     (482305.9, 3668632.4,   193.2,   365.8,   0.0);   (482325.9,
3668632.4,   184.8,   365.8,   0.0);
     (482345.9, 3668632.4,   182.1,   377.3,   0.0);   (482365.9,
3668632.4,   181.8,   385.8,   0.0);
     (482385.9, 3668632.4,   182.6,   386.0,   0.0);   (482405.9,
3668632.4,   183.6,   396.8,   0.0);
     (482425.9, 3668632.4,   183.6,   398.0,   0.0);   (482445.9,
3668632.4,   183.9,   398.0,   0.0);
     (482465.9, 3668632.4,   184.1,   398.0,   0.0);   (482485.9,
3668632.4,   184.5,   398.0,   0.0);
     (482505.9, 3668632.4,   185.1,   398.0,   0.0);   (482525.9,
3668632.4,   185.2,   398.0,   0.0);
     (482545.9, 3668632.4,   185.5,   398.0,   0.0);   (482565.9,
3668632.4,   185.8,   398.0,   0.0);
     (482585.9, 3668632.4,   191.5,   398.0,   0.0);   (482605.9,
3668632.4,   193.1,   398.0,   0.0);
     (482625.9, 3668632.4,   192.3,   398.0,   0.0);   (482645.9,
3668632.4,   193.1,   398.0,   0.0);

                                          *** DISCRETE CARTESIAN RECEPTORS ***
                                        (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                                  (METERS)

     (482665.9, 3668632.4,   194.1,   398.0,   0.0);   (482685.9,
3668632.4,   197.5,   398.0,   0.0);
     (482705.9, 3668632.4,   197.4,   398.0,   0.0);   (482725.9,

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3668632.4,     198.6,     398.0,       0.0);
     ( 482745.9, 3668632.4,     200.4,     398.0,       0.0);         ( 482765.9,
3668632.4,     202.1,     398.0,       0.0);
     ( 482785.9, 3668632.4,     203.8,     398.0,       0.0);         ( 482805.9,
3668632.4,     208.0,     398.0,       0.0);
     ( 481085.9, 3668652.4,     147.9,     177.2,       0.0);         ( 481105.9,
3668652.4,     150.9,     177.2,       0.0);
     ( 481125.9, 3668652.4,     150.8,     177.2,       0.0);         ( 481145.9,
3668652.4,     152.2,     177.2,       0.0);
     ( 481165.9, 3668652.4,     152.5,     177.3,       0.0);         ( 481185.9,
3668652.4,     152.5,     181.3,       0.0);
     ( 481205.9, 3668652.4,     153.3,     182.9,       0.0);         ( 481225.9,
3668652.4,     153.0,     183.1,       0.0);
     ( 481245.9, 3668652.4,     153.4,     183.1,       0.0);         ( 481265.9,
3668652.4,     154.3,     224.2,       0.0);
     ( 481285.9, 3668652.4,     153.9,     224.8,       0.0);         ( 481305.9,
3668652.4,     153.9,     224.8,       0.0);
     ( 481325.9, 3668652.4,     152.8,     224.8,       0.0);         ( 481345.9,
3668652.4,     153.2,     224.8,       0.0);
     ( 481365.9, 3668652.4,     153.7,     224.9,       0.0);         ( 481385.9,
3668652.4,     153.4,     224.9,       0.0);
     ( 481405.9, 3668652.4,     153.7,     224.9,       0.0);         ( 481425.9,
3668652.4,     154.1,     224.9,       0.0);
     ( 481445.9, 3668652.4,     155.7,     224.9,       0.0);         ( 481465.9,
3668652.4,     156.6,     224.9,       0.0);
     ( 481485.9, 3668652.4,     157.3,     224.9,       0.0);         ( 481925.9,
3668652.4,     218.9,     223.0,       0.0);
     ( 481945.9, 3668652.4,     219.6,     222.8,       0.0);         ( 481965.9,
3668652.4,     220.0,     222.8,       0.0);
     ( 481985.9, 3668652.4,     220.4,     222.7,       0.0);         ( 482005.9,
3668652.4,     221.7,     222.6,       0.0);
     ( 482105.9, 3668652.4,     215.0,     215.0,       0.0);         ( 482125.9,
3668652.4,     213.3,     215.1,       0.0);
     ( 482145.9, 3668652.4,     205.0,     224.9,       0.0);         ( 482165.9,
3668652.4,     204.1,     224.9,       0.0);
     ( 482185.9, 3668652.4,     203.5,     224.9,       0.0);         ( 482205.9,
3668652.4,     204.0,     224.8,       0.0);
     ( 482225.9, 3668652.4,     200.2,     224.9,       0.0);         ( 482245.9,
3668652.4,     194.0,     365.8,       0.0);
     ( 482265.9, 3668652.4,     193.2,     365.8,       0.0);         ( 482285.9,
3668652.4,     192.7,     365.8,       0.0);
     ( 482305.9, 3668652.4,     193.0,     365.8,       0.0);         ( 482325.9,
3668652.4,     187.7,     365.8,       0.0);
     ( 482345.9, 3668652.4,     182.2,     379.9,       0.0);         ( 482365.9,
3668652.4,     182.1,     394.5,       0.0);
     ( 482385.9, 3668652.4,     182.5,     398.0,       0.0);         ( 482405.9,
3668652.4,     183.9,     398.0,       0.0);
     ( 482425.9, 3668652.4,     184.2,     398.0,       0.0);         ( 482445.9,
3668652.4,     184.6,     398.0,       0.0);
     ( 482465.9, 3668652.4,     185.0,     398.0,       0.0);         ( 482485.9,
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3668652.4,   185.2,   398.0,   0.0);
     (482505.9, 3668652.4,   185.6,   398.0,   0.0);   (482525.9,
3668652.4,   185.5,   398.0,   0.0);
     (482545.9, 3668652.4,   185.7,   398.0,   0.0);   (482565.9,
3668652.4,   186.0,   398.0,   0.0);
     (482585.9, 3668652.4,   191.1,   398.0,   0.0);   (482605.9,
3668652.4,   192.6,   398.0,   0.0);
     (482625.9, 3668652.4,   192.0,   398.0,   0.0);   (482645.9,
3668652.4,   192.3,   398.0,   0.0);
     (482665.9, 3668652.4,   193.3,   398.0,   0.0);   (482685.9,
3668652.4,   194.8,   398.0,   0.0);
     (482705.9, 3668652.4,   196.5,   398.0,   0.0);   (482725.9,
3668652.4,   198.8,   398.0,   0.0);
     (482745.9, 3668652.4,   200.1,   398.0,   0.0);   (482765.9,
3668652.4,   202.0,   398.0,   0.0);
     (482785.9, 3668652.4,   206.4,   398.0,   0.0);   (481105.9,
3668672.4,   150.3,   150.3,   0.0);
     (481125.9, 3668672.4,   150.0,   177.2,   0.0);   (481145.9,
3668672.4,   150.2,   177.2,   0.0);
     (481165.9, 3668672.4,   152.1,   177.2,   0.0);   (481185.9,
3668672.4,   151.8,   177.3,   0.0);
     (481205.9, 3668672.4,   152.2,   181.3,   0.0);   (481225.9,
3668672.4,   152.5,   183.0,   0.0);
     (481245.9, 3668672.4,   152.2,   224.4,   0.0);   (481265.9,
3668672.4,   152.9,   224.7,   0.0);
     (481285.9, 3668672.4,   152.8,   224.8,   0.0);   (481305.9,
3668672.4,   152.6,   224.8,   0.0);
     (481325.9, 3668672.4,   152.2,   224.8,   0.0);   (481345.9,
3668672.4,   152.2,   224.9,   0.0);
     (481365.9, 3668672.4,   152.7,   224.9,   0.0);   (481385.9,
3668672.4,   153.0,   224.9,   0.0);
     (481405.9, 3668672.4,   154.7,   224.9,   0.0);   (481425.9,
3668672.4,   156.6,   224.9,   0.0);
     (481445.9, 3668672.4,   156.9,   224.9,   0.0);   (481465.9,
3668672.4,   157.0,   224.9,   0.0);
     (481485.9, 3668672.4,   157.2,   224.9,   0.0);   (481505.9,
3668672.4,   158.2,   224.9,   0.0);

                                                *** DISCRETE CARTESIAN RECEPTORS ***
                                               (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                                           (METERS)

     (481945.9, 3668672.4,   221.3,   223.0,   0.0);   (481965.9,

```
3668672.4,     221.6,     222.8,       0.0);
     ( 481985.9, 3668672.4,     222.0,     223.7,       0.0);         ( 482005.9,
3668672.4,     222.8,     222.8,       0.0);
     ( 482105.9, 3668672.4,     214.8,     224.1,       0.0);         ( 482125.9,
3668672.4,     214.5,     214.5,       0.0);
     ( 482145.9, 3668672.4,     206.2,     224.9,       0.0);         ( 482165.9,
3668672.4,     203.7,     224.9,       0.0);
     ( 482185.9, 3668672.4,     202.7,     224.9,       0.0);         ( 482205.9,
3668672.4,     203.3,     224.9,       0.0);
     ( 482225.9, 3668672.4,     202.5,     224.8,       0.0);         ( 482245.9,
3668672.4,     194.2,     365.8,       0.0);
     ( 482265.9, 3668672.4,     192.7,     365.8,       0.0);         ( 482285.9,
3668672.4,     191.7,     365.8,       0.0);
     ( 482305.9, 3668672.4,     192.3,     365.8,       0.0);         ( 482325.9,
3668672.4,     190.0,     365.8,       0.0);
     ( 482345.9, 3668672.4,     182.6,     385.8,       0.0);         ( 482365.9,
3668672.4,     182.6,     397.4,       0.0);
     ( 482385.9, 3668672.4,     182.0,     398.0,       0.0);         ( 482405.9,
3668672.4,     183.3,     398.0,       0.0);
     ( 482425.9, 3668672.4,     183.7,     398.0,       0.0);         ( 482445.9,
3668672.4,     184.2,     398.0,       0.0);
     ( 482465.9, 3668672.4,     184.5,     398.0,       0.0);         ( 482485.9,
3668672.4,     184.8,     398.0,       0.0);
     ( 482505.9, 3668672.4,     185.2,     398.0,       0.0);         ( 482525.9,
3668672.4,     185.4,     398.0,       0.0);
     ( 482545.9, 3668672.4,     185.8,     398.0,       0.0);         ( 482565.9,
3668672.4,     186.1,     398.0,       0.0);
     ( 482585.9, 3668672.4,     191.0,     398.0,       0.0);         ( 482605.9,
3668672.4,     192.2,     398.0,       0.0);
     ( 482625.9, 3668672.4,     191.6,     398.0,       0.0);         ( 482645.9,
3668672.4,     193.1,     398.0,       0.0);
     ( 482665.9, 3668672.4,     194.2,     398.0,       0.0);         ( 482685.9,
3668672.4,     195.5,     398.0,       0.0);
     ( 482705.9, 3668672.4,     196.7,     398.0,       0.0);         ( 482725.9,
3668672.4,     198.6,     398.0,       0.0);
     ( 482745.9, 3668672.4,     199.4,     398.0,       0.0);         ( 481105.9,
3668692.4,     147.6,     177.2,       0.0);
     ( 481125.9, 3668692.4,     149.6,     149.6,       0.0);         ( 481145.9,
3668692.4,     149.8,     177.2,       0.0);
     ( 481165.9, 3668692.4,     151.4,     151.4,       0.0);         ( 481185.9,
3668692.4,     151.3,     177.0,       0.0);
     ( 481205.9, 3668692.4,     151.4,     177.2,       0.0);         ( 481225.9,
3668692.4,     151.6,     185.5,       0.0);
     ( 481245.9, 3668692.4,     151.3,     224.7,       0.0);         ( 481265.9,
3668692.4,     151.5,     224.8,       0.0);
     ( 481285.9, 3668692.4,     151.6,     224.8,       0.0);         ( 481365.9,
3668692.4,     152.8,     224.9,       0.0);
     ( 481385.9, 3668692.4,     155.8,     224.9,       0.0);         ( 481405.9,
3668692.4,     156.5,     224.9,       0.0);
     ( 481425.9, 3668692.4,     156.6,     224.9,       0.0);         ( 481445.9,
```

3668692.4,   156.9,   224.9,   0.0);
     (481465.9, 3668692.4,   157.0,   224.9,   0.0);   (481485.9,
3668692.4,   157.2,   224.9,   0.0);
     (481505.9, 3668692.4,   157.6,   224.9,   0.0);   (481945.9,
3668692.4,   222.9,   223.8,   0.0);
     (481965.9, 3668692.4,   223.2,   223.8,   0.0);   (481985.9,
3668692.4,   223.0,   223.0,   0.0);
     (482005.9, 3668692.4,   223.9,   223.9,   0.0);   (482105.9,
3668692.4,   214.1,   224.8,   0.0);
     (482125.9, 3668692.4,   214.5,   221.5,   0.0);   (482145.9,
3668692.4,   208.6,   224.9,   0.0);
     (482165.9, 3668692.4,   203.2,   224.9,   0.0);   (482185.9,
3668692.4,   202.5,   224.9,   0.0);
     (482205.9, 3668692.4,   202.5,   224.9,   0.0);   (482225.9,
3668692.4,   202.8,   224.9,   0.0);
     (482245.9, 3668692.4,   195.5,   365.8,   0.0);   (482265.9,
3668692.4,   192.0,   365.8,   0.0);
     (482285.9, 3668692.4,   191.1,   365.8,   0.0);   (482305.9,
3668692.4,   191.3,   365.8,   0.0);
     (482325.9, 3668692.4,   191.0,   365.8,   0.0);   (482345.9,
3668692.4,   183.4,   386.0,   0.0);
     (482365.9, 3668692.4,   182.9,   398.0,   0.0);   (482385.9,
3668692.4,   182.2,   398.0,   0.0);
     (482405.9, 3668692.4,   183.5,   398.0,   0.0);   (482425.9,
3668692.4,   183.9,   398.0,   0.0);
     (482445.9, 3668692.4,   184.2,   398.0,   0.0);   (482465.9,
3668692.4,   184.6,   398.0,   0.0);
     (482485.9, 3668692.4,   184.9,   398.0,   0.0);   (482505.9,
3668692.4,   185.3,   398.0,   0.0);
     (482525.9, 3668692.4,   185.7,   398.0,   0.0);   (482545.9,
3668692.4,   185.9,   398.0,   0.0);
     (482565.9, 3668692.4,   186.6,   398.0,   0.0);   (482585.9,
3668692.4,   190.2,   398.0,   0.0);
     (482605.9, 3668692.4,   191.2,   398.0,   0.0);   (482625.9,
3668692.4,   191.3,   398.0,   0.0);
     (482645.9, 3668692.4,   192.9,   398.0,   0.0);   (482665.9,
3668692.4,   194.3,   398.0,   0.0);
     (482685.9, 3668692.4,   195.7,   398.0,   0.0);   (482705.9,
3668692.4,   196.2,   398.0,   0.0);

 *** MODELOPTs: RegDFAULT CONC ELEV RURAL SigA Data

                                  *** DISCRETE CARTESIAN RECEPTORS ***
                                (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                          (METERS)

```
     ( 482725.9, 3668692.4,     197.4,     398.0,       0.0);         ( 481125.9,
3668712.4,     149.5,     149.5,       0.0);
     ( 481145.9, 3668712.4,     149.3,     149.3,       0.0);         ( 481165.9,
3668712.4,     150.1,     151.2,       0.0);
     ( 481185.9, 3668712.4,     150.9,     150.9,       0.0);         ( 481205.9,
3668712.4,     150.8,     185.5,       0.0);
     ( 481225.9, 3668712.4,     150.9,     224.0,       0.0);         ( 481245.9,
3668712.4,     150.8,     224.8,       0.0);
     ( 481365.9, 3668712.4,     153.9,     224.9,       0.0);         ( 481385.9,
3668712.4,     156.2,     224.9,       0.0);
     ( 481405.9, 3668712.4,     156.5,     224.9,       0.0);         ( 481425.9,
3668712.4,     156.5,     224.9,       0.0);
     ( 481445.9, 3668712.4,     156.6,     224.9,       0.0);         ( 481465.9,
3668712.4,     157.7,     224.9,       0.0);
     ( 481485.9, 3668712.4,     157.6,     224.9,       0.0);         ( 481505.9,
3668712.4,     157.8,     224.9,       0.0);
     ( 481525.9, 3668712.4,     164.0,     224.9,       0.0);         ( 481945.9,
3668712.4,     222.1,     224.0,       0.0);
     ( 481965.9, 3668712.4,     223.9,     223.9,       0.0);         ( 481985.9,
3668712.4,     223.7,     223.7,       0.0);
     ( 482005.9, 3668712.4,     224.0,     224.0,       0.0);         ( 482025.9,
3668712.4,     223.9,     223.9,       0.0);
     ( 482125.9, 3668712.4,     213.7,     224.8,       0.0);         ( 482145.9,
3668712.4,     210.8,     224.9,       0.0);
     ( 482165.9, 3668712.4,     202.7,     224.9,       0.0);         ( 482185.9,
3668712.4,     202.3,     224.9,       0.0);
     ( 482205.9, 3668712.4,     201.5,     224.9,       0.0);         ( 482225.9,
3668712.4,     202.0,     224.9,       0.0);
     ( 482245.9, 3668712.4,     197.4,     365.5,       0.0);         ( 482265.9,
3668712.4,     191.5,     365.8,       0.0);
     ( 482285.9, 3668712.4,     190.8,     365.8,       0.0);         ( 482305.9,
3668712.4,     190.1,     365.8,       0.0);
     ( 482325.9, 3668712.4,     190.5,     365.8,       0.0);         ( 482345.9,
3668712.4,     185.4,     385.2,       0.0);
     ( 482365.9, 3668712.4,     183.3,     398.0,       0.0);         ( 482385.9,
3668712.4,     182.6,     398.0,       0.0);
     ( 482405.9, 3668712.4,     183.8,     398.0,       0.0);         ( 482425.9,
3668712.4,     184.2,     398.0,       0.0);
     ( 482445.9, 3668712.4,     184.6,     398.0,       0.0);         ( 482465.9,
3668712.4,     184.9,     398.0,       0.0);
     ( 482485.9, 3668712.4,     185.3,     398.0,       0.0);         ( 482505.9,
3668712.4,     185.6,     398.0,       0.0);
     ( 482525.9, 3668712.4,     185.9,     398.0,       0.0);         ( 482545.9,
3668712.4,     186.2,     398.0,       0.0);
     ( 482565.9, 3668712.4,     187.4,     398.0,       0.0);         ( 482585.9,
3668712.4,     189.1,     398.0,       0.0);
     ( 482605.9, 3668712.4,     190.0,     398.0,       0.0);         ( 482625.9,
3668712.4,     190.9,     398.0,       0.0);
     ( 482645.9, 3668712.4,     191.9,     398.0,       0.0);         ( 482665.9,
```

3668712.4,   193.3,   398.0,   0.0);
     (482685.9, 3668712.4,   194.2,   398.0,   0.0);   (482705.9,
3668712.4,   195.3,   398.0,   0.0);
     (482725.9, 3668712.4,   196.3,   398.0,   0.0);   (481125.9,
3668732.4,   148.9,   149.4,   0.0);
     (481145.9, 3668732.4,   149.4,   149.4,   0.0);   (481165.9,
3668732.4,   149.9,   149.9,   0.0);
     (481185.9, 3668732.4,   150.4,   150.4,   0.0);   (481205.9,
3668732.4,   150.3,   185.5,   0.0);
     (481385.9, 3668732.4,   156.6,   224.9,   0.0);   (481405.9,
3668732.4,   156.8,   224.9,   0.0);
     (481425.9, 3668732.4,   157.3,   224.9,   0.0);   (481445.9,
3668732.4,   158.2,   224.9,   0.0);
     (481465.9, 3668732.4,   158.1,   224.9,   0.0);   (481485.9,
3668732.4,   158.2,   224.9,   0.0);
     (481505.9, 3668732.4,   159.8,   224.9,   0.0);   (481965.9,
3668732.4,   224.1,   224.1,   0.0);
     (481985.9, 3668732.4,   223.8,   223.8,   0.0);   (482005.9,
3668732.4,   224.1,   224.1,   0.0);
     (482025.9, 3668732.4,   224.3,   224.3,   0.0);   (482125.9,
3668732.4,   211.9,   224.9,   0.0);
     (482145.9, 3668732.4,   211.3,   224.9,   0.0);   (482165.9,
3668732.4,   203.5,   224.9,   0.0);
     (482185.9, 3668732.4,   201.6,   224.9,   0.0);   (482205.9,
3668732.4,   200.5,   224.9,   0.0);
     (482225.9, 3668732.4,   201.0,   224.9,   0.0);   (482245.9,
3668732.4,   199.7,   364.9,   0.0);
     (482265.9, 3668732.4,   191.8,   365.8,   0.0);   (482285.9,
3668732.4,   190.3,   365.8,   0.0);
     (482305.9, 3668732.4,   189.2,   365.8,   0.0);   (482325.9,
3668732.4,   189.8,   375.4,   0.0);
     (482345.9, 3668732.4,   187.7,   377.3,   0.0);   (482365.9,
3668732.4,   183.5,   398.0,   0.0);
     (482385.9, 3668732.4,   183.1,   398.0,   0.0);   (482405.9,
3668732.4,   184.6,   398.0,   0.0);
     (482425.9, 3668732.4,   185.8,   398.0,   0.0);   (482445.9,
3668732.4,   185.9,   398.0,   0.0);
     (482465.9, 3668732.4,   186.0,   398.0,   0.0);   (482485.9,
3668732.4,   186.3,   398.0,   0.0);
     (482505.9, 3668732.4,   186.5,   398.0,   0.0);   (482525.9,
3668732.4,   186.7,   398.0,   0.0);

                                                *** DISCRETE CARTESIAN RECEPTORS ***

(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

(482545.9, 3668732.4, 186.5, 398.0, 0.0); (482565.9, 3668732.4, 187.6, 398.0, 0.0);
(482585.9, 3668732.4, 188.5, 398.0, 0.0); (482605.9, 3668732.4, 189.3, 398.0, 0.0);
(482625.9, 3668732.4, 190.3, 398.0, 0.0); (482645.9, 3668732.4, 191.5, 398.0, 0.0);
(482665.9, 3668732.4, 192.8, 398.0, 0.0); (482685.9, 3668732.4, 193.9, 398.0, 0.0);
(482705.9, 3668732.4, 195.2, 398.0, 0.0); (482725.9, 3668732.4, 196.3, 398.0, 0.0);
(482745.9, 3668732.4, 197.3, 398.0, 0.0); (481145.9, 3668752.4, 149.6, 149.6, 0.0);
(481165.9, 3668752.4, 149.9, 149.9, 0.0); (481405.9, 3668752.4, 157.3, 224.9, 0.0);
(481425.9, 3668752.4, 157.7, 224.9, 0.0); (481445.9, 3668752.4, 158.6, 224.9, 0.0);
(481465.9, 3668752.4, 158.4, 224.9, 0.0); (481485.9, 3668752.4, 158.5, 224.9, 0.0);
(481505.9, 3668752.4, 165.4, 224.9, 0.0); (481965.9, 3668752.4, 224.3, 224.3, 0.0);
(481985.9, 3668752.4, 224.2, 224.2, 0.0); (482005.9, 3668752.4, 224.2, 224.2, 0.0);
(482025.9, 3668752.4, 224.6, 224.6, 0.0); (482125.9, 3668752.4, 209.1, 224.9, 0.0);
(482145.9, 3668752.4, 208.8, 224.9, 0.0); (482165.9, 3668752.4, 205.5, 224.9, 0.0);
(482185.9, 3668752.4, 200.6, 224.9, 0.0); (482205.9, 3668752.4, 199.5, 224.9, 0.0);
(482225.9, 3668752.4, 199.4, 224.9, 0.0); (482245.9, 3668752.4, 199.1, 365.0, 0.0);
(482265.9, 3668752.4, 192.9, 365.8, 0.0); (482285.9, 3668752.4, 189.4, 365.8, 0.0);
(482305.9, 3668752.4, 188.6, 376.5, 0.0); (482325.9, 3668752.4, 188.7, 377.3, 0.0);
(482345.9, 3668752.4, 188.8, 377.4, 0.0); (482365.9, 3668752.4, 183.8, 398.0, 0.0);
(482385.9, 3668752.4, 183.8, 398.0, 0.0); (482405.9, 3668752.4, 183.9, 398.0, 0.0);
(482425.9, 3668752.4, 185.3, 398.0, 0.0); (482445.9, 3668752.4, 185.5, 398.0, 0.0);
(482465.9, 3668752.4, 185.6, 398.0, 0.0); (482485.9, 3668752.4, 185.9, 398.0, 0.0);
(482505.9, 3668752.4, 186.2, 398.0, 0.0); (482525.9, 3668752.4, 186.4, 398.0, 0.0);
(482545.9, 3668752.4, 186.3, 398.0, 0.0); (482565.9, 3668752.4, 186.8, 398.0, 0.0);
(482585.9, 3668752.4, 187.9, 398.0, 0.0); (482605.9,

3668752.4,   189.1,   398.0,   0.0);
     (482625.9, 3668752.4,   190.8,   398.0,   0.0);   (482645.9,
3668752.4,   192.1,   398.0,   0.0);
     (482665.9, 3668752.4,   193.2,   398.0,   0.0);   (482685.9,
3668752.4,   194.4,   398.0,   0.0);
     (482705.9, 3668752.4,   195.4,   398.0,   0.0);   (482725.9,
3668752.4,   196.5,   398.0,   0.0);
     (482745.9, 3668752.4,   197.7,   398.0,   0.0);   (482765.9,
3668752.4,   198.7,   398.0,   0.0);
     (481405.9, 3668772.4,   158.1,   224.9,   0.0);   (481425.9,
3668772.4,   158.0,   224.9,   0.0);
     (481445.9, 3668772.4,   158.5,   224.9,   0.0);   (481465.9,
3668772.4,   158.7,   224.9,   0.0);
     (481485.9, 3668772.4,   162.4,   224.9,   0.0);   (481965.9,
3668772.4,   224.4,   224.4,   0.0);
     (481985.9, 3668772.4,   224.4,   224.4,   0.0);   (482005.9,
3668772.4,   224.4,   224.4,   0.0);
     (482025.9, 3668772.4,   224.7,   224.7,   0.0);   (482125.9,
3668772.4,   206.3,   224.9,   0.0);
     (482145.9, 3668772.4,   205.8,   224.9,   0.0);   (482165.9,
3668772.4,   205.8,   224.9,   0.0);
     (482185.9, 3668772.4,   199.5,   224.9,   0.0);   (482205.9,
3668772.4,   198.4,   224.9,   0.0);
     (482225.9, 3668772.4,   197.2,   365.0,   0.0);   (482245.9,
3668772.4,   197.5,   365.8,   0.0);
     (482265.9, 3668772.4,   194.2,   365.8,   0.0);   (482285.9,
3668772.4,   189.4,   365.8,   0.0);
     (482305.9, 3668772.4,   188.5,   377.3,   0.0);   (482325.9,
3668772.4,   187.4,   379.9,   0.0);
     (482345.9, 3668772.4,   185.4,   398.0,   0.0);   (482365.9,
3668772.4,   184.0,   398.0,   0.0);
     (482385.9, 3668772.4,   184.1,   398.0,   0.0);   (482405.9,
3668772.4,   183.9,   398.0,   0.0);
     (482425.9, 3668772.4,   185.5,   398.0,   0.0);   (482445.9,
3668772.4,   185.5,   398.0,   0.0);
     (482465.9, 3668772.4,   185.4,   398.0,   0.0);   (482485.9,
3668772.4,   185.8,   398.0,   0.0);
     (482505.9, 3668772.4,   186.1,   398.0,   0.0);   (482525.9,
3668772.4,   186.4,   398.0,   0.0);
     (482545.9, 3668772.4,   186.8,   398.0,   0.0);   (482565.9,
3668772.4,   187.4,   398.0,   0.0);
     (482585.9, 3668772.4,   188.2,   398.0,   0.0);   (482605.9,
3668772.4,   189.4,   398.0,   0.0);

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

(482625.9, 3668772.4, 191.1, 398.0, 0.0); (482645.9, 3668772.4, 192.8, 398.0, 0.0);
(482665.9, 3668772.4, 194.2, 398.0, 0.0); (482685.9, 3668772.4, 195.3, 398.0, 0.0);
(482705.9, 3668772.4, 196.4, 398.0, 0.0); (482725.9, 3668772.4, 197.0, 398.0, 0.0);
(482745.9, 3668772.4, 198.1, 398.0, 0.0); (482765.9, 3668772.4, 199.4, 398.0, 0.0);
(482785.9, 3668772.4, 200.6, 398.0, 0.0); (481425.9, 3668792.4, 159.3, 224.9, 0.0);
(481445.9, 3668792.4, 158.7, 224.9, 0.0); (481465.9, 3668792.4, 159.3, 224.9, 0.0);
(481965.9, 3668792.4, 223.7, 224.7, 0.0); (481985.9, 3668792.4, 224.7, 224.7, 0.0);
(482005.9, 3668792.4, 224.4, 224.4, 0.0); (482025.9, 3668792.4, 224.7, 224.7, 0.0);
(482045.9, 3668792.4, 224.2, 224.2, 0.0); (482145.9, 3668792.4, 203.7, 224.9, 0.0);
(482165.9, 3668792.4, 203.1, 224.9, 0.0); (482185.9, 3668792.4, 199.7, 224.9, 0.0);
(482205.9, 3668792.4, 197.9, 224.9, 0.0); (482225.9, 3668792.4, 196.4, 365.4, 0.0);
(482245.9, 3668792.4, 194.8, 365.8, 0.0); (482265.9, 3668792.4, 192.7, 365.8, 0.0);
(482285.9, 3668792.4, 190.6, 365.8, 0.0); (482305.9, 3668792.4, 188.9, 377.3, 0.0);
(482325.9, 3668792.4, 187.8, 385.8, 0.0); (482345.9, 3668792.4, 186.4, 398.0, 0.0);
(482365.9, 3668792.4, 185.1, 398.0, 0.0); (482385.9, 3668792.4, 184.5, 398.0, 0.0);
(482405.9, 3668792.4, 183.5, 398.0, 0.0); (482425.9, 3668792.4, 186.3, 398.0, 0.0);
(482445.9, 3668792.4, 186.0, 398.0, 0.0); (482465.9, 3668792.4, 185.7, 398.0, 0.0);
(482485.9, 3668792.4, 186.2, 398.0, 0.0); (482505.9, 3668792.4, 186.6, 398.0, 0.0);
(482525.9, 3668792.4, 186.8, 398.0, 0.0); (482545.9, 3668792.4, 187.0, 398.0, 0.0);
(482565.9, 3668792.4, 188.1, 398.0, 0.0); (482585.9, 3668792.4, 189.2, 398.0, 0.0);
(482605.9, 3668792.4, 191.7, 398.0, 0.0); (482625.9, 3668792.4, 193.2, 398.0, 0.0);
(482645.9, 3668792.4, 194.1, 398.0, 0.0); (482665.9, 3668792.4, 195.0, 398.0, 0.0);
(482685.9, 3668792.4, 195.5, 398.0, 0.0); (482705.9,

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3668792.4,     196.5,     398.0,       0.0);
     ( 482725.9, 3668792.4,     198.6,     398.0,       0.0);         ( 482745.9,
3668792.4,     198.6,     398.0,       0.0);
     ( 482765.9, 3668792.4,     199.8,     398.0,       0.0);         ( 482785.9,
3668792.4,     200.8,     398.0,       0.0);
     ( 482805.9, 3668792.4,     203.7,     398.0,       0.0);         ( 481445.9,
3668812.4,     167.3,     224.8,       0.0);
     ( 481465.9, 3668812.4,     166.2,     224.9,       0.0);         ( 481985.9,
3668812.4,     224.7,     224.7,       0.0);
     ( 482005.9, 3668812.4,     224.5,     224.5,       0.0);         ( 482025.9,
3668812.4,     224.6,     224.6,       0.0);
     ( 482045.9, 3668812.4,     224.7,     224.7,       0.0);         ( 482145.9,
3668812.4,     203.7,     224.9,       0.0);
     ( 482165.9, 3668812.4,     202.2,     224.9,       0.0);         ( 482185.9,
3668812.4,     200.8,     224.9,       0.0);
     ( 482205.9, 3668812.4,     200.5,     224.9,       0.0);         ( 482225.9,
3668812.4,     197.5,     364.9,       0.0);
     ( 482245.9, 3668812.4,     196.2,     365.8,       0.0);         ( 482265.9,
3668812.4,     194.1,     365.8,       0.0);
     ( 482285.9, 3668812.4,     191.6,     365.8,       0.0);         ( 482305.9,
3668812.4,     189.8,     377.3,       0.0);
     ( 482325.9, 3668812.4,     188.7,     386.0,       0.0);         ( 482345.9,
3668812.4,     188.0,     398.0,       0.0);
     ( 482365.9, 3668812.4,     186.3,     398.0,       0.0);         ( 482385.9,
3668812.4,     184.8,     398.0,       0.0);
     ( 482405.9, 3668812.4,     184.0,     398.0,       0.0);         ( 482425.9,
3668812.4,     186.4,     398.0,       0.0);
     ( 482445.9, 3668812.4,     186.2,     398.0,       0.0);         ( 482465.9,
3668812.4,     185.9,     398.0,       0.0);
     ( 482485.9, 3668812.4,     186.4,     398.0,       0.0);         ( 482505.9,
3668812.4,     187.3,     398.0,       0.0);
     ( 482525.9, 3668812.4,     188.2,     398.0,       0.0);         ( 482545.9,
3668812.4,     189.1,     398.0,       0.0);
     ( 482565.9, 3668812.4,     190.0,     398.0,       0.0);         ( 482585.9,
3668812.4,     191.0,     398.0,       0.0);
     ( 482605.9, 3668812.4,     191.7,     398.0,       0.0);         ( 482625.9,
3668812.4,     192.8,     398.0,       0.0);
     ( 482645.9, 3668812.4,     193.5,     398.0,       0.0);         ( 482665.9,
3668812.4,     194.2,     398.0,       0.0);
     ( 482685.9, 3668812.4,     195.2,     398.0,       0.0);         ( 482705.9,
3668812.4,     197.0,     398.0,       0.0);
     ( 482725.9, 3668812.4,     199.6,     398.0,       0.0);         ( 482745.9,
3668812.4,     199.8,     398.0,       0.0);
     ( 482765.9, 3668812.4,     199.7,     398.0,       0.0);         ( 482785.9,
3668812.4,     200.8,     398.0,       0.0);
 *** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
Vista\Gran Vista\Gran Vista.i ***        04/27/22
 *** AERMET - VERSION  19191 ***   ***
                       ***       08:26:34
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*** MODELOPTs: RegDFAULT CONC ELEV RURAL SigA Data

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

(482805.9, 3668812.4, 201.8, 398.0, 0.0); (482825.9, 3668812.4, 203.8, 398.0, 0.0);
(481445.9, 3668832.4, 175.3, 185.5, 0.0); (481985.9, 3668832.4, 224.7, 224.7, 0.0);
(482005.9, 3668832.4, 224.2, 224.2, 0.0); (482025.9, 3668832.4, 224.2, 224.5, 0.0);
(482045.9, 3668832.4, 224.6, 224.6, 0.0); (482145.9, 3668832.4, 204.2, 224.9, 0.0);
(482165.9, 3668832.4, 202.6, 224.9, 0.0); (482185.9, 3668832.4, 201.9, 224.9, 0.0);
(482205.9, 3668832.4, 201.8, 224.9, 0.0); (482225.9, 3668832.4, 198.0, 364.9, 0.0);
(482245.9, 3668832.4, 196.7, 365.8, 0.0); (482265.9, 3668832.4, 195.7, 365.8, 0.0);
(482285.9, 3668832.4, 193.7, 365.8, 0.0); (482305.9, 3668832.4, 193.1, 376.5, 0.0);
(482325.9, 3668832.4, 192.0, 377.3, 0.0); (482345.9, 3668832.4, 191.6, 386.0, 0.0);
(482365.9, 3668832.4, 187.4, 398.0, 0.0); (482385.9, 3668832.4, 185.0, 398.0, 0.0);
(482405.9, 3668832.4, 184.2, 398.0, 0.0); (482425.9, 3668832.4, 186.4, 398.0, 0.0);
(482445.9, 3668832.4, 186.3, 398.0, 0.0); (482465.9, 3668832.4, 185.9, 398.0, 0.0);
(482485.9, 3668832.4, 186.4, 398.0, 0.0); (482505.9, 3668832.4, 186.9, 398.0, 0.0);
(482525.9, 3668832.4, 187.7, 398.0, 0.0); (482545.9, 3668832.4, 188.8, 398.0, 0.0);
(482565.9, 3668832.4, 189.4, 398.0, 0.0); (482585.9, 3668832.4, 190.0, 398.0, 0.0);
(482605.9, 3668832.4, 191.0, 398.0, 0.0); (482625.9, 3668832.4, 192.1, 398.0, 0.0);
(482645.9, 3668832.4, 193.2, 398.0, 0.0); (482665.9, 3668832.4, 194.4, 398.0, 0.0);
(482685.9, 3668832.4, 195.2, 398.0, 0.0); (482705.9, 3668832.4, 195.9, 398.0, 0.0);
(482725.9, 3668832.4, 197.9, 398.0, 0.0); (482745.9, 3668832.4, 200.6, 398.0, 0.0);
(482765.9, 3668832.4, 200.7, 398.0, 0.0); (482785.9, 3668832.4, 200.8, 398.0, 0.0);
(482805.9, 3668832.4, 202.3, 398.0, 0.0); (482825.9, 3668832.4, 203.1, 398.0, 0.0);
(482845.9, 3668832.4, 204.0, 398.0, 0.0); (481985.9,

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3668852.4,     224.1,     224.1,       0.0);
     ( 482005.9, 3668852.4,     223.6,     223.6,       0.0);         ( 482025.9,
3668852.4,     223.0,     223.0,       0.0);
     ( 482045.9, 3668852.4,     223.6,     223.8,       0.0);         ( 482145.9,
3668852.4,     204.2,     224.9,       0.0);
     ( 482165.9, 3668852.4,     202.3,     224.9,       0.0);         ( 482185.9,
3668852.4,     201.7,     224.9,       0.0);
     ( 482205.9, 3668852.4,     201.0,     224.9,       0.0);         ( 482225.9,
3668852.4,     199.4,     224.9,       0.0);
     ( 482245.9, 3668852.4,     197.5,     365.5,       0.0);         ( 482265.9,
3668852.4,     195.9,     365.8,       0.0);
     ( 482285.9, 3668852.4,     194.3,     365.8,       0.0);         ( 482305.9,
3668852.4,     192.8,     377.3,       0.0);
     ( 482325.9, 3668852.4,     191.7,     377.6,       0.0);         ( 482345.9,
3668852.4,     191.5,     397.5,       0.0);
     ( 482365.9, 3668852.4,     187.6,     398.0,       0.0);         ( 482385.9,
3668852.4,     185.4,     398.0,       0.0);
     ( 482405.9, 3668852.4,     184.7,     398.0,       0.0);         ( 482425.9,
3668852.4,     186.5,     398.0,       0.0);
     ( 482445.9, 3668852.4,     186.4,     398.0,       0.0);         ( 482465.9,
3668852.4,     186.0,     398.0,       0.0);
     ( 482485.9, 3668852.4,     186.5,     398.0,       0.0);         ( 482505.9,
3668852.4,     186.6,     398.0,       0.0);
     ( 482525.9, 3668852.4,     187.1,     398.0,       0.0);         ( 482545.9,
3668852.4,     188.0,     398.0,       0.0);
     ( 482565.9, 3668852.4,     189.0,     398.0,       0.0);         ( 482585.9,
3668852.4,     190.5,     398.0,       0.0);
     ( 482605.9, 3668852.4,     191.2,     398.0,       0.0);         ( 482625.9,
3668852.4,     192.5,     398.0,       0.0);
     ( 482645.9, 3668852.4,     193.6,     398.0,       0.0);         ( 482665.9,
3668852.4,     194.3,     398.0,       0.0);
     ( 482685.9, 3668852.4,     194.8,     398.0,       0.0);         ( 482705.9,
3668852.4,     193.5,     398.0,       0.0);
     ( 482725.9, 3668852.4,     193.7,     398.0,       0.0);         ( 482745.9,
3668852.4,     198.7,     398.0,       0.0);
     ( 482765.9, 3668852.4,     201.5,     398.0,       0.0);         ( 482785.9,
3668852.4,     202.0,     398.0,       0.0);
     ( 482805.9, 3668852.4,     202.0,     398.0,       0.0);         ( 482825.9,
3668852.4,     202.7,     398.0,       0.0);
     ( 482845.9, 3668852.4,     203.8,     398.0,       0.0);         ( 482865.9,
3668852.4,     205.1,     398.0,       0.0);
     ( 482885.9, 3668852.4,     207.0,     398.0,       0.0);         ( 482905.9,
3668852.4,     208.5,     398.0,       0.0);
     ( 482925.9, 3668852.4,     209.9,     398.0,       0.0);         ( 482945.9,
3668852.4,     210.9,     398.0,       0.0);
     ( 482965.9, 3668852.4,     212.1,     398.0,       0.0);         ( 482985.9,
3668852.4,     213.5,     398.0,       0.0);
 *** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
Vista\Gran Vista\Gran Vista.i ***        04/27/22
 *** AERMET - VERSION  19191 ***   ***
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*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

(483005.9, 3668852.4, 215.7, 398.0, 0.0); (483025.9, 3668852.4, 217.6, 398.0, 0.0);
(483045.9, 3668852.4, 218.9, 398.0, 0.0); (483065.9, 3668852.4, 219.5, 398.0, 0.0);
(483085.9, 3668852.4, 219.8, 398.0, 0.0); (483105.9, 3668852.4, 220.1, 398.0, 0.0);
(483125.9, 3668852.4, 220.4, 398.0, 0.0); (483145.9, 3668852.4, 220.8, 398.0, 0.0);
(481985.9, 3668872.4, 222.7, 223.5, 0.0); (482005.9, 3668872.4, 222.4, 223.8, 0.0);
(482025.9, 3668872.4, 222.3, 222.3, 0.0); (482045.9, 3668872.4, 222.1, 222.1, 0.0);
(482065.9, 3668872.4, 219.6, 224.7, 0.0); (482125.9, 3668872.4, 206.0, 224.9, 0.0);
(482145.9, 3668872.4, 205.2, 224.9, 0.0); (482165.9, 3668872.4, 203.8, 224.9, 0.0);
(482185.9, 3668872.4, 201.7, 224.9, 0.0); (482205.9, 3668872.4, 199.9, 224.9, 0.0);
(482225.9, 3668872.4, 198.5, 224.9, 0.0); (482245.9, 3668872.4, 197.1, 365.8, 0.0);
(482265.9, 3668872.4, 195.3, 365.8, 0.0); (482285.9, 3668872.4, 193.0, 376.7, 0.0);
(482305.9, 3668872.4, 191.4, 377.6, 0.0); (482325.9, 3668872.4, 190.7, 398.0, 0.0);
(482345.9, 3668872.4, 191.1, 398.0, 0.0); (482365.9, 3668872.4, 188.0, 398.0, 0.0);
(482385.9, 3668872.4, 185.7, 398.0, 0.0); (482405.9, 3668872.4, 184.8, 398.0, 0.0);
(482425.9, 3668872.4, 186.6, 398.0, 0.0); (482445.9, 3668872.4, 186.5, 398.0, 0.0);
(482465.9, 3668872.4, 186.1, 398.0, 0.0); (482485.9, 3668872.4, 186.7, 398.0, 0.0);
(482505.9, 3668872.4, 186.7, 398.0, 0.0); (482525.9, 3668872.4, 187.5, 398.0, 0.0);
(482545.9, 3668872.4, 188.5, 398.0, 0.0); (482565.9, 3668872.4, 189.4, 398.0, 0.0);
(482585.9, 3668872.4, 190.4, 398.0, 0.0); (482605.9, 3668872.4, 191.1, 398.0, 0.0);
(482625.9, 3668872.4, 192.4, 398.0, 0.0); (482645.9, 3668872.4, 192.7, 398.0, 0.0);
(482665.9, 3668872.4, 193.0, 398.0, 0.0); (482685.9,

```
3668872.4,     193.3,     398.0,       0.0);
     ( 482705.9, 3668872.4,     193.6,     398.0,       0.0);         ( 482725.9,
3668872.4,     193.8,     398.0,       0.0);
     ( 482745.9, 3668872.4,     194.2,     398.0,       0.0);         ( 482765.9,
3668872.4,     198.9,     398.0,       0.0);
     ( 482785.9, 3668872.4,     202.2,     398.0,       0.0);         ( 482805.9,
3668872.4,     202.5,     398.0,       0.0);
     ( 482825.9, 3668872.4,     202.7,     398.0,       0.0);         ( 482845.9,
3668872.4,     203.9,     398.0,       0.0);
     ( 482865.9, 3668872.4,     205.0,     398.0,       0.0);         ( 482885.9,
3668872.4,     206.2,     398.0,       0.0);
     ( 482905.9, 3668872.4,     207.6,     398.0,       0.0);         ( 482925.9,
3668872.4,     208.9,     398.0,       0.0);
     ( 482945.9, 3668872.4,     210.0,     398.0,       0.0);         ( 482965.9,
3668872.4,     211.4,     398.0,       0.0);
     ( 482985.9, 3668872.4,     213.0,     398.0,       0.0);         ( 483005.9,
3668872.4,     214.9,     398.0,       0.0);
     ( 483025.9, 3668872.4,     216.8,     398.0,       0.0);         ( 483045.9,
3668872.4,     218.2,     398.0,       0.0);
     ( 483065.9, 3668872.4,     219.5,     398.0,       0.0);         ( 483085.9,
3668872.4,     219.8,     398.0,       0.0);
     ( 483105.9, 3668872.4,     219.9,     398.0,       0.0);         ( 483125.9,
3668872.4,     220.1,     398.0,       0.0);
     ( 483145.9, 3668872.4,     220.2,     398.0,       0.0);         ( 483165.9,
3668872.4,     220.7,     398.0,       0.0);
     ( 483185.9, 3668872.4,     220.9,     398.0,       0.0);         ( 482005.9,
3668892.4,     222.1,     222.1,       0.0);
     ( 482025.9, 3668892.4,     221.4,     221.4,       0.0);         ( 482045.9,
3668892.4,     220.8,     222.2,       0.0);
     ( 482065.9, 3668892.4,     218.7,     223.9,       0.0);         ( 482125.9,
3668892.4,     206.0,     224.9,       0.0);
     ( 482145.9, 3668892.4,     206.4,     224.9,       0.0);         ( 482165.9,
3668892.4,     206.5,     224.9,       0.0);
     ( 482185.9, 3668892.4,     200.3,     224.9,       0.0);         ( 482205.9,
3668892.4,     199.9,     224.9,       0.0);
     ( 482225.9, 3668892.4,     198.9,     224.9,       0.0);         ( 482245.9,
3668892.4,     200.0,     364.6,       0.0);
     ( 482265.9, 3668892.4,     197.9,     365.8,       0.0);         ( 482285.9,
3668892.4,     190.7,     377.6,       0.0);
     ( 482305.9, 3668892.4,     190.4,     397.4,       0.0);         ( 482325.9,
3668892.4,     189.9,     398.0,       0.0);
     ( 482345.9, 3668892.4,     190.4,     398.0,       0.0);         ( 482365.9,
3668892.4,     188.7,     398.0,       0.0);
     ( 482385.9, 3668892.4,     186.0,     398.0,       0.0);         ( 482405.9,
3668892.4,     185.1,     398.0,       0.0);
     ( 482425.9, 3668892.4,     186.8,     398.0,       0.0);         ( 482445.9,
3668892.4,     186.6,     398.0,       0.0);
     ( 482465.9, 3668892.4,     186.2,     398.0,       0.0);         ( 482485.9,
3668892.4,     186.6,     398.0,       0.0);
 *** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
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*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

(482505.9, 3668892.4, 186.8, 398.0, 0.0); (482525.9, 3668892.4, 187.8, 398.0, 0.0);
(482545.9, 3668892.4, 188.6, 398.0, 0.0); (482565.9, 3668892.4, 189.1, 398.0, 0.0);
(482585.9, 3668892.4, 189.5, 398.0, 0.0); (482605.9, 3668892.4, 190.0, 398.0, 0.0);
(482625.9, 3668892.4, 192.3, 398.0, 0.0); (482645.9, 3668892.4, 192.8, 398.0, 0.0);
(482665.9, 3668892.4, 193.1, 398.0, 0.0); (482685.9, 3668892.4, 193.3, 398.0, 0.0);
(482705.9, 3668892.4, 193.6, 398.0, 0.0); (482725.9, 3668892.4, 193.9, 398.0, 0.0);
(482745.9, 3668892.4, 194.1, 398.0, 0.0); (482765.9, 3668892.4, 194.4, 398.0, 0.0);
(482785.9, 3668892.4, 196.3, 398.0, 0.0); (482805.9, 3668892.4, 201.4, 398.0, 0.0);
(482825.9, 3668892.4, 203.0, 398.0, 0.0); (482845.9, 3668892.4, 205.2, 398.0, 0.0);
(482865.9, 3668892.4, 206.5, 398.0, 0.0); (482885.9, 3668892.4, 207.5, 398.0, 0.0);
(482905.9, 3668892.4, 208.5, 398.0, 0.0); (482925.9, 3668892.4, 209.3, 398.0, 0.0);
(482945.9, 3668892.4, 209.6, 398.0, 0.0); (482965.9, 3668892.4, 212.0, 398.0, 0.0);
(482985.9, 3668892.4, 213.5, 398.0, 0.0); (483005.9, 3668892.4, 215.4, 398.0, 0.0);
(483025.9, 3668892.4, 217.4, 398.0, 0.0); (483045.9, 3668892.4, 218.9, 398.0, 0.0);
(483065.9, 3668892.4, 219.5, 398.0, 0.0); (483085.9, 3668892.4, 219.8, 398.0, 0.0);
(483105.9, 3668892.4, 220.4, 398.0, 0.0); (483125.9, 3668892.4, 220.6, 398.0, 0.0);
(483145.9, 3668892.4, 220.6, 398.0, 0.0); (483165.9, 3668892.4, 220.3, 398.0, 0.0);
(483185.9, 3668892.4, 220.2, 398.0, 0.0); (483205.9, 3668892.4, 220.5, 398.0, 0.0);
(483225.9, 3668892.4, 220.8, 398.0, 0.0); (482005.9, 3668912.4, 220.9, 220.9, 0.0);
(482025.9, 3668912.4, 220.5, 220.5, 0.0); (482045.9,

3668912.4,   219.2,   220.5,   0.0);
     (482125.9, 3668912.4,   206.0,   224.9,   0.0);   (482145.9,
3668912.4,   206.7,   224.9,   0.0);
     (482165.9, 3668912.4,   206.8,   224.9,   0.0);   (482185.9,
3668912.4,   200.5,   224.9,   0.0);
     (482205.9, 3668912.4,   200.3,   224.9,   0.0);   (482225.9,
3668912.4,   199.4,   224.9,   0.0);
     (482245.9, 3668912.4,   200.3,   224.9,   0.0);   (482265.9,
3668912.4,   198.6,   365.8,   0.0);
     (482285.9, 3668912.4,   190.6,   386.0,   0.0);   (482305.9,
3668912.4,   190.1,   398.0,   0.0);
     (482325.9, 3668912.4,   189.3,   398.0,   0.0);   (482345.9,
3668912.4,   189.9,   398.0,   0.0);
     (482365.9, 3668912.4,   188.8,   398.0,   0.0);   (482385.9,
3668912.4,   186.3,   398.0,   0.0);
     (482405.9, 3668912.4,   185.6,   398.0,   0.0);   (482425.9,
3668912.4,   186.9,   398.0,   0.0);
     (482445.9, 3668912.4,   186.8,   398.0,   0.0);   (482465.9,
3668912.4,   187.1,   398.0,   0.0);
     (482485.9, 3668912.4,   187.6,   398.0,   0.0);   (482505.9,
3668912.4,   187.9,   398.0,   0.0);
     (482525.9, 3668912.4,   188.7,   398.0,   0.0);   (482545.9,
3668912.4,   189.0,   398.0,   0.0);
     (482565.9, 3668912.4,   189.3,   398.0,   0.0);   (482585.9,
3668912.4,   189.7,   398.0,   0.0);
     (482605.9, 3668912.4,   190.1,   398.0,   0.0);   (482625.9,
3668912.4,   192.5,   398.0,   0.0);
     (482645.9, 3668912.4,   192.8,   398.0,   0.0);   (482665.9,
3668912.4,   193.2,   398.0,   0.0);
     (482685.9, 3668912.4,   193.4,   398.0,   0.0);   (482705.9,
3668912.4,   193.7,   398.0,   0.0);
     (482725.9, 3668912.4,   194.0,   398.0,   0.0);   (482745.9,
3668912.4,   194.2,   398.0,   0.0);
     (482765.9, 3668912.4,   194.7,   398.0,   0.0);   (482785.9,
3668912.4,   198.2,   398.0,   0.0);
     (482805.9, 3668912.4,   200.3,   398.0,   0.0);   (482825.9,
3668912.4,   201.7,   398.0,   0.0);
     (482845.9, 3668912.4,   202.4,   398.0,   0.0);   (482865.9,
3668912.4,   203.5,   398.0,   0.0);
     (482885.9, 3668912.4,   205.7,   398.0,   0.0);   (482905.9,
3668912.4,   209.0,   398.0,   0.0);
     (482925.9, 3668912.4,   209.2,   398.0,   0.0);   (482945.9,
3668912.4,   208.9,   398.0,   0.0);
     (482965.9, 3668912.4,   210.3,   398.0,   0.0);   (482985.9,
3668912.4,   211.5,   398.0,   0.0);
     (483005.9, 3668912.4,   212.5,   398.0,   0.0);   (483025.9,
3668912.4,   213.1,   398.0,   0.0);
     (483045.9, 3668912.4,   212.8,   398.0,   0.0);   (483065.9,
3668912.4,   212.4,   398.0,   0.0);
     (483085.9, 3668912.4,   212.9,   398.0,   0.0);   (483105.9,

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

(483125.9, 3668912.4,   218.0,   398.0,   0.0);   (483145.9, 3668912.4,   220.7,   398.0,   0.0);
(483165.9, 3668912.4,   220.0,   398.0,   0.0);   (483185.9, 3668912.4,   219.9,   398.0,   0.0);
(483205.9, 3668912.4,   220.1,   398.0,   0.0);   (483225.9, 3668912.4,   220.6,   398.0,   0.0);
(482125.9, 3668932.4,   206.2,   224.9,   0.0);   (482145.9, 3668932.4,   206.9,   224.9,   0.0);
(482165.9, 3668932.4,   207.0,   224.9,   0.0);   (482185.9, 3668932.4,   200.7,   224.9,   0.0);
(482205.9, 3668932.4,   200.6,   224.9,   0.0);   (482225.9, 3668932.4,   199.8,   224.9,   0.0);
(482245.9, 3668932.4,   200.7,   224.9,   0.0);   (482265.9, 3668932.4,   198.8,   365.8,   0.0);
(482285.9, 3668932.4,   190.4,   398.0,   0.0);   (482305.9, 3668932.4,   189.8,   398.0,   0.0);
(482325.9, 3668932.4,   189.3,   398.0,   0.0);   (482345.9, 3668932.4,   190.0,   398.0,   0.0);
(482365.9, 3668932.4,   189.2,   398.0,   0.0);   (482385.9, 3668932.4,   186.5,   398.0,   0.0);
(482405.9, 3668932.4,   185.8,   398.0,   0.0);   (482425.9, 3668932.4,   186.7,   398.0,   0.0);
(482445.9, 3668932.4,   187.4,   398.0,   0.0);   (482465.9, 3668932.4,   187.8,   398.0,   0.0);
(482485.9, 3668932.4,   188.0,   398.0,   0.0);   (482505.9, 3668932.4,   188.4,   398.0,   0.0);
(482525.9, 3668932.4,   189.0,   398.0,   0.0);   (482545.9, 3668932.4,   189.2,   398.0,   0.0);
(482565.9, 3668932.4,   189.5,   398.0,   0.0);   (482585.9, 3668932.4,   189.8,   398.0,   0.0);
(482605.9, 3668932.4,   190.1,   398.0,   0.0);   (482625.9, 3668932.4,   192.7,   398.0,   0.0);
(482645.9, 3668932.4,   193.0,   398.0,   0.0);   (482665.9, 3668932.4,   193.2,   398.0,   0.0);
(482685.9, 3668932.4,   193.5,   398.0,   0.0);   (482705.9, 3668932.4,   193.8,   398.0,   0.0);
(482725.9, 3668932.4,   194.1,   398.0,   0.0);   (482745.9,

3668932.4,   194.4,   398.0,   0.0);
     (482765.9, 3668932.4,   194.7,   398.0,   0.0);   (482785.9,
3668932.4,   198.1,   398.0,   0.0);
     (482805.9, 3668932.4,   199.0,   398.0,   0.0);   (482825.9,
3668932.4,   200.8,   398.0,   0.0);
     (482845.9, 3668932.4,   202.2,   398.0,   0.0);   (482865.9,
3668932.4,   202.4,   398.0,   0.0);
     (482885.9, 3668932.4,   202.4,   398.0,   0.0);   (482905.9,
3668932.4,   207.7,   398.0,   0.0);
     (482925.9, 3668932.4,   208.0,   398.0,   0.0);   (482945.9,
3668932.4,   207.9,   398.0,   0.0);
     (482965.9, 3668932.4,   208.6,   398.0,   0.0);   (482985.9,
3668932.4,   208.7,   398.0,   0.0);
     (483005.9, 3668932.4,   208.9,   398.0,   0.0);   (483025.9,
3668932.4,   209.5,   398.0,   0.0);
     (483045.9, 3668932.4,   210.6,   398.0,   0.0);   (483065.9,
3668932.4,   211.6,   398.0,   0.0);
     (483085.9, 3668932.4,   212.5,   398.0,   0.0);   (483105.9,
3668932.4,   213.1,   398.0,   0.0);
     (483125.9, 3668932.4,   213.8,   398.0,   0.0);   (483145.9,
3668932.4,   218.4,   398.0,   0.0);
     (483165.9, 3668932.4,   219.2,   398.0,   0.0);   (483185.9,
3668932.4,   219.1,   398.0,   0.0);
     (483205.9, 3668932.4,   220.0,   398.0,   0.0);   (482125.9,
3668952.4,   206.5,   224.9,   0.0);
     (482145.9, 3668952.4,   207.2,   224.9,   0.0);   (482165.9,
3668952.4,   206.9,   224.7,   0.0);
     (482185.9, 3668952.4,   201.1,   224.9,   0.0);   (482205.9,
3668952.4,   200.9,   224.9,   0.0);
     (482225.9, 3668952.4,   200.1,   224.9,   0.0);   (482245.9,
3668952.4,   201.0,   224.7,   0.0);
     (482265.9, 3668952.4,   198.7,   365.5,   0.0);   (482285.9,
3668952.4,   190.5,   398.0,   0.0);
     (482305.9, 3668952.4,   190.1,   398.0,   0.0);   (482325.9,
3668952.4,   189.5,   398.0,   0.0);
     (482345.9, 3668952.4,   190.2,   398.0,   0.0);   (482365.9,
3668952.4,   189.5,   398.0,   0.0);
     (482385.9, 3668952.4,   186.9,   398.0,   0.0);   (482405.9,
3668952.4,   186.1,   398.0,   0.0);
     (482425.9, 3668952.4,   187.0,   398.0,   0.0);   (482445.9,
3668952.4,   187.7,   398.0,   0.0);
     (482465.9, 3668952.4,   188.0,   398.0,   0.0);   (482485.9,
3668952.4,   188.3,   398.0,   0.0);
     (482505.9, 3668952.4,   188.5,   398.0,   0.0);   (482525.9,
3668952.4,   189.2,   398.0,   0.0);
     (482545.9, 3668952.4,   189.5,   398.0,   0.0);   (482565.9,
3668952.4,   189.7,   398.0,   0.0);
     (482585.9, 3668952.4,   190.0,   398.0,   0.0);   (482605.9,
3668952.4,   190.3,   398.0,   0.0);
     (482625.9, 3668952.4,   192.9,   398.0,   0.0);   (482645.9,

3668952.4,   193.3,   398.0,   0.0);
     (482665.9, 3668952.4,   193.5,   398.0,   0.0);   (482685.9,
3668952.4,   193.8,   398.0,   0.0);

                                                *** DISCRETE CARTESIAN RECEPTORS ***
                                              (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                                          (METERS)

     (482705.9, 3668952.4,   194.0,   398.0,   0.0);   (482725.9,
3668952.4,   194.2,   398.0,   0.0);
     (482745.9, 3668952.4,   194.5,   398.0,   0.0);   (482765.9,
3668952.4,   195.5,   398.0,   0.0);
     (482785.9, 3668952.4,   196.9,   398.0,   0.0);   (482805.9,
3668952.4,   197.9,   398.0,   0.0);
     (482825.9, 3668952.4,   200.4,   398.0,   0.0);   (482845.9,
3668952.4,   201.8,   398.0,   0.0);
     (482865.9, 3668952.4,   201.5,   398.0,   0.0);   (482885.9,
3668952.4,   202.4,   398.0,   0.0);
     (482905.9, 3668952.4,   207.0,   398.0,   0.0);   (482925.9,
3668952.4,   206.1,   398.0,   0.0);
     (482945.9, 3668952.4,   206.5,   398.0,   0.0);   (482965.9,
3668952.4,   207.4,   398.0,   0.0);
     (482985.9, 3668952.4,   208.2,   398.0,   0.0);   (483005.9,
3668952.4,   208.0,   398.0,   0.0);
     (483025.9, 3668952.4,   208.7,   398.0,   0.0);   (483045.9,
3668952.4,   209.8,   398.0,   0.0);
     (483065.9, 3668952.4,   210.8,   398.0,   0.0);   (483085.9,
3668952.4,   211.9,   398.0,   0.0);
     (483105.9, 3668952.4,   212.8,   398.0,   0.0);   (483125.9,
3668952.4,   216.5,   398.0,   0.0);
     (483145.9, 3668952.4,   216.8,   398.0,   0.0);   (483165.9,
3668952.4,   217.2,   398.0,   0.0);
     (483185.9, 3668952.4,   219.0,   398.0,   0.0);   (482125.9,
3668972.4,   206.8,   224.7,   0.0);
     (482145.9, 3668972.4,   207.4,   224.6,   0.0);   (482165.9,
3668972.4,   206.3,   224.6,   0.0);
     (482185.9, 3668972.4,   201.4,   224.9,   0.0);   (482205.9,
3668972.4,   201.2,   224.9,   0.0);
     (482225.9, 3668972.4,   200.6,   224.9,   0.0);   (482245.9,
3668972.4,   201.3,   201.3,   0.0);
     (482265.9, 3668972.4,   198.5,   365.5,   0.0);   (482285.9,
3668972.4,   190.6,   398.0,   0.0);
     (482305.9, 3668972.4,   190.2,   398.0,   0.0);   (482325.9,

3668972.4,   189.7,   398.0,   0.0);
     (482345.9, 3668972.4,   190.4,   398.0,   0.0);   (482365.9,
3668972.4,   190.0,   398.0,   0.0);
     (482385.9, 3668972.4,   187.2,   398.0,   0.0);   (482405.9,
3668972.4,   186.4,   398.0,   0.0);
     (482425.9, 3668972.4,   187.3,   398.0,   0.0);   (482445.9,
3668972.4,   188.0,   398.0,   0.0);
     (482465.9, 3668972.4,   188.3,   398.0,   0.0);   (482485.9,
3668972.4,   188.6,   398.0,   0.0);
     (482505.9, 3668972.4,   188.8,   398.0,   0.0);   (482525.9,
3668972.4,   189.4,   398.0,   0.0);
     (482545.9, 3668972.4,   189.6,   398.0,   0.0);   (482565.9,
3668972.4,   189.9,   398.0,   0.0);
     (482585.9, 3668972.4,   190.2,   398.0,   0.0);   (482605.9,
3668972.4,   190.5,   398.0,   0.0);
     (482625.9, 3668972.4,   193.2,   398.0,   0.0);   (482645.9,
3668972.4,   193.6,   398.0,   0.0);
     (482665.9, 3668972.4,   193.8,   398.0,   0.0);   (482685.9,
3668972.4,   193.9,   398.0,   0.0);
     (482705.9, 3668972.4,   194.1,   398.0,   0.0);   (482725.9,
3668972.4,   194.2,   398.0,   0.0);
     (482745.9, 3668972.4,   194.5,   398.0,   0.0);   (482765.9,
3668972.4,   195.6,   398.0,   0.0);
     (482785.9, 3668972.4,   196.5,   398.0,   0.0);   (482805.9,
3668972.4,   197.0,   398.0,   0.0);
     (482825.9, 3668972.4,   201.3,   398.0,   0.0);   (482845.9,
3668972.4,   201.0,   398.0,   0.0);
     (482865.9, 3668972.4,   200.9,   398.0,   0.0);   (482885.9,
3668972.4,   201.7,   398.0,   0.0);
     (482905.9, 3668972.4,   205.4,   398.0,   0.0);   (482925.9,
3668972.4,   204.1,   398.0,   0.0);
     (482945.9, 3668972.4,   205.3,   398.0,   0.0);   (482965.9,
3668972.4,   205.8,   398.0,   0.0);
     (482985.9, 3668972.4,   207.7,   398.0,   0.0);   (483005.9,
3668972.4,   207.0,   398.0,   0.0);
     (483025.9, 3668972.4,   209.0,   398.0,   0.0);   (483045.9,
3668972.4,   210.5,   398.0,   0.0);
     (483065.9, 3668972.4,   211.6,   398.0,   0.0);   (483085.9,
3668972.4,   212.0,   398.0,   0.0);
     (483105.9, 3668972.4,   212.7,   398.0,   0.0);   (483125.9,
3668972.4,   214.3,   398.0,   0.0);
     (483145.9, 3668972.4,   214.7,   398.0,   0.0);   (483165.9,
3668972.4,   216.4,   398.0,   0.0);
     (482125.9, 3668992.4,   207.1,   223.9,   0.0);   (482145.9,
3668992.4,   207.6,   207.6,   0.0);
     (482165.9, 3668992.4,   205.5,   223.9,   0.0);   (482185.9,
3668992.4,   201.8,   224.9,   0.0);
     (482205.9, 3668992.4,   201.4,   224.7,   0.0);   (482225.9,
3668992.4,   201.1,   223.9,   0.0);
     (482245.9, 3668992.4,   201.7,   201.7,   0.0);   (482265.9,

3668992.4,   198.2,   376.0,   0.0);
     (482285.9, 3668992.4,   190.7,   398.0,   0.0);   (482305.9,
3668992.4,   190.5,   398.0,   0.0);
     (482325.9, 3668992.4,   189.9,   398.0,   0.0);   (482345.9,
3668992.4,   190.6,   398.0,   0.0);

                                                *** DISCRETE CARTESIAN RECEPTORS ***
                                              (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                                          (METERS)

     (482365.9, 3668992.4,   189.9,   398.0,   0.0);   (482385.9,
3668992.4,   187.5,   398.0,   0.0);
     (482405.9, 3668992.4,   186.7,   398.0,   0.0);   (482425.9,
3668992.4,   187.7,   398.0,   0.0);
     (482445.9, 3668992.4,   188.2,   398.0,   0.0);   (482465.9,
3668992.4,   188.6,   398.0,   0.0);
     (482485.9, 3668992.4,   188.8,   398.0,   0.0);   (482505.9,
3668992.4,   189.5,   398.0,   0.0);
     (482525.9, 3668992.4,   190.0,   398.0,   0.0);   (482545.9,
3668992.4,   189.8,   398.0,   0.0);
     (482565.9, 3668992.4,   190.2,   398.0,   0.0);   (482585.9,
3668992.4,   190.5,   398.0,   0.0);
     (482605.9, 3668992.4,   190.8,   398.0,   0.0);   (482625.9,
3668992.4,   193.6,   398.0,   0.0);
     (482645.9, 3668992.4,   194.0,   398.0,   0.0);   (482665.9,
3668992.4,   194.1,   398.0,   0.0);
     (482685.9, 3668992.4,   194.1,   398.0,   0.0);   (482705.9,
3668992.4,   194.0,   398.0,   0.0);
     (482725.9, 3668992.4,   194.3,   398.0,   0.0);   (482745.9,
3668992.4,   194.3,   398.0,   0.0);
     (482765.9, 3668992.4,   195.5,   398.0,   0.0);   (482785.9,
3668992.4,   195.8,   398.0,   0.0);
     (482805.9, 3668992.4,   196.5,   398.0,   0.0);   (482825.9,
3668992.4,   200.9,   398.0,   0.0);
     (482845.9, 3668992.4,   200.2,   398.0,   0.0);   (482865.9,
3668992.4,   200.6,   398.0,   0.0);
     (482885.9, 3668992.4,   201.4,   398.0,   0.0);   (482905.9,
3668992.4,   203.3,   398.0,   0.0);
     (482925.9, 3668992.4,   202.7,   398.0,   0.0);   (482945.9,
3668992.4,   203.8,   398.0,   0.0);
     (482965.9, 3668992.4,   204.9,   398.0,   0.0);   (482985.9,
3668992.4,   206.6,   398.0,   0.0);
     (483005.9, 3668992.4,   205.8,   398.0,   0.0);   (483025.9,

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3668992.4,     207.4,     398.0,       0.0);
     ( 483045.9, 3668992.4,     208.4,     398.0,       0.0);         ( 483065.9,
3668992.4,     209.9,     398.0,       0.0);
     ( 483085.9, 3668992.4,     210.7,     398.0,       0.0);         ( 483105.9,
3668992.4,     211.9,     398.0,       0.0);
     ( 483125.9, 3668992.4,     212.1,     398.0,       0.0);         ( 483145.9,
3668992.4,     213.7,     398.0,       0.0);
     ( 482125.9, 3669012.4,     207.3,     214.3,       0.0);         ( 482145.9,
3669012.4,     208.0,     208.0,       0.0);
     ( 482165.9, 3669012.4,     205.0,     208.4,       0.0);         ( 482185.9,
3669012.4,     202.2,     223.9,       0.0);
     ( 482205.9, 3669012.4,     201.7,     223.9,       0.0);         ( 482225.9,
3669012.4,     201.7,     201.7,       0.0);
     ( 482245.9, 3669012.4,     202.2,     202.2,       0.0);         ( 482265.9,
3669012.4,     198.4,     376.7,       0.0);
     ( 482285.9, 3669012.4,     191.0,     398.0,       0.0);         ( 482305.9,
3669012.4,     190.7,     398.0,       0.0);
     ( 482325.9, 3669012.4,     190.1,     398.0,       0.0);         ( 482345.9,
3669012.4,     190.8,     398.0,       0.0);
     ( 482365.9, 3669012.4,     190.1,     398.0,       0.0);         ( 482385.9,
3669012.4,     187.7,     398.0,       0.0);
     ( 482405.9, 3669012.4,     187.1,     398.0,       0.0);         ( 482425.9,
3669012.4,     188.0,     398.0,       0.0);
     ( 482445.9, 3669012.4,     188.4,     398.0,       0.0);         ( 482465.9,
3669012.4,     188.8,     398.0,       0.0);
     ( 482485.9, 3669012.4,     190.2,     398.0,       0.0);         ( 482505.9,
3669012.4,     190.3,     398.0,       0.0);
     ( 482525.9, 3669012.4,     190.2,     398.0,       0.0);         ( 482545.9,
3669012.4,     189.9,     398.0,       0.0);
     ( 482565.9, 3669012.4,     190.3,     398.0,       0.0);         ( 482585.9,
3669012.4,     190.5,     398.0,       0.0);
     ( 482605.9, 3669012.4,     190.8,     398.0,       0.0);         ( 482625.9,
3669012.4,     193.7,     398.0,       0.0);
     ( 482645.9, 3669012.4,     193.8,     398.0,       0.0);         ( 482665.9,
3669012.4,     194.0,     398.0,       0.0);
     ( 482685.9, 3669012.4,     194.1,     398.0,       0.0);         ( 482705.9,
3669012.4,     194.2,     398.0,       0.0);
     ( 482725.9, 3669012.4,     194.4,     398.0,       0.0);         ( 482745.9,
3669012.4,     194.3,     398.0,       0.0);
     ( 482765.9, 3669012.4,     195.2,     398.0,       0.0);         ( 482785.9,
3669012.4,     195.6,     398.0,       0.0);
     ( 482805.9, 3669012.4,     196.1,     398.0,       0.0);         ( 482825.9,
3669012.4,     200.0,     398.0,       0.0);
     ( 482845.9, 3669012.4,     199.6,     398.0,       0.0);         ( 482865.9,
3669012.4,     199.9,     398.0,       0.0);
     ( 482885.9, 3669012.4,     201.0,     398.0,       0.0);         ( 482905.9,
3669012.4,     202.3,     398.0,       0.0);
     ( 482925.9, 3669012.4,     201.9,     398.0,       0.0);         ( 482945.9,
3669012.4,     202.4,     398.0,       0.0);
     ( 482965.9, 3669012.4,     204.4,     398.0,       0.0);         ( 482985.9,
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3669012.4,   205.8,   398.0,   0.0);
     (483005.9, 3669012.4,   205.1,   398.0,   0.0);   (483025.9,
3669012.4,   206.2,   398.0,   0.0);
     (483045.9, 3669012.4,   206.9,   398.0,   0.0);   (483065.9,
3669012.4,   208.2,   398.0,   0.0);
     (483085.9, 3669012.4,   209.4,   398.0,   0.0);   (483105.9,
3669012.4,   209.8,   398.0,   0.0);

                                                *** DISCRETE CARTESIAN RECEPTORS ***
                                               (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                                          (METERS)

     (483125.9, 3669012.4,   211.5,   398.0,   0.0);   (482125.9,
3669032.4,   207.6,   211.6,   0.0);
     (482145.9, 3669032.4,   208.2,   208.2,   0.0);   (482165.9,
3669032.4,   204.5,   210.0,   0.0);
     (482185.9, 3669032.4,   202.5,   211.2,   0.0);   (482205.9,
3669032.4,   202.0,   211.2,   0.0);
     (482225.9, 3669032.4,   202.2,   202.2,   0.0);   (482245.9,
3669032.4,   202.6,   202.6,   0.0);
     (482265.9, 3669032.4,   198.5,   377.3,   0.0);   (482285.9,
3669032.4,   191.1,   398.0,   0.0);
     (482305.9, 3669032.4,   190.9,   398.0,   0.0);   (482325.9,
3669032.4,   190.3,   398.0,   0.0);
     (482345.9, 3669032.4,   191.0,   398.0,   0.0);   (482365.9,
3669032.4,   190.4,   398.0,   0.0);
     (482385.9, 3669032.4,   187.9,   398.0,   0.0);   (482405.9,
3669032.4,   187.2,   398.0,   0.0);
     (482425.9, 3669032.4,   188.2,   398.0,   0.0);   (482445.9,
3669032.4,   188.6,   398.0,   0.0);
     (482465.9, 3669032.4,   188.9,   398.0,   0.0);   (482485.9,
3669032.4,   190.3,   398.0,   0.0);
     (482505.9, 3669032.4,   190.3,   398.0,   0.0);   (482525.9,
3669032.4,   190.2,   398.0,   0.0);
     (482545.9, 3669032.4,   190.1,   398.0,   0.0);   (482565.9,
3669032.4,   190.5,   398.0,   0.0);
     (482585.9, 3669032.4,   190.7,   398.0,   0.0);   (482605.9,
3669032.4,   191.0,   398.0,   0.0);
     (482625.9, 3669032.4,   193.7,   398.0,   0.0);   (482645.9,
3669032.4,   193.7,   398.0,   0.0);
     (482665.9, 3669032.4,   193.6,   398.0,   0.0);   (482685.9,
3669032.4,   193.8,   398.0,   0.0);
     (482705.9, 3669032.4,   194.0,   398.0,   0.0);   (482725.9,

3669032.4,   194.2,   398.0,   0.0);
     (482745.9, 3669032.4,   194.5,   398.0,   0.0);   (482765.9,
3669032.4,   195.1,   398.0,   0.0);
     (482785.9, 3669032.4,   195.5,   398.0,   0.0);   (482805.9,
3669032.4,   195.9,   398.0,   0.0);
     (482825.9, 3669032.4,   199.4,   398.0,   0.0);   (482845.9,
3669032.4,   198.8,   398.0,   0.0);
     (482865.9, 3669032.4,   199.4,   398.0,   0.0);   (482885.9,
3669032.4,   200.3,   398.0,   0.0);
     (482905.9, 3669032.4,   201.8,   398.0,   0.0);   (482925.9,
3669032.4,   201.3,   398.0,   0.0);
     (482945.9, 3669032.4,   201.9,   398.0,   0.0);   (482965.9,
3669032.4,   203.9,   398.0,   0.0);
     (482985.9, 3669032.4,   205.0,   398.0,   0.0);   (483005.9,
3669032.4,   204.4,   398.0,   0.0);
     (483025.9, 3669032.4,   205.7,   398.0,   0.0);   (483045.9,
3669032.4,   206.2,   398.0,   0.0);
     (483065.9, 3669032.4,   207.1,   398.0,   0.0);   (483085.9,
3669032.4,   208.0,   398.0,   0.0);
     (483105.9, 3669032.4,   209.8,   398.0,   0.0);   (482125.9,
3669052.4,   208.1,   211.4,   0.0);
     (482145.9, 3669052.4,   208.7,   208.7,   0.0);   (482165.9,
3669052.4,   204.3,   211.6,   0.0);
     (482185.9, 3669052.4,   202.9,   211.2,   0.0);   (482205.9,
3669052.4,   202.3,   211.2,   0.0);
     (482225.9, 3669052.4,   202.5,   202.5,   0.0);   (482245.9,
3669052.4,   202.9,   202.9,   0.0);
     (482265.9, 3669052.4,   198.6,   377.3,   0.0);   (482285.9,
3669052.4,   191.3,   398.0,   0.0);
     (482305.9, 3669052.4,   191.0,   398.0,   0.0);   (482325.9,
3669052.4,   190.5,   398.0,   0.0);
     (482345.9, 3669052.4,   191.1,   398.0,   0.0);   (482365.9,
3669052.4,   190.6,   398.0,   0.0);
     (482385.9, 3669052.4,   188.1,   398.0,   0.0);   (482405.9,
3669052.4,   187.4,   398.0,   0.0);
     (482425.9, 3669052.4,   188.3,   398.0,   0.0);   (482445.9,
3669052.4,   188.7,   398.0,   0.0);
     (482465.9, 3669052.4,   189.0,   398.0,   0.0);   (482485.9,
3669052.4,   189.8,   398.0,   0.0);
     (482505.9, 3669052.4,   190.0,   398.0,   0.0);   (482525.9,
3669052.4,   190.2,   398.0,   0.0);
     (482545.9, 3669052.4,   190.4,   398.0,   0.0);   (482565.9,
3669052.4,   190.8,   398.0,   0.0);
     (482585.9, 3669052.4,   190.9,   398.0,   0.0);   (482605.9,
3669052.4,   191.3,   398.0,   0.0);
     (482625.9, 3669052.4,   193.7,   398.0,   0.0);   (482645.9,
3669052.4,   193.7,   398.0,   0.0);
     (482665.9, 3669052.4,   193.9,   398.0,   0.0);   (482685.9,
3669052.4,   194.0,   398.0,   0.0);
     (482705.9, 3669052.4,   194.3,   398.0,   0.0);   (482725.9,

3669052.4,   194.4,   398.0,   0.0);
     (482745.9, 3669052.4,   195.0,   398.0,   0.0);   (482765.9,
3669052.4,   195.0,   398.0,   0.0);
     (482785.9, 3669052.4,   195.4,   398.0,   0.0);   (482805.9,
3669052.4,   195.7,   398.0,   0.0);
     (482825.9, 3669052.4,   197.2,   398.0,   0.0);   (482845.9,
3669052.4,   197.9,   398.0,   0.0);
     (482865.9, 3669052.4,   198.8,   398.0,   0.0);   (482885.9,
3669052.4,   199.8,   398.0,   0.0);

                                                *** DISCRETE CARTESIAN RECEPTORS ***
                                              (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                                        (METERS)

     (482905.9, 3669052.4,   201.4,   398.0,   0.0);   (482925.9,
3669052.4,   200.6,   398.0,   0.0);
     (482945.9, 3669052.4,   201.3,   398.0,   0.0);   (482965.9,
3669052.4,   202.8,   398.0,   0.0);
     (482985.9, 3669052.4,   203.7,   398.0,   0.0);   (483005.9,
3669052.4,   203.7,   398.0,   0.0);
     (483025.9, 3669052.4,   204.4,   398.0,   0.0);   (483045.9,
3669052.4,   206.0,   398.0,   0.0);
     (483065.9, 3669052.4,   207.2,   398.0,   0.0);   (483085.9,
3669052.4,   207.6,   398.0,   0.0);
     (482125.9, 3669072.4,   208.9,   209.8,   0.0);   (482145.9,
3669072.4,   209.5,   209.5,   0.0);
     (482165.9, 3669072.4,   203.8,   213.4,   0.0);   (482185.9,
3669072.4,   203.3,   211.2,   0.0);
     (482205.9, 3669072.4,   202.6,   211.2,   0.0);   (482225.9,
3669072.4,   202.8,   211.2,   0.0);
     (482245.9, 3669072.4,   203.1,   203.1,   0.0);   (482265.9,
3669072.4,   198.5,   377.4,   0.0);
     (482285.9, 3669072.4,   191.5,   398.0,   0.0);   (482305.9,
3669072.4,   191.4,   398.0,   0.0);
     (482325.9, 3669072.4,   190.7,   398.0,   0.0);   (482345.9,
3669072.4,   191.3,   398.0,   0.0);
     (482365.9, 3669072.4,   190.6,   398.0,   0.0);   (482385.9,
3669072.4,   188.3,   398.0,   0.0);
     (482405.9, 3669072.4,   187.5,   398.0,   0.0);   (482425.9,
3669072.4,   188.5,   398.0,   0.0);
     (482445.9, 3669072.4,   188.9,   398.0,   0.0);   (482465.9,
3669072.4,   189.2,   398.0,   0.0);
     (482485.9, 3669072.4,   189.9,   398.0,   0.0);   (482505.9,

3669072.4,   190.5,   398.0,   0.0);
     (482525.9, 3669072.4,   190.6,   398.0,   0.0);   (482545.9,
3669072.4,   190.7,   398.0,   0.0);
     (482565.9, 3669072.4,   191.1,   398.0,   0.0);   (482585.9,
3669072.4,   191.6,   398.0,   0.0);
     (482605.9, 3669072.4,   191.6,   398.0,   0.0);   (482625.9,
3669072.4,   194.0,   398.0,   0.0);
     (482645.9, 3669072.4,   194.0,   398.0,   0.0);   (482665.9,
3669072.4,   194.0,   398.0,   0.0);
     (482685.9, 3669072.4,   194.2,   398.0,   0.0);   (482705.9,
3669072.4,   194.4,   398.0,   0.0);
     (482725.9, 3669072.4,   194.6,   398.0,   0.0);   (482745.9,
3669072.4,   194.7,   398.0,   0.0);
     (482765.9, 3669072.4,   194.9,   398.0,   0.0);   (482785.9,
3669072.4,   195.7,   398.0,   0.0);
     (482805.9, 3669072.4,   196.2,   398.0,   0.0);   (482825.9,
3669072.4,   196.4,   398.0,   0.0);
     (482845.9, 3669072.4,   197.4,   398.0,   0.0);   (482865.9,
3669072.4,   198.2,   398.0,   0.0);
     (482885.9, 3669072.4,   198.9,   398.0,   0.0);   (482905.9,
3669072.4,   199.5,   398.0,   0.0);
     (482925.9, 3669072.4,   200.2,   398.0,   0.0);   (482945.9,
3669072.4,   201.0,   398.0,   0.0);
     (482965.9, 3669072.4,   201.8,   398.0,   0.0);   (482985.9,
3669072.4,   203.0,   398.0,   0.0);
     (483005.9, 3669072.4,   204.0,   398.0,   0.0);   (483025.9,
3669072.4,   204.8,   398.0,   0.0);
     (483045.9, 3669072.4,   205.8,   398.0,   0.0);   (483065.9,
3669072.4,   206.7,   398.0,   0.0);
     (482125.9, 3669092.4,   210.2,   211.1,   0.0);   (482145.9,
3669092.4,   210.6,   210.6,   0.0);
     (482165.9, 3669092.4,   204.2,   212.9,   0.0);   (482185.9,
3669092.4,   203.5,   211.4,   0.0);
     (482205.9, 3669092.4,   203.4,   211.2,   0.0);   (482225.9,
3669092.4,   203.3,   211.2,   0.0);
     (482245.9, 3669092.4,   203.1,   203.1,   0.0);   (482265.9,
3669092.4,   196.7,   398.0,   0.0);
     (482285.9, 3669092.4,   191.8,   398.0,   0.0);   (482305.9,
3669092.4,   191.3,   398.0,   0.0);
     (482325.9, 3669092.4,   190.9,   398.0,   0.0);   (482345.9,
3669092.4,   191.6,   398.0,   0.0);
     (482365.9, 3669092.4,   190.9,   398.0,   0.0);   (482385.9,
3669092.4,   188.6,   398.0,   0.0);
     (482405.9, 3669092.4,   187.7,   398.0,   0.0);   (482425.9,
3669092.4,   188.8,   398.0,   0.0);
     (482445.9, 3669092.4,   189.0,   398.0,   0.0);   (482465.9,
3669092.4,   189.2,   398.0,   0.0);
     (482485.9, 3669092.4,   189.8,   398.0,   0.0);   (482505.9,
3669092.4,   190.7,   398.0,   0.0);
     (482525.9, 3669092.4,   190.8,   398.0,   0.0);   (482545.9,

3669092.4,   191.1,   398.0,   0.0);
     (482565.9, 3669092.4,   191.4,   398.0,   0.0);   (482585.9,
3669092.4,   191.8,   398.0,   0.0);
     (482605.9, 3669092.4,   191.9,   398.0,   0.0);   (482625.9,
3669092.4,   194.1,   398.0,   0.0);
     (482645.9, 3669092.4,   194.2,   398.0,   0.0);   (482665.9,
3669092.4,   194.1,   398.0,   0.0);
     (482685.9, 3669092.4,   194.3,   398.0,   0.0);   (482705.9,
3669092.4,   194.5,   398.0,   0.0);
     (482725.9, 3669092.4,   194.9,   398.0,   0.0);   (482745.9,
3669092.4,   194.8,   398.0,   0.0);

                                                *** DISCRETE CARTESIAN RECEPTORS ***
                                              (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                                          (METERS)

     (482765.9, 3669092.4,   194.7,   398.0,   0.0);   (482785.9,
3669092.4,   196.5,   398.0,   0.0);
     (482805.9, 3669092.4,   197.1,   398.0,   0.0);   (482825.9,
3669092.4,   197.3,   398.0,   0.0);
     (482845.9, 3669092.4,   198.0,   398.0,   0.0);   (482865.9,
3669092.4,   198.7,   398.0,   0.0);
     (482885.9, 3669092.4,   199.4,   398.0,   0.0);   (482905.9,
3669092.4,   200.2,   398.0,   0.0);
     (482925.9, 3669092.4,   200.9,   398.0,   0.0);   (482945.9,
3669092.4,   201.7,   398.0,   0.0);
     (482965.9, 3669092.4,   202.5,   398.0,   0.0);   (482985.9,
3669092.4,   203.2,   398.0,   0.0);
     (483005.9, 3669092.4,   203.9,   398.0,   0.0);   (483025.9,
3669092.4,   203.6,   398.0,   0.0);
     (483045.9, 3669092.4,   203.9,   398.0,   0.0);   (482125.9,
3669112.4,   211.0,   211.0,   0.0);
     (482145.9, 3669112.4,   210.7,   210.7,   0.0);   (482165.9,
3669112.4,   207.1,   211.2,   0.0);
     (482185.9, 3669112.4,   205.5,   211.2,   0.0);   (482205.9,
3669112.4,   204.6,   211.2,   0.0);
     (482225.9, 3669112.4,   203.6,   208.8,   0.0);   (482245.9,
3669112.4,   202.2,   375.4,   0.0);
     (482265.9, 3669112.4,   197.2,   398.0,   0.0);   (482285.9,
3669112.4,   194.4,   398.0,   0.0);
     (482305.9, 3669112.4,   193.0,   398.0,   0.0);   (482325.9,
3669112.4,   191.8,   398.0,   0.0);
     (482345.9, 3669112.4,   191.2,   398.0,   0.0);   (482365.9,

3669112.4,   190.1,   398.0,   0.0);
     (482385.9, 3669112.4,   188.8,   398.0,   0.0);   (482405.9,
3669112.4,   188.5,   398.0,   0.0);
     (482425.9, 3669112.4,   189.2,   398.0,   0.0);   (482445.9,
3669112.4,   189.5,   398.0,   0.0);
     (482465.9, 3669112.4,   189.7,   398.0,   0.0);   (482485.9,
3669112.4,   190.1,   398.0,   0.0);
     (482505.9, 3669112.4,   190.5,   398.0,   0.0);   (482525.9,
3669112.4,   190.8,   398.0,   0.0);
     (482545.9, 3669112.4,   191.0,   398.0,   0.0);   (482565.9,
3669112.4,   191.3,   398.0,   0.0);
     (482585.9, 3669112.4,   191.6,   398.0,   0.0);   (482605.9,
3669112.4,   191.9,   398.0,   0.0);
     (482625.9, 3669112.4,   192.7,   398.0,   0.0);   (482645.9,
3669112.4,   192.9,   398.0,   0.0);
     (482665.9, 3669112.4,   193.2,   398.0,   0.0);   (482685.9,
3669112.4,   193.3,   398.0,   0.0);
     (482705.9, 3669112.4,   193.7,   398.0,   0.0);   (482725.9,
3669112.4,   193.8,   398.0,   0.0);
     (482745.9, 3669112.4,   194.2,   398.0,   0.0);   (482765.9,
3669112.4,   194.2,   398.0,   0.0);
     (482785.9, 3669112.4,   195.4,   398.0,   0.0);   (482805.9,
3669112.4,   196.2,   398.0,   0.0);
     (482105.9, 3669132.4,   211.6,   211.6,   0.0);   (482217.0,
3667990.6,   173.1,   365.8,   0.0);
     (482229.5, 3668011.8,   173.3,   365.8,   0.0);   (482236.5,
3668031.3,   173.6,   365.8,   0.0);
     (482242.0, 3668047.8,   173.8,   365.8,   0.0);   (482250.7,
3668068.2,   174.0,   365.8,   0.0);
     (482258.5, 3668087.0,   174.3,   365.8,   0.0);   (482269.5,
3668107.4,   174.6,   365.8,   0.0);
     (482275.0, 3668126.2,   174.8,   365.8,   0.0);   (482282.0,
3668145.8,   175.0,   365.8,   0.0);
     (482285.1, 3668166.2,   175.4,   365.8,   0.0);   (482279.7,
3668186.5,   175.7,   365.8,   0.0);
     (482184.3, 3668008.0,   173.4,   365.8,   0.0);   (482281.4,
3668219.3,   176.0,   365.8,   0.0);
     (482169.5, 3668350.1,   185.6,   365.4,   0.0);   (482099.1,
3668346.8,   189.7,   222.6,   0.0);
     (482075.6, 3668387.9,   197.9,   218.3,   0.0);   (482092.4,
3668418.9,   201.3,   216.9,   0.0);
     (482069.7, 3668475.1,   206.4,   218.9,   0.0);   (481993.4,
3668559.8,   214.2,   221.0,   0.0);
     (482077.3, 3668908.7,   216.6,   223.9,   0.0);   (481998.4,
3668921.3,   220.1,   220.1,   0.0);
     (481850.0, 3668378.6,   190.9,   222.8,   0.0);   (481874.3,
3668300.7,   185.6,   221.0,   0.0);
     (481931.3, 3668239.4,   183.0,   216.3,   0.0);   (482131.0,
3668050.7,   173.7,   364.6,   0.0);
     (482373.3, 3668115.6,   175.3,   365.8,   0.0);   (482494.0,

3667985.4,   184.9,   365.8,   0.0);
     (482458.2, 3667913.7,   182.8,   365.8,   0.0);   (482582.7,
3667817.4,   176.3,   365.8,   0.0);
     (482756.3, 3667981.6,   181.6,   365.8,   0.0);   (482507.3,
3668238.2,   178.3,   365.8,   0.0);
     (482301.6, 3668296.7,   177.7,   365.8,   0.0);   (482254.4,
3668321.3,   184.4,   365.8,   0.0);
     (482067.6, 3668560.9,   212.7,   221.7,   0.0);   (482129.9,
3668802.4,   205.2,   224.9,   0.0);
     (482105.3, 3669132.7,   211.7,   211.7,   0.0);   (483039.4,
3669106.3,   203.0,   398.0,   0.0);
     (483256.4, 3668898.7,   224.9,   398.0,   0.0);   (483120.5,
3668832.6,   220.9,   398.0,   0.0);

                                          *** DISCRETE CARTESIAN RECEPTORS ***
                                        (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                                (METERS)

     (482863.9, 3668834.5,   205.8,   398.0,   0.0);   (482724.3,
3668704.3,   196.4,   398.0,   0.0);
     (482814.8, 3668632.6,   209.8,   398.0,   0.0);   (482945.0,
3668615.6,   217.8,   398.0,   0.0);
     (482979.0, 3668566.6,   223.6,   379.4,   0.0);   (482916.8,
3668496.8,   217.0,   365.8,   0.0);
     (482694.1, 3668589.2,   198.6,   398.0,   0.0);   (482711.1,
3668513.7,   198.8,   386.0,   0.0);
     (482775.2, 3668417.5,   203.7,   365.8,   0.0);   (482886.6,
3668459.0,   209.4,   379.4,   0.0);
     (482945.0, 3668364.7,   213.4,   365.8,   0.0);   (482860.1,
3668294.8,   198.1,   365.8,   0.0);
     (481786.4, 3668055.2,   180.2,   180.2,   0.0);   (481722.3,
3667900.5,   179.9,   179.9,   0.0);
     (481922.3, 3667809.9,   172.7,   172.7,   0.0);   (481984.6,
3667962.7,   173.6,   173.6,   0.0);
     (481582.6, 3668149.5,   190.3,   194.4,   0.0);   (481677.0,
3668398.6,   175.7,   224.7,   0.0);
     (481614.7, 3668496.8,   169.0,   224.9,   0.0);   (481473.2,
3668604.3,   156.8,   224.9,   0.0);
     (481529.8, 3668715.6,   166.8,   224.9,   0.0);   (481454.3,
3668845.8,   170.6,   224.8,   0.0);
     (481337.3, 3668670.4,   152.0,   224.9,   0.0);   (481137.3,
3668776.0,   147.9,   149.8,   0.0);
     (481016.5, 3668502.4,   154.5,   157.0,   0.0);   (481209.0,

3668317.5,   161.0,   208.6,   0.0);

                                          *** METEOROLOGICAL DAYS SELECTED FOR PROCESSING ***
                                                                  (1=YES; 0=NO)

           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1

```
   Surface file:   ..\ESC_2010_2012_sigma_v19191.SFC
                Met Version:  19191
   Profile file:   ..\ESC_2010_2012_sigma_v19191.PFL

   Surface format: FREE

   Profile format: FREE

   Surface station no.:    53120                  Upper air station no.:     3190
                  Name: UNKNOWN                                     Name: UNKNOWN

                  Year:   2010                                      Year:   2010

 First 24 hours of scalar data
 YR MO DY JDY HR     H0     U*     W*  DT/DZ ZICNV ZIMCH  M-O LEN    Z0  BOWEN
ALBEDO  REF WS   WD     HT  REF TA     HT
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - -
 10 01 01   1 01   -0.4  0.021 -9.000 -9.000 -999.    7.      2.1  0.16   1.02
1.00    0.44  104.   10.0  280.4   10.0
 10 01 01   1 02   -0.4  0.021 -9.000 -9.000 -999.    7.      2.1  0.16   1.02
1.00    0.44   91.   10.0  280.4   10.0
 10 01 01   1 03   -0.4  0.021 -9.000 -9.000 -999.    7.      2.1  0.16   1.02
1.00    0.44  110.   10.0  279.8   10.0
 10 01 01   1 04   -0.4  0.021 -9.000 -9.000 -999.    7.      2.1  0.16   1.02
1.00    0.44   93.   10.0  279.2   10.0
 10 01 01   1 05   -0.4  0.021 -9.000 -9.000 -999.    7.      2.0  0.15   1.02
1.00    0.44  275.   10.0  278.6   10.0
 10 01 01   1 06   -1.7  0.043 -9.000 -9.000 -999.   21.      4.2  0.16   1.02
1.00    0.89  107.   10.0  278.1   10.0
 10 01 01   1 07   -0.4  0.021 -9.000 -9.000 -999.    8.      2.1  0.16   1.02
1.00    0.44  182.   10.0  278.1   10.0
 10 01 01   1 08   -0.3  0.021 -9.000 -9.000 -999.    7.      2.5  0.16   1.02
0.50    0.44  104.   10.0  278.6   10.0
 10 01 01   1 09   31.3  0.080  0.377  0.014   61.   54.     -1.5  0.15   1.02
0.30    0.44  277.   10.0  282.5   10.0
 10 01 01   1 10   80.9  0.140  0.712  0.009  159.  125.     -3.0  0.15   1.02
0.23    0.89  279.   10.0  286.4   10.0
 10 01 01   1 11  115.7  0.269  1.068  0.008  375.  336.    -15.1  0.15   1.02
0.21    2.23  273.   10.0  290.9   10.0
 10 01 01   1 12  132.1  0.273  1.247  0.008  523.  343.    -13.7  0.15   1.02
0.20    2.23  281.   10.0  292.5   10.0
 10 01 01   1 13  130.1  0.189  1.325  0.008  636.  200.     -4.6  0.14   1.02
0.20    1.34  269.   10.0  293.6   10.0
 10 01 01   1 14  110.4  0.189  1.308  0.007  720.  197.     -5.4  0.15   1.02
0.21    1.34  274.   10.0  295.4   10.0
 10 01 01   1 15   71.8  0.259  1.160  0.007  772.  316.    -21.4  0.15   1.02
0.24    2.23  290.   10.0  293.6   10.0
 10 01 01   1 16   19.2  0.196  0.751  0.007  783.  210.    -35.1  0.15   1.02
```

```
0.34    1.78  280.   10.0  291.4   10.0
 10 01 01   1 17   -1.5  0.043 -9.000 -9.000 -999.   65.      4.4  0.15   1.02
0.61    0.89  282.   10.0  290.4   10.0
 10 01 01   1 18   -0.4  0.021 -9.000 -9.000 -999.   13.      2.0  0.14   1.02
1.00    0.44  134.   10.0  289.8   10.0
 10 01 01   1 19   -0.4  0.020 -9.000 -9.000 -999.    7.      1.9  0.13   1.02
1.00    0.44  309.   10.0  288.6   10.0
 10 01 01   1 20   -0.4  0.020 -9.000 -9.000 -999.    7.      1.9  0.13   1.02
1.00    0.44  323.   10.0  287.5   10.0
 10 01 01   1 21   -0.4  0.020 -9.000 -9.000 -999.    7.      1.9  0.12   1.02
1.00    0.44   12.   10.0  285.9   10.0
 10 01 01   1 22   -1.7  0.043 -9.000 -9.000 -999.   21.      4.3  0.16   1.02
1.00    0.89  101.   10.0  285.4   10.0
 10 01 01   1 23   -1.6  0.042 -9.000 -9.000 -999.   20.      4.0  0.14   1.02
1.00    0.89  263.   10.0  284.2   10.0
 10 01 01   1 24   -1.7  0.043 -9.000 -9.000 -999.   21.      4.2  0.16   1.02
1.00    0.89  117.   10.0  283.1   10.0


 First hour of profile data
 YR MO DY HR HEIGHT F  WDIR    WSPD AMB_TMP sigmaA  sigmaW  sigmaV
 10 01 01 01   10.0 1  104.    0.44   280.4   18.0  -99.00    0.20

 F indicates top of profile (=1) or below (=0)
↟ *** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
Vista\Gran Vista\Gran Vista.i ***        04/27/22
 *** AERMET - VERSION  19191 ***   ***
                       ***        08:26:34

                                  PAGE 233
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL  SigA Data

                               *** THE PERIOD ( 26304 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL       ***
                                  INCLUDING SOURCE(S):     L0000001    , L0000002
, L0000003    , L0000004    , L0000005    ,
                  L0000006    , L0000007    , L0000008    , L0000009    , L0000010
, L0000011    , L0000012    , L0000013    ,
                  L0000014    , L0000015    , L0000016    , L0000017    , L0000018
, L0000019    , L0000020    , L0000021    ,
                  L0000022    , L0000023    , L0000024    , L0000025    , L0000026
, L0000027    , L0000028    ,  . . .      ,

                                             *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                          ** CONC OF PM_10    IN MICROGRAMS/M**3
                    **

       X-COORD (M)   Y-COORD (M)        CONC                        X-COORD (M)
```

Y-COORD (M) CONC

- - - -

3667892.38   20.34755
         482645.94   3667892.38   18.89078   481745.94
3667912.38   7.86649
         481765.94   3667912.38   8.32417   481785.94
3667912.38   8.80015
         481805.94   3667912.38   9.31866   481825.94
3667912.38   9.91392
         481845.94   3667912.38   10.53240   481865.94
3667912.38   11.17455
         481885.94   3667912.38   11.77145   481905.94
3667912.38   12.42750
         481925.94   3667912.38   13.09190   481945.94
3667912.38   13.67410
         482465.94   3667912.38   49.40289   482485.94
3667912.38   41.77583
         482505.94   3667912.38   38.43783   482525.94
3667912.38   35.18700
         482545.94   3667912.38   32.45873   482565.94
3667912.38   29.25828
         482585.94   3667912.38   26.39293   482605.94
3667912.38   24.04239
         482625.94   3667912.38   21.98899   482645.94
3667912.38   20.24809
         482665.94   3667912.38   18.72879   481745.94
3667932.38   7.63748
         481765.94   3667932.38   8.17787   481785.94
3667932.38   8.67107
         481805.94   3667932.38   9.21700   481825.94
3667932.38   9.79984
         481845.94   3667932.38   10.42119   481865.94
3667932.38   11.10289
         481885.94   3667932.38   11.82800   481905.94
3667932.38   12.42917

 *** MODELOPTs: RegDFAULT CONC ELEV RURAL SigA Data

                             *** THE PERIOD (26304 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL   ***
                                INCLUDING SOURCE(S):   L0000001   , L0000002
, L0000003   , L0000004   , L0000005   ,
                   L0000006   , L0000007   , L0000008   , L0000009   , L0000010
, L0000011   , L0000012   , L0000013   ,
                   L0000014   , L0000015   , L0000016   , L0000017   , L0000018
, L0000019   , L0000020   , L0000021   ,
                   L0000022   , L0000023   , L0000024   , L0000025   , L0000026

, L0000027   , L0000028   , . . .   ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_10   IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
481925.94	3667932.38	13.08070	481945.94	3667932.38	13.90429
481965.94	3667932.38	15.24075	482485.94	3667932.38	46.81591
482505.94	3667932.38	42.33659	482525.94	3667932.38	38.91709
482545.94	3667932.38	35.16261	482565.94	3667932.38	31.64573
482585.94	3667932.38	28.55622	482605.94	3667932.38	25.77982
482625.94	3667932.38	23.49056	482645.94	3667932.38	21.52849
482665.94	3667932.38	19.81672	482685.94	3667932.38	18.17899
481745.94	3667952.38	7.30510	481765.94	3667952.38	8.02547
481785.94	3667952.38	8.50600	481805.94	3667952.38	9.02474
481825.94	3667952.38	9.62137	481845.94	3667952.38	10.26072
481865.94	3667952.38	10.94481	481885.94	3667952.38	11.68584
481905.94	3667952.38	12.38467	481925.94	3667952.38	13.08332
481945.94	3667952.38	13.93577	481965.94	3667952.38	15.16854
482485.94	3667952.38	51.55577	482505.94	3667952.38	45.83112
482525.94	3667952.38	41.37598	482545.94	3667952.38	37.72262
482565.94	3667952.38	33.84625	482585.94	3667952.38	30.44235
482605.94	3667952.38	27.31552	482625.94	3667952.38	24.77778
482645.94	3667952.38	22.67257	482665.94	3667952.38	20.75035
482685.94	3667952.38	19.00979	482705.94	3667952.38	17.48253

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         481765.94    3667972.38        7.81597                        481785.94
3667972.38        8.33746
         481805.94    3667972.38        8.80397                        481825.94
3667972.38        9.44602
         481845.94    3667972.38       10.06856                        481865.94
3667972.38       10.74992
         481885.94    3667972.38       11.49621                        481905.94
3667972.38       12.32364
         481925.94    3667972.38       13.12599                        481945.94
3667972.38       13.77926
         482505.94    3667972.38       48.37267                        482525.94
3667972.38       42.82222
         482545.94    3667972.38       39.36260                        482565.94
3667972.38       35.60221
         482585.94    3667972.38       31.98593                        482605.94
3667972.38       28.50571
         482625.94    3667972.38       25.79152                        482645.94
3667972.38       23.51018
         482665.94    3667972.38       21.38278                        482685.94
3667972.38       19.61592
         482705.94    3667972.38       18.01845                        482725.94
3667972.38       16.62319
         482745.94    3667972.38       15.77988                        481765.94
3667992.38        7.25813
         481785.94    3667992.38        8.13567                        481805.94
3667992.38        8.62016
         481825.94    3667992.38        9.22698                        481845.94
3667992.38        9.85074
         481865.94    3667992.38       10.52452                        481885.94
3667992.38       11.27363
         481905.94    3667992.38       12.08986                        482505.94
3667992.38       49.92371
         482525.94    3667992.38       45.71596                        482545.94
3667992.38       40.24062
         482565.94    3667992.38       36.62200                        482585.94
3667992.38       32.79427
         482605.94    3667992.38       29.13829                        482625.94
3667992.38       26.40928
         482645.94    3667992.38       23.93412                        482665.94
3667992.38       21.81923
         482685.94    3667992.38       19.90476                        482705.94
3667992.38       18.41516
 *** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
Vista\Gran Vista\Gran Vista.i ***        04/27/22
 *** AERMET - VERSION  19191 ***   ***
                       ***       08:26:34

                                  PAGE 235
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL  SigA Data
```

*** THE PERIOD (26304 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***

INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 , L0000005 , L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 , L0000013 , L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 , L0000021 , L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
482725.94	3667992.38	17.31074	481785.94	3668012.38	7.93460
481805.94	3668012.38	8.44728	481825.94	3668012.38	8.95820
481845.94	3668012.38	9.63245	481865.94	3668012.38	10.29816
482185.94	3668012.38	62.86007	482485.94	3668012.38	59.09557
482505.94	3668012.38	50.88471	482525.94	3668012.38	45.60599
482545.94	3668012.38	41.26050	482565.94	3668012.38	36.68617
482585.94	3668012.38	32.65567	482605.94	3668012.38	29.41200
482625.94	3668012.38	26.60855	482645.94	3668012.38	24.06536
482665.94	3668012.38	21.94276	482685.94	3668012.38	20.28578
482705.94	3668012.38	18.66844	482725.94	3668012.38	17.24583
481785.94	3668032.38	7.42690	481805.94	3668032.38	8.22862
481825.94	3668032.38	8.74706	482165.94	3668032.38	46.76968
482185.94	3668032.38	57.13342	482465.94	3668032.38	68.54892
482485.94	3668032.38	57.86583	482505.94	3668032.38	51.01322
482525.94	3668032.38	45.32112	482545.94		

3668032.38 40.59036
482565.94 3668032.38 36.29052 482585.94
3668032.38 32.54117
482605.94 3668032.38 29.25785 482625.94
3668032.38 26.43350
482645.94 3668032.38 23.81262 482665.94
3668032.38 21.96963
482685.94 3668032.38 20.04760 482705.94
3668032.38 18.48711
481785.94 3668052.38 7.23130 482145.94
3668052.38 36.12558
482165.94 3668052.38 42.52470 482185.94
3668052.38 50.89449
482445.94 3668052.38 83.81643 482465.94
3668052.38 69.60237
482485.94 3668052.38 58.17120 482505.94
3668052.38 50.37693
482525.94 3668052.38 44.00031 482545.94
3668052.38 39.48261
482565.94 3668052.38 35.40890 482585.94
3668052.38 31.80205
482605.94 3668052.38 28.70202 482625.94
3668052.38 25.92821
482645.94 3668052.38 23.48517 482665.94
3668052.38 21.42665
482685.94 3668052.38 19.74946 482125.94
3668072.38 29.10825
482145.94 3668072.38 33.17162 482165.94
3668072.38 38.26067
482185.94 3668072.38 45.00406 482205.94
3668072.38 55.17193
482425.94 3668072.38 87.50961 482445.94
3668072.38 74.29669
482465.94 3668072.38 63.81817 482485.94
3668072.38 54.87962
482505.94 3668072.38 48.22865 482525.94
3668072.38 41.98993
482545.94 3668072.38 37.99788 482565.94
3668072.38 33.91133
482585.94 3668072.38 30.56547 482605.94
3668072.38 27.84235
482625.94 3668072.38 25.28656 482645.94
3668072.38 22.81323
482665.94 3668072.38 20.70572 482105.94
3668092.38 23.51785
482125.94 3668092.38 26.70899 482145.94
3668092.38 30.21813
482165.94 3668092.38 34.81281 482185.94
3668092.38 40.08790
482205.94 3668092.38 47.35696 482405.94

 *** MODELOPTs: RegDFAULT CONC ELEV RURAL SigA Data

                              *** THE PERIOD (26304 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL   ***
                                 INCLUDING SOURCE(S):   L0000001   , L0000002 , L0000003   , L0000004   , L0000005   ,
                                  L0000006   , L0000007   , L0000008   , L0000009   , L0000010 , L0000011   , L0000012   , L0000013   ,
                                  L0000014   , L0000015   , L0000016   , L0000017   , L0000018 , L0000019   , L0000020   , L0000021   ,
                                  L0000022   , L0000023   , L0000024   , L0000025   , L0000026 , L0000027   , L0000028   , . . .   ,

                                                 *** DISCRETE CARTESIAN RECEPTOR POINTS ***

                                              ** CONC OF PM_10   IN MICROGRAMS/M**3   **

       X-COORD (M)   Y-COORD (M)   CONC   X-COORD (M)   Y-COORD (M)   CONC
 - - -

```
        482225.94    3668112.38       47.88342                    482385.94
3668112.38       81.80847
        482405.94    3668112.38       70.83501                    482425.94
3668112.38       62.07137
        482445.94    3668112.38       54.99093                    482465.94
3668112.38       49.03578
        482485.94    3668112.38       43.99024                    482505.94
3668112.38       39.64251
        482525.94    3668112.38       35.82761                    482545.94
3668112.38       32.55472
        482565.94    3668112.38       29.59356                    482585.94
3668112.38       27.03392
        482605.94    3668112.38       24.79991                    482625.94
3668112.38       22.68325
        482045.94    3668132.38       16.42175                    482065.94
3668132.38       17.75163
        482085.94    3668132.38       18.98584                    482105.94
3668132.38       20.55477
        482125.94    3668132.38       22.84026                    482145.94
3668132.38       24.69383
        482165.94    3668132.38       27.73766                    482185.94
3668132.38       31.55056
        482205.94    3668132.38       35.92866                    482225.94
3668132.38       40.17404
        482405.94    3668132.38       56.40579                    482425.94
3668132.38       51.09101
        482445.94    3668132.38       46.32261                    482465.94
3668132.38       42.11070
        482485.94    3668132.38       38.40898                    482505.94
3668132.38       35.11667
        482525.94    3668132.38       32.18568                    482545.94
3668132.38       29.59620
        482565.94    3668132.38       27.22119                    482585.94
3668132.38       25.03756
        482605.94    3668132.38       23.07925                    482025.94
3668152.38       14.33949
        482045.94    3668152.38       15.38588                    482065.94
3668152.38       16.55143
        482085.94    3668152.38       17.86799                    482105.94
3668152.38       19.35799
        482125.94    3668152.38       20.92521                    482145.94
3668152.38       22.67907
        482165.94    3668152.38       24.49966                    482185.94
3668152.38       27.32785
        482205.94    3668152.38       30.77387                    482225.94
3668152.38       34.42211
        482245.94    3668152.38       37.23314                    482425.94
3668152.38       41.77885
        482445.94    3668152.38       38.74775                    482465.94
3668152.38       35.94774
```

*** THE PERIOD (26304 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 , L0000005 ,
L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 , L0000013 ,
L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 , L0000021 ,
L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
482025.94	3668172.38	13.42624	482045.94	3668172.38	14.39349
482065.94	3668172.38	15.31400	482085.94	3668172.38	16.51311
482105.94	3668172.38	17.75322	482125.94	3668172.38	18.94704
482145.94	3668172.38	20.57773	482165.94	3668172.38	22.32236
482185.94	3668172.38	23.99608	482205.94	3668172.38	26.32638
482225.94	3668172.38	29.04485	482245.94		

3668172.38 31.71474
482445.94 3668172.38 32.56892 482465.94
3668172.38 30.67651
482485.94 3668172.38 28.83111 482505.94
3668172.38 27.07129
482525.94 3668172.38 25.39534 482545.94
3668172.38 23.80037
482565.94 3668172.38 22.23304 481505.94
3668192.38 1.70619
481525.94 3668192.38 1.65225 481545.94
3668192.38 1.62291
481565.94 3668192.38 1.64600 481585.94
3668192.38 1.65657
481985.94 3668192.38 11.01749 482005.94
3668192.38 11.81102
482025.94 3668192.38 12.59881 482045.94
3668192.38 13.39663
482065.94 3668192.38 14.13720 482085.94
3668192.38 15.02057
482105.94 3668192.38 16.03140 482125.94
3668192.38 17.19062
482145.94 3668192.38 18.53321 482165.94
3668192.38 19.93952
482185.94 3668192.38 21.47951 482205.94
3668192.38 22.91113
482225.94 3668192.38 24.76332 482245.94
3668192.38 26.65628
482265.94 3668192.38 28.38892 482465.94
3668192.38 26.31350
482485.94 3668192.38 25.02908 482505.94
3668192.38 23.70617
482525.94 3668192.38 22.45646 482545.94
3668192.38 21.18364
481445.94 3668212.38 2.07332 481465.94
3668212.38 1.75951
481485.94 3668212.38 1.68112 481505.94
3668212.38 1.65929
481525.94 3668212.38 1.57552 481545.94
3668212.38 1.57517
481565.94 3668212.38 1.60688 481585.94
3668212.38 1.62556
481605.94 3668212.38 1.76715 481965.94
3668212.38 9.25805
481985.94 3668212.38 10.24236 482005.94
3668212.38 11.09390
482025.94 3668212.38 11.73739 482045.94
3668212.38 12.41730
482065.94 3668212.38 13.14602 482085.94
3668212.38 13.87442
482105.94 3668212.38 14.67632 482125.94

3668212.38   15.52036
         482145.94   3668212.38   16.39977   482165.94
3668212.38   17.50838
         482185.94   3668212.38   19.09859   482205.94
3668212.38   20.34990
         482225.94   3668212.38   21.54525   482245.94
3668212.38   22.81912
         482265.94   3668212.38   24.00760   482485.94
3668212.38   21.78219
         482505.94   3668212.38   20.83663   482525.94
3668212.38   19.90892
         481405.94   3668232.38   2.61995   481425.94
3668232.38   2.34224
         481445.94   3668232.38   2.09950   481465.94
3668232.38   1.63755
         481485.94   3668232.38   1.58135   481505.94
3668232.38   1.61558
         481525.94   3668232.38   1.59772   481545.94
3668232.38   1.57635

 *** MODELOPTs: RegDFAULT CONC ELEV RURAL SigA Data

                              *** THE PERIOD (26304 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL   ***
                                  INCLUDING SOURCE(S):   L0000001   , L0000002 , L0000003   , L0000004   , L0000005   ,
                 L0000006   , L0000007   , L0000008   , L0000009   , L0000010 , L0000011   , L0000012   , L0000013   ,
                 L0000014   , L0000015   , L0000016   , L0000017   , L0000018 , L0000019   , L0000020   , L0000021   ,
                 L0000022   , L0000023   , L0000024   , L0000025   , L0000026 , L0000027   , L0000028   , . . .   ,

                                                 *** DISCRETE CARTESIAN RECEPTOR POINTS ***

                                                ** CONC OF PM_10   IN MICROGRAMS/M**3
                  **

       X-COORD (M)   Y-COORD (M)   CONC   X-COORD (M)
Y-COORD (M)   CONC
 - - -

```
         481605.94    3668232.38        1.68810                    481945.94
3668232.38        6.82394
         481965.94    3668232.38        8.20040                    481985.94
3668232.38        9.57886
         482005.94    3668232.38       10.01341                    482025.94
3668232.38       10.56408
         482045.94    3668232.38       11.51164                    482065.94
3668232.38       12.11490
         482085.94    3668232.38       12.78514                    482105.94
3668232.38       13.46471
         482125.94    3668232.38       14.06913                    482145.94
3668232.38       14.86825
         482165.94    3668232.38       15.45137                    482185.94
3668232.38       16.95097
         482205.94    3668232.38       18.08348                    482225.94
3668232.38       19.02592
         482245.94    3668232.38       19.88448                    482265.94
3668232.38       20.66892
         482505.94    3668232.38       18.38533                    481365.94
3668252.38        3.07620
         481385.94    3668252.38        3.06755                    481405.94
3668252.38        2.43548
         481425.94    3668252.38        2.23086                    481445.94
3668252.38        1.94838
         481465.94    3668252.38        1.64736                    481485.94
3668252.38        1.50683
         481505.94    3668252.38        1.56097                    481525.94
3668252.38        1.56819
         481545.94    3668252.38        1.56400                    481565.94
3668252.38        1.55774
         481585.94    3668252.38        1.67863                    481605.94
3668252.38        1.71472
         481925.94    3668252.38        5.23247                    481945.94
3668252.38        6.06124
         481965.94    3668252.38        7.38026                    481985.94
3668252.38        7.56190
         482005.94    3668252.38        7.29888                    482025.94
3668252.38        7.14666
         482045.94    3668252.38        7.85755                    482065.94
3668252.38        9.08941
         482085.94    3668252.38       10.93620                    482105.94
3668252.38       12.31224
         482125.94    3668252.38       12.73623                    482145.94
3668252.38       13.00541
         482165.94    3668252.38       13.01134                    482185.94
3668252.38       14.01378
         482205.94    3668252.38       15.73610                    482225.94
3668252.38       16.91194
         482245.94    3668252.38       17.57343                    481325.94
3668272.38        2.79194
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         481345.94    3668272.38        2.92941                      481365.94
3668272.38        3.00733
         481385.94    3668272.38        2.49400                      481405.94
3668272.38        2.38155
         481425.94    3668272.38        2.18668                      481445.94
3668272.38        2.05746
         481465.94    3668272.38        2.07027                      481485.94
3668272.38        1.46754
         481505.94    3668272.38        1.52703                      481525.94
3668272.38        1.58664
         481545.94    3668272.38        1.59948                      481565.94
3668272.38        1.55424
         481585.94    3668272.38        1.72289                      481605.94
3668272.38        1.77234
         481625.94    3668272.38        1.89777                      481905.94
3668272.38        4.14291
         481925.94    3668272.38        4.52995                      481945.94
3668272.38        5.45016
         481965.94    3668272.38        5.57161                      481985.94
3668272.38        6.48535
         482005.94    3668272.38        6.69308                      482025.94
3668272.38        6.48971
         482045.94    3668272.38        6.44264                      482065.94
3668272.38        6.43743
         482085.94    3668272.38        6.62450                      482105.94
3668272.38        6.90539
         482125.94    3668272.38        7.95598                      482145.94
3668272.38       11.01994
 *** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
Vista\Gran Vista\Gran Vista.i ***        04/27/22
 *** AERMET - VERSION  19191 ***   ***
                       ***        08:26:34

                                  PAGE 239
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL  SigA Data

                              *** THE PERIOD ( 26304 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL      ***
                                  INCLUDING SOURCE(S):     L0000001    , L0000002
, L0000003    , L0000004    , L0000005    ,
                  L0000006    , L0000007    , L0000008    , L0000009    , L0000010
, L0000011    , L0000012    , L0000013    ,
                  L0000014    , L0000015    , L0000016    , L0000017    , L0000018
, L0000019    , L0000020    , L0000021    ,
                  L0000022    , L0000023    , L0000024    , L0000025    , L0000026
, L0000027    , L0000028    ,  . . .      ,

                                                *** DISCRETE CARTESIAN RECEPTOR POINTS
***
```

** CONC OF PM_10 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
482165.94	3668272.38	9.68440	482185.94	3668272.38	10.16724
482205.94	3668272.38	13.50192	482225.94	3668272.38	14.95047
481265.94	3668292.38	2.23776	481285.94	3668292.38	2.33177
481305.94	3668292.38	2.47891	481325.94	3668292.38	2.72350
481345.94	3668292.38	2.90822	481365.94	3668292.38	2.75002
481385.94	3668292.38	2.67421	481405.94	3668292.38	2.44522
481425.94	3668292.38	2.22313	481445.94	3668292.38	2.15148
481465.94	3668292.38	2.05402	481485.94	3668292.38	1.49973
481505.94	3668292.38	1.51963	481525.94	3668292.38	1.64350
481545.94	3668292.38	1.66555	481565.94	3668292.38	1.59707
481585.94	3668292.38	1.72542	481605.94	3668292.38	1.91304
481625.94	3668292.38	1.95574	481885.94	3668292.38	3.37303
481905.94	3668292.38	3.45232	481925.94	3668292.38	4.07424
481945.94	3668292.38	4.10159	481965.94	3668292.38	4.89804
481985.94	3668292.38	5.78117	482005.94	3668292.38	6.08886
482025.94	3668292.38	6.24164	482045.94	3668292.38	6.40938
482065.94	3668292.38	6.41119	482085.94	3668292.38	6.41854
482105.94	3668292.38	6.67086	482125.94	3668292.38	7.19425
482145.94	3668292.38	8.08515	482165.94	3668292.38	8.30480
482185.94	3668292.38	9.06146	482205.94	3668292.38	11.96743
481225.94	3668312.38	2.07430	481245.94	3668312.38	2.14623
481265.94	3668312.38	2.24721	481285.94		

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3668312.38        2.34960
         481305.94    3668312.38        2.44755                    481325.94
3668312.38        2.68207
         481345.94    3668312.38        2.84743                    481365.94
3668312.38        2.43159
         481385.94    3668312.38        2.44278                    481405.94
3668312.38        2.32265
         481425.94    3668312.38        2.23438                    481445.94
3668312.38        2.09051
         481465.94    3668312.38        1.99116                    481485.94
3668312.38        1.91247
         481505.94    3668312.38        1.55773                    481525.94
3668312.38        1.69909
         481545.94    3668312.38        1.75099                    481565.94
3668312.38        1.76731
         481585.94    3668312.38        1.80059                    481605.94
3668312.38        1.99870
         481625.94    3668312.38        2.09417                    481885.94
3668312.38        2.74170
         481905.94    3668312.38        3.08723                    481925.94
3668312.38        3.34313
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3668312.38        4.34828
         481985.94    3668312.38        5.34807                    482005.94
3668312.38        5.47996
         482025.94    3668312.38        5.54623                    482045.94
3668312.38        5.56624
         482065.94    3668312.38        5.69210                    482085.94
3668312.38        5.87157
         482105.94    3668312.38        6.06698                    482125.94
3668312.38        6.42297
         482145.94    3668312.38        7.10340                    482165.94
3668312.38        8.12138
         482185.94    3668312.38        8.88078                    482285.94
3668312.38        8.72782
         482305.94    3668312.38       12.14369                    482325.94
3668312.38       13.53208
 *** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
Vista\Gran Vista\Gran Vista.i ***        04/27/22
 *** AERMET - VERSION  19191 ***   ***
                       ***        08:26:34

                                  PAGE 240
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL  SigA Data

                               *** THE PERIOD ( 26304 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL       ***
                                   INCLUDING SOURCE(S):     L0000001    , L0000002
, L0000003    , L0000004    , L0000005    ,
                 L0000006    , L0000007    , L0000008    , L0000009    , L0000010
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, L0000011   , L0000012   , L0000013   ,
                L0000014   , L0000015   , L0000016   , L0000017   , L0000018
, L0000019   , L0000020   , L0000021   ,
                L0000022   , L0000023   , L0000024   , L0000025   , L0000026
, L0000027   , L0000028   , . . .   ,

                                                *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                            ** CONC OF PM_10   IN MICROGRAMS/M**3
                  **

       X-COORD (M)   Y-COORD (M)   CONC   X-COORD (M)
Y-COORD (M)   CONC
 -
- -
         482345.94   3668312.38   13.60052   482365.94
3668312.38   13.61817
         482385.94   3668312.38   13.33119   482405.94
3668312.38   13.22321
         482425.94   3668312.38   13.01454   482445.94
3668312.38   12.68551
         482465.94   3668312.38   12.34488   482485.94
3668312.38   11.97357
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3668312.38   11.31929
         482545.94   3668312.38   10.99038   482565.94
3668312.38   9.76002
         482585.94   3668312.38   9.02840   482605.94
3668312.38   8.50502
         482625.94   3668312.38   7.82346   482645.94
3668312.38   6.98372
         482665.94   3668312.38   6.48359   482685.94
3668312.38   5.86649
         482705.94   3668312.38   5.17592   482725.94
3668312.38   4.94315
         482745.94   3668312.38   4.71918   482765.94
3668312.38   4.48835
         482785.94   3668312.38   4.29588   482805.94
3668312.38   4.15957
         482825.94   3668312.38   3.96644   482845.94
3668312.38   3.80789
         482865.94   3668312.38   3.62209   481205.94
3668332.38   1.99898
         481225.94   3668332.38   2.06735   481245.94
3668332.38   2.15611
         481265.94   3668332.38   2.25785   481285.94
3668332.38   2.35599
         481305.94   3668332.38   2.49212   481325.94
3668332.38   2.65489

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         481345.94    3668332.38        2.75685                     481365.94
3668332.38        2.36791
         481385.94    3668332.38        2.31546                     481405.94
3668332.38        2.34524
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         481465.94    3668332.38        2.35923                     481485.94
3668332.38        2.35000
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3668332.38        1.74174
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3668332.38        2.08868
         481585.94    3668332.38        1.99150                     481605.94
3668332.38        2.15131
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3668332.38        2.46919
         481865.94    3668332.38        2.30177                     481885.94
3668332.38        2.30208
         481905.94    3668332.38        2.71978                     481925.94
3668332.38        2.67599
         481945.94    3668332.38        2.73789                     481965.94
3668332.38        2.43901
         481985.94    3668332.38        2.60090                     482005.94
3668332.38        2.89684
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3668332.38        3.68665
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3668332.38        4.54677
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3668332.38        5.58108
         482145.94    3668332.38        6.34227                     482165.94
3668332.38        7.02385
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3668332.38        5.25056
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3668332.38       12.04510
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3668332.38       11.59501
         482445.94    3668332.38       11.25485                     482465.94
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3668332.38       10.14068
 *** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
Vista\Gran Vista\Gran Vista.i ***        04/27/22
 *** AERMET - VERSION  19191 ***   ***
                       ***       08:26:34
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*** MODELOPTs: RegDFAULT CONC ELEV RURAL SigA Data

*** THE PERIOD (26304 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 , L0000005 , L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 , L0000013 , L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 , L0000021 , L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
482525.94	3668332.38	9.32868	482545.94	3668332.38	9.98228
482565.94	3668332.38	8.80467	482585.94	3668332.38	8.44025
482605.94	3668332.38	6.11968	482625.94	3668332.38	6.33363
482645.94	3668332.38	6.35498	482665.94	3668332.38	5.86611
482685.94	3668332.38	5.36148	482705.94	3668332.38	4.85516
482725.94	3668332.38	4.55127	482745.94	3668332.38	4.34243
482765.94	3668332.38	4.10537	482785.94	3668332.38	3.94070
482805.94	3668332.38	3.75572	482825.94	3668332.38	3.64036
482845.94	3668332.38	3.49377	482865.94	3668332.38	3.39989
482885.94	3668332.38	3.24569	481185.94	3668352.38	1.95516
481205.94	3668352.38	1.99118	481225.94	3668352.38	2.05798
481245.94	3668352.38	2.16296	481265.94	3668352.38	2.27027
481285.94	3668352.38	2.36672	481305.94		

3668352.38 2.50122
481325.94 3668352.38 2.63593 481345.94
3668352.38 2.82172
481365.94 3668352.38 2.76269 481385.94
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3668352.38 2.49811
481445.94 3668352.38 2.49107 481465.94
3668352.38 2.53697
481485.94 3668352.38 2.48238 481505.94
3668352.38 2.14266
481525.94 3668352.38 2.11596 481545.94
3668352.38 2.26028
481565.94 3668352.38 2.23683 481585.94
3668352.38 2.22975
481605.94 3668352.38 2.36932 481625.94
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481645.94 3668352.38 2.82052 481865.94
3668352.38 1.89892
481885.94 3668352.38 2.16275 481905.94
3668352.38 2.19274
481925.94 3668352.38 2.34422 481945.94
3668352.38 1.89615
481965.94 3668352.38 1.84991 481985.94
3668352.38 1.89675
482005.94 3668352.38 1.96762 482025.94
3668352.38 2.02967
482045.94 3668352.38 2.05296 482065.94
3668352.38 2.14339
482085.94 3668352.38 2.40479 482245.94
3668352.38 3.74899
482265.94 3668352.38 3.95961 482285.94
3668352.38 5.20789
482305.94 3668352.38 10.65584 482325.94
3668352.38 11.14472
482345.94 3668352.38 11.21850 482365.94
3668352.38 11.26551
482385.94 3668352.38 11.12994 482405.94
3668352.38 11.03116
482425.94 3668352.38 10.88310 482445.94
3668352.38 10.63012
482465.94 3668352.38 10.27307 482485.94
3668352.38 9.98815
482505.94 3668352.38 9.66418 482525.94
3668352.38 9.33516
482545.94 3668352.38 9.08261 482565.94
3668352.38 7.89910
482585.94 3668352.38 7.58701 482605.94
3668352.38 5.56125
482625.94 3668352.38 5.59726 482645.94

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3668352.38   4.83559
         482705.94   3668352.38   4.45646   482725.94
3668352.38   4.20271

 *** MODELOPTs: RegDFAULT CONC ELEV RURAL SigA Data

                              *** THE PERIOD (26304 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL   ***
                                  INCLUDING SOURCE(S):   L0000001   , L0000002   , L0000003   , L0000004   , L0000005   ,
                                   L0000006   , L0000007   , L0000008   , L0000009   , L0000010   , L0000011   , L0000012   , L0000013   ,
                                   L0000014   , L0000015   , L0000016   , L0000017   , L0000018   , L0000019   , L0000020   , L0000021   ,
                                   L0000022   , L0000023   , L0000024   , L0000025   , L0000026   , L0000027   , L0000028   , . . .   ,

                                                    *** DISCRETE CARTESIAN RECEPTOR POINTS ***

                                                  ** CONC OF PM_10   IN MICROGRAMS/M**3
                  **

       X-COORD (M)   Y-COORD (M)   CONC   X-COORD (M)
Y-COORD (M)   CONC
 - - -

481285.94 3668372.38 2.36719 481305.94
3668372.38 2.59630
481325.94 3668372.38 2.66029 481345.94
3668372.38 2.81447
481365.94 3668372.38 2.82711 481385.94
3668372.38 2.23120
481405.94 3668372.38 2.44405 481425.94
3668372.38 2.61997
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3668372.38 2.66630
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3668372.38 2.65561
481565.94 3668372.38 2.58329 481585.94
3668372.38 2.50380
481605.94 3668372.38 3.08644 481625.94
3668372.38 3.14378
481645.94 3668372.38 3.18928 481665.94
3668372.38 3.41971
481865.94 3668372.38 1.82410 481885.94
3668372.38 1.93081
481905.94 3668372.38 1.93398 481925.94
3668372.38 1.89281
481945.94 3668372.38 1.64978 481965.94
3668372.38 1.66178
481985.94 3668372.38 1.70289 482005.94
3668372.38 1.74467
482025.94 3668372.38 1.79124 482045.94
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482065.94 3668372.38 1.88626 482225.94
3668372.38 2.94516
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3668372.38 3.32891
482285.94 3668372.38 5.10050 482305.94
3668372.38 9.93039
482325.94 3668372.38 10.19904 482345.94
3668372.38 10.27947
482365.94 3668372.38 10.19218 482385.94
3668372.38 10.12958
482405.94 3668372.38 9.91661 482425.94
3668372.38 9.76031
482445.94 3668372.38 9.52371 482465.94
3668372.38 9.32793
482485.94 3668372.38 9.06645 482505.94
3668372.38 8.80305
482525.94 3668372.38 8.48774 482545.94
3668372.38 8.13981
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3668372.38 6.89354

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3668372.38        5.17019
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3668372.38        4.65057
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3668372.38        3.99687
         482725.94    3668372.38        3.77426                       482745.94
3668372.38        3.61704
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3668372.38        3.38041
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3668372.38        3.07559
         482845.94    3668372.38        3.04331                       482865.94
3668372.38        2.94982
 *** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
Vista\Gran Vista\Gran Vista.i ***        04/27/22
 *** AERMET - VERSION  19191 ***   ***
                       ***        08:26:34

                                  PAGE 243
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL  SigA Data

                                *** THE PERIOD ( 26304 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL       ***
                                   INCLUDING SOURCE(S):     L0000001    , L0000002
, L0000003    , L0000004    , L0000005    ,
                  L0000006    , L0000007    , L0000008    , L0000009    , L0000010
, L0000011    , L0000012    , L0000013    ,
                  L0000014    , L0000015    , L0000016    , L0000017    , L0000018
, L0000019    , L0000020    , L0000021    ,
                  L0000022    , L0000023    , L0000024    , L0000025    , L0000026
, L0000027    , L0000028    ,  . . .      ,

                                      *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                   ** CONC OF PM_10    IN MICROGRAMS/M**3
                  **

       X-COORD (M)   Y-COORD (M)        CONC                       X-COORD (M)
Y-COORD (M)        CONC
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
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3668372.38        2.75795
         482925.94    3668372.38        2.67262                       481145.94
3668392.38        1.82910
         481165.94    3668392.38        1.87086                       481185.94
3668392.38        1.92098
         481205.94    3668392.38        2.00984                       481225.94
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3668392.38 2.06872
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3668392.38 2.61690
481325.94 3668392.38 2.71594 481345.94
3668392.38 2.60367
481365.94 3668392.38 2.12166 481385.94
3668392.38 2.31070
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3668392.38 2.94470
481445.94 3668392.38 3.02136 481465.94
3668392.38 2.61301
481485.94 3668392.38 2.59711 481505.94
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3668392.38 3.15466
481565.94 3668392.38 2.92044 481585.94
3668392.38 2.99397
481605.94 3668392.38 3.25438 481625.94
3668392.38 3.49857
481645.94 3668392.38 3.43098 481665.94
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3668392.38 1.60865
481945.94 3668392.38 1.60384 481965.94
3668392.38 1.59301
481985.94 3668392.38 1.62192 482005.94
3668392.38 1.65668
482025.94 3668392.38 1.67380 482045.94
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482065.94 3668392.38 1.77531 482205.94
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3668392.38 2.61784
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3668392.38 5.06480
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482345.94 3668392.38 9.49297 482365.94
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482385.94 3668392.38 9.05092 482405.94
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3668392.38 8.60027
482465.94 3668392.38 8.31281 482485.94
3668392.38 7.95345
482505.94 3668392.38 7.20749 482525.94

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3668392.38        7.04631
         482545.94    3668392.38        7.05252                        482565.94
3668392.38        6.65880
         482585.94    3668392.38        6.17405                        482605.94
3668392.38        4.62530
         482625.94    3668392.38        4.71582                        482645.94
3668392.38        4.44166
         482665.94    3668392.38        4.20230                        482685.94
3668392.38        3.79256
         482705.94    3668392.38        3.53749                        482725.94
3668392.38        3.40806
         482745.94    3668392.38        3.29183                        482765.94
3668392.38        3.17392
         482785.94    3668392.38        3.04540                        482805.94
3668392.38        2.96372
         482825.94    3668392.38        2.86236                        482845.94
3668392.38        2.75904
         482865.94    3668392.38        2.71773                        482885.94
3668392.38        2.66130
         482905.94    3668392.38        2.59097                        482925.94
3668392.38        2.45520
         481125.94    3668412.38        1.76666                        481145.94
3668412.38        1.80603
 *** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
Vista\Gran Vista\Gran Vista.i ***        04/27/22
 *** AERMET - VERSION  19191 ***   ***
                      ***        08:26:34

                                 PAGE 244
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL  SigA Data

                              *** THE PERIOD ( 26304 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL      ***
                                  INCLUDING SOURCE(S):     L0000001    , L0000002
, L0000003    , L0000004    , L0000005    ,
                  L0000006    , L0000007    , L0000008    , L0000009    , L0000010
, L0000011    , L0000012    , L0000013    ,
                  L0000014    , L0000015    , L0000016    , L0000017    , L0000018
, L0000019    , L0000020    , L0000021    ,
                  L0000022    , L0000023    , L0000024    , L0000025    , L0000026
, L0000027    , L0000028    ,  . . .      ,

                                                *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                             ** CONC OF PM_10    IN MICROGRAMS/M**3
                  **

       X-COORD (M)   Y-COORD (M)        CONC                         X-COORD (M)
Y-COORD (M)        CONC
```

- - - -

```
         482385.94    3668412.38        8.08401                      482405.94
3668412.38        8.03873
         482425.94    3668412.38        7.86972                      482445.94
3668412.38        7.35020
         482465.94    3668412.38        6.88542                      482485.94
3668412.38        6.77744
         482505.94    3668412.38        6.51467                      482525.94
3668412.38        6.30839
         482545.94    3668412.38        6.49905                      482565.94
3668412.38        6.12071
         482585.94    3668412.38        5.56710                      482605.94
3668412.38        4.23959
         482625.94    3668412.38        4.34070                      482645.94
3668412.38        4.20807
         482665.94    3668412.38        3.91732                      482685.94
3668412.38        3.57385
         482705.94    3668412.38        3.25914                      482725.94
3668412.38        3.12800
         482745.94    3668412.38        3.00923                      482765.94
3668412.38        2.72743
         482785.94    3668412.38        2.59882                      482805.94
3668412.38        2.55344
         482825.94    3668412.38        2.57250                      482845.94
3668412.38        2.56100
         482865.94    3668412.38        2.50540                      482885.94
3668412.38        2.48007
         482905.94    3668412.38        2.39423                      481105.94
3668432.38        1.70516
         481125.94    3668432.38        1.74474                      481145.94
3668432.38        1.78729
         481165.94    3668432.38        1.84422                      481185.94
3668432.38        1.91434
 *** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
Vista\Gran Vista\Gran Vista.i ***        04/27/22
 *** AERMET - VERSION  19191 ***   ***
                       ***        08:26:34

                                  PAGE 245
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL  SigA Data

                                  *** THE PERIOD ( 26304 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL      ***
                                  INCLUDING SOURCE(S):     L0000001    , L0000002
, L0000003    , L0000004    , L0000005    ,
                  L0000006    , L0000007    , L0000008    , L0000009    , L0000010
, L0000011    , L0000012    , L0000013    ,
                  L0000014    , L0000015    , L0000016    , L0000017    , L0000018
, L0000019    , L0000020    , L0000021    ,
                  L0000022    , L0000023    , L0000024    , L0000025    , L0000026
, L0000027    , L0000028    ,  . . .      ,
```

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
481205.94	3668432.38	1.98927	481225.94	3668432.38	2.08256
481245.94	3668432.38	2.34366	481265.94	3668432.38	2.46892
481285.94	3668432.38	2.52581	481305.94	3668432.38	2.58183
481325.94	3668432.38	2.63305	481345.94	3668432.38	2.65445
481365.94	3668432.38	2.71815	481385.94	3668432.38	2.62594
481405.94	3668432.38	2.90798	481425.94	3668432.38	3.02505
481445.94	3668432.38	3.07110	481465.94	3668432.38	3.06024
481485.94	3668432.38	3.18082	481505.94	3668432.38	3.30758
481525.94	3668432.38	3.40835	481545.94	3668432.38	3.46382
481565.94	3668432.38	3.44291	481585.94	3668432.38	3.63598
481605.94	3668432.38	3.71102	481625.94	3668432.38	3.77318
481645.94	3668432.38	3.80672	481865.94	3668432.38	1.26795
481885.94	3668432.38	1.23539	481905.94	3668432.38	1.16919
481925.94	3668432.38	1.21426	481945.94	3668432.38	1.30409
481965.94	3668432.38	1.34356	481985.94	3668432.38	1.37542
482005.94	3668432.38	1.34139	482025.94	3668432.38	1.37805
482045.94	3668432.38	1.46241	482065.94	3668432.38	1.47561
482085.94	3668432.38	1.45989	482185.94	3668432.38	1.82119
482205.94	3668432.38	1.89236	482225.94	3668432.38	1.91296
482245.94	3668432.38	1.95454	482265.94		

3668432.38   2.06364
         482285.94   3668432.38   3.42543   482305.94
3668432.38   7.95205
         482325.94   3668432.38   7.97181   482345.94
3668432.38   8.18087
         482365.94   3668432.38   7.55583   482385.94
3668432.38   7.67536
         482405.94   3668432.38   7.76023   482425.94
3668432.38   7.67462
         482445.94   3668432.38   7.50473   482465.94
3668432.38   7.33858
         482485.94   3668432.38   7.10307   482505.94
3668432.38   6.36997
         482525.94   3668432.38   6.12250   482545.94
3668432.38   6.00468
         482565.94   3668432.38   5.68643   482585.94
3668432.38   4.95627
         482605.94   3668432.38   3.89842   482625.94
3668432.38   4.00197
         482645.94   3668432.38   3.99585   482665.94
3668432.38   3.69930
         482685.94   3668432.38   3.37008   482705.94
3668432.38   3.07755
         482725.94   3668432.38   2.92301   482745.94
3668432.38   2.61425
         482825.94   3668432.38   2.30579   482845.94
3668432.38   2.34880
         482865.94   3668432.38   2.34289   482885.94
3668432.38   2.31121
         481085.94   3668452.38   1.64803   481105.94
3668452.38   1.68515
         481125.94   3668452.38   1.72925   481145.94
3668452.38   1.77291
         481165.94   3668452.38   1.82449   481185.94
3668452.38   1.88162
         481205.94   3668452.38   1.95077   481225.94
3668452.38   2.01310
         481245.94   3668452.38   2.16935   481265.94
3668452.38   2.44865
         481285.94   3668452.38   2.47341   481305.94
3668452.38   2.52629

                              *** THE PERIOD (26304 HRS) AVERAGE CONCENTRATION

VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): L0000001 , L0000002
, L0000003 , L0000004 , L0000005 ,
L0000006 , L0000007 , L0000008 , L0000009 , L0000010
, L0000011 , L0000012 , L0000013 ,
L0000014 , L0000015 , L0000016 , L0000017 , L0000018
, L0000019 , L0000020 , L0000021 ,
L0000022 , L0000023 , L0000024 , L0000025 , L0000026
, L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS
***

** CONC OF PM_10 IN MICROGRAMS/M**3
**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
481325.94	3668452.38	2.63718	481345.94	3668452.38	2.70467
481365.94	3668452.38	2.76283	481385.94	3668452.38	2.84114
481405.94	3668452.38	2.90702	481425.94	3668452.38	2.97182
481445.94	3668452.38	2.86614	481465.94	3668452.38	2.94642
481485.94	3668452.38	2.99795	481505.94	3668452.38	3.15157
481525.94	3668452.38	3.29030	481545.94	3668452.38	3.37767
481565.94	3668452.38	3.31543	481585.94	3668452.38	3.39466
481605.94	3668452.38	3.51849	481625.94	3668452.38	3.65649
481885.94	3668452.38	1.09384	481905.94	3668452.38	1.09682
481925.94	3668452.38	1.15682	481945.94	3668452.38	1.19114
481965.94	3668452.38	1.23044	481985.94	3668452.38	1.19305
482005.94	3668452.38	1.23029	482025.94	3668452.38	1.29284
482045.94	3668452.38	1.33896	482065.94	3668452.38	1.34219
482165.94	3668452.38	1.51939	482185.94	3668452.38	1.68345
482205.94	3668452.38	1.73715	482225.94	3668452.38	1.80212

482245.94 3668452.38 1.81991 482265.94
3668452.38 1.86970
482285.94 3668452.38 3.24576 482305.94
3668452.38 7.30989
482325.94 3668452.38 7.34566 482345.94
3668452.38 7.59930
482365.94 3668452.38 7.00608 482385.94
3668452.38 7.13216
482405.94 3668452.38 7.23571 482425.94
3668452.38 6.85216
482445.94 3668452.38 6.71735 482465.94
3668452.38 6.08123
482485.94 3668452.38 5.89280 482505.94
3668452.38 5.78635
482525.94 3668452.38 5.57445 482545.94
3668452.38 5.56482
482565.94 3668452.38 5.21744 482585.94
3668452.38 4.48083
482605.94 3668452.38 3.59660 482625.94
3668452.38 3.69086
482645.94 3668452.38 3.58042 482665.94
3668452.38 3.16325
482685.94 3668452.38 3.04991 482705.94
3668452.38 2.83175
482725.94 3668452.38 2.59530 482745.94
3668452.38 2.32106
482885.94 3668452.38 2.15560 481065.94
3668472.38 1.59436
481085.94 3668472.38 1.62833 481105.94
3668472.38 1.66823
481125.94 3668472.38 1.70869 481145.94
3668472.38 1.75186
481165.94 3668472.38 1.79842 481185.94
3668472.38 1.87005
481205.94 3668472.38 1.92846 481225.94
3668472.38 1.97361
481245.94 3668472.38 2.07411 481265.94
3668472.38 2.20491
481285.94 3668472.38 2.32703 481305.94
3668472.38 2.34389
481325.94 3668472.38 2.34562 481345.94
3668472.38 2.45593
481365.94 3668472.38 2.52518 481385.94
3668472.38 2.62928
481405.94 3668472.38 2.68518 481425.94
3668472.38 2.76861
481445.94 3668472.38 2.77003 481465.94
3668472.38 2.78147
481485.94 3668472.38 2.91782 481505.94
3668472.38 3.02160

 *** MODELOPTs: RegDFAULT CONC ELEV RURAL SigA Data

                                *** THE PERIOD (26304 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL   ***
                                    INCLUDING SOURCE(S):   L0000001   , L0000002 , L0000003   , L0000004   , L0000005   ,
                  L0000006   , L0000007   , L0000008   , L0000009   , L0000010 , L0000011   , L0000012   , L0000013   ,
                  L0000014   , L0000015   , L0000016   , L0000017   , L0000018 , L0000019   , L0000020   , L0000021   ,
                  L0000022   , L0000023   , L0000024   , L0000025   , L0000026 , L0000027   , L0000028   , . . .   ,

                                                *** DISCRETE CARTESIAN RECEPTOR POINTS ***

                                            ** CONC OF PM_10   IN MICROGRAMS/M**3   **

       X-COORD (M)   Y-COORD (M)   CONC   X-COORD (M)   Y-COORD (M)   CONC
 - - -

3668472.38 1.69236
482265.94 3668472.38 1.73905 482285.94 3668472.38 2.85041
482305.94 3668472.38 6.73355 482325.94 3668472.38 6.74619
482345.94 3668472.38 7.09503 482365.94 3668472.38 6.52702
482385.94 3668472.38 6.53990 482405.94 3668472.38 6.53668
482425.94 3668472.38 6.10455 482445.94 3668472.38 5.68488
482465.94 3668472.38 5.55917 482485.94 3668472.38 5.39679
482505.94 3668472.38 5.26497 482525.94 3668472.38 5.07777
482545.94 3668472.38 5.13333 482565.94 3668472.38 4.78898
482585.94 3668472.38 3.88545 482605.94 3668472.38 3.18762
482625.94 3668472.38 3.33569 482645.94 3668472.38 3.24119
482665.94 3668472.38 3.00463 482685.94 3668472.38 2.72424
482705.94 3668472.38 2.56279 482725.94 3668472.38 2.26692
481045.94 3668492.38 1.54608 481065.94 3668492.38 1.57591
481085.94 3668492.38 1.61175 481105.94 3668492.38 1.64925
481125.94 3668492.38 1.68824 481145.94 3668492.38 1.72798
481165.94 3668492.38 1.77519 481185.94 3668492.38 1.83883
481205.94 3668492.38 1.91094 481225.94 3668492.38 1.94987
481245.94 3668492.38 1.99550 481265.94 3668492.38 2.06885
481285.94 3668492.38 2.12842 481305.94 3668492.38 2.17333
481325.94 3668492.38 2.22333 481345.94 3668492.38 2.29211
481365.94 3668492.38 2.29048 481385.94 3668492.38 2.35905
481405.94 3668492.38 2.41613 481425.94 3668492.38 2.50825
481445.94 3668492.38 2.59320 481465.94 3668492.38 2.71793
481485.94 3668492.38 2.80915 481505.94 3668492.38 2.80799
481525.94 3668492.38 2.70704 481545.94

3668492.38   2.75751
         481565.94   3668492.38   2.83830   481585.94
3668492.38   2.93696
         481605.94   3668492.38   3.09788   481885.94
3668492.38   0.96948
         481905.94   3668492.38   0.98541   481925.94
3668492.38   1.01025
         481945.94   3668492.38   0.98170   481965.94
3668492.38   1.00578

 *** MODELOPTs: RegDFAULT CONC ELEV RURAL SigA Data

                               *** THE PERIOD (26304 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL   ***
                                   INCLUDING SOURCE(S):   L0000001   , L0000002   , L0000003   , L0000004   , L0000005   ,
                                    L0000006   , L0000007   , L0000008   , L0000009   , L0000010   , L0000011   , L0000012   , L0000013   ,
                                    L0000014   , L0000015   , L0000016   , L0000017   , L0000018   , L0000019   , L0000020   , L0000021   ,
                                    L0000022   , L0000023   , L0000024   , L0000025   , L0000026   , L0000027   , L0000028   , . . .   ,

                                                    *** DISCRETE CARTESIAN RECEPTOR POINTS ***

                                               ** CONC OF PM_10   IN MICROGRAMS/M**3
                  **

       X-COORD (M)   Y-COORD (M)   CONC   X-COORD (M)
Y-COORD (M)   CONC
 - - -

```
        482285.94    3668492.38        2.28131                    482305.94
3668492.38        6.10111
        482325.94    3668492.38        6.25236                    482345.94
3668492.38        6.58740
        482365.94    3668492.38        4.81267                    482385.94
3668492.38        4.79092
        482405.94    3668492.38        4.74973                    482425.94
3668492.38        4.68994
        482445.94    3668492.38        4.66180                    482465.94
3668492.38        4.58815
        482485.94    3668492.38        4.52856                    482505.94
3668492.38        4.40229
        482525.94    3668492.38        4.36020                    482545.94
3668492.38        4.69960
        482565.94    3668492.38        4.38365                    482585.94
3668492.38        3.43952
        482605.94    3668492.38        2.81448                    482625.94
3668492.38        2.94091
        482645.94    3668492.38        2.90083                    482665.94
3668492.38        2.84684
        482685.94    3668492.38        2.53625                    482705.94
3668492.38        2.21837
        481025.94    3668512.38        1.50330                    481045.94
3668512.38        1.53064
        481065.94    3668512.38        1.56129                    481085.94
3668512.38        1.59496
        481105.94    3668512.38        1.63157                    481125.94
3668512.38        1.66831
        481145.94    3668512.38        1.71474                    481165.94
3668512.38        1.75204
        481185.94    3668512.38        1.80825                    481205.94
3668512.38        1.85815
        481225.94    3668512.38        1.91067                    481245.94
3668512.38        1.95228
        481265.94    3668512.38        2.00092                    481285.94
3668512.38        2.05915
        481305.94    3668512.38        2.08789                    481325.94
3668512.38        2.11837
        481345.94    3668512.38        2.17108                    481365.94
3668512.38        2.22127
        481385.94    3668512.38        2.27723                    481405.94
3668512.38        2.34417
        481425.94    3668512.38        2.44032                    481445.94
3668512.38        2.50404
        481465.94    3668512.38        2.61665                    481485.94
3668512.38        2.49876
        481505.94    3668512.38        2.51072                    481525.94
3668512.38        2.55645
        481545.94    3668512.38        2.62110                    481565.94
3668512.38        2.69723
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         481585.94    3668512.38        2.83238                      481905.94
3668512.38        0.93918
         481925.94    3668512.38        0.92602                      481945.94
3668512.38        0.93340
         481965.94    3668512.38        0.94441                      481985.94
3668512.38        0.97781
         482005.94    3668512.38        0.99607                      482025.94
3668512.38        1.01251
         482105.94    3668512.38        1.09554                      482125.94
3668512.38        1.12913
         482145.94    3668512.38        1.16015                      482165.94
3668512.38        1.18172
         482185.94    3668512.38        1.24465                      482205.94
3668512.38        1.42847
         482225.94    3668512.38        1.46755                      482245.94
3668512.38        1.50405
         482265.94    3668512.38        1.51285                      482285.94
3668512.38        1.95199
 *** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
Vista\Gran Vista\Gran Vista.i ***        04/27/22
 *** AERMET - VERSION  19191 ***   ***
                      ***        08:26:34

                                 PAGE 249
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL  SigA Data

                                *** THE PERIOD ( 26304 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL       ***
                                    INCLUDING SOURCE(S):     L0000001    , L0000002
, L0000003    , L0000004    , L0000005    ,
                  L0000006    , L0000007    , L0000008    , L0000009    , L0000010
, L0000011    , L0000012    , L0000013    ,
                  L0000014    , L0000015    , L0000016    , L0000017    , L0000018
, L0000019    , L0000020    , L0000021    ,
                  L0000022    , L0000023    , L0000024    , L0000025    , L0000026
, L0000027    , L0000028    ,  . . .      ,

                                          *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                    ** CONC OF PM_10    IN MICROGRAMS/M**3
                  **

      X-COORD (M)   Y-COORD (M)        CONC                       X-COORD (M)
Y-COORD (M)        CONC
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
         482305.94    3668512.38        5.39946                      482325.94
3668512.38        5.76171
         482345.94    3668512.38        6.10723                      482365.94
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3668512.38        4.57514
         482385.94    3668512.38        4.54548                    482405.94
3668512.38        4.46044
         482425.94    3668512.38        4.52682                    482445.94
3668512.38        4.58224
         482465.94    3668512.38        4.55673                    482485.94
3668512.38        4.50295
         482505.94    3668512.38        4.36092                    482525.94
3668512.38        4.32407
         482545.94    3668512.38        4.26824                    482565.94
3668512.38        3.99215
         482585.94    3668512.38        2.96232                    482605.94
3668512.38        2.50767
         482625.94    3668512.38        2.58460                    482645.94
3668512.38        2.60896
         482665.94    3668512.38        2.55275                    482685.94
3668512.38        2.33733
         482705.94    3668512.38        2.03473                    482885.94
3668512.38        1.74660
         482905.94    3668512.38        1.74101                    482925.94
3668512.38        1.72759
         481045.94    3668532.38        1.51792                    481065.94
3668532.38        1.54657
         481085.94    3668532.38        1.57987                    481105.94
3668532.38        1.61477
         481125.94    3668532.38        1.65120                    481145.94
3668532.38        1.69010
         481165.94    3668532.38        1.73361                    481185.94
3668532.38        1.77027
         481205.94    3668532.38        1.82262                    481225.94
3668532.38        1.86897
         481245.94    3668532.38        1.90925                    481265.94
3668532.38        1.95607
         481285.94    3668532.38        1.98712                    481305.94
3668532.38        2.02303
         481325.94    3668532.38        2.07082                    481345.94
3668532.38        2.11913
         481365.94    3668532.38        2.16795                    481385.94
3668532.38        2.22823
         481405.94    3668532.38        2.30858                    481425.94
3668532.38        2.35703
         481445.94    3668532.38        2.33876                    481465.94
3668532.38        2.33558
         481485.94    3668532.38        2.36786                    481505.94
3668532.38        2.40099
         481525.94    3668532.38        2.45994                    481545.94
3668532.38        2.51273
         481565.94    3668532.38        2.59073                    481905.94
3668532.38        0.89101
         481925.94    3668532.38        0.86443                    481945.94
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3668532.38        0.86960
         481965.94    3668532.38        0.89564                        481985.94
3668532.38        0.90315
         482005.94    3668532.38        0.92925                        482105.94
3668532.38        1.03934
         482125.94    3668532.38        1.07038                        482145.94
3668532.38        1.09926
         482165.94    3668532.38        1.11972                        482185.94
3668532.38        1.15951
         482205.94    3668532.38        1.33231                        482225.94
3668532.38        1.37970
         482245.94    3668532.38        1.41891                        482265.94
3668532.38        1.42765
         482285.94    3668532.38        1.73011                        482305.94
3668532.38        4.26550
         482325.94    3668532.38        5.37490                        482345.94
3668532.38        5.66696
         482365.94    3668532.38        4.54395                        482385.94
3668532.38        4.43751
         482405.94    3668532.38        4.46971                        482425.94
3668532.38        4.40530
         482445.94    3668532.38        4.28922                        482465.94
3668532.38        4.18454
         482485.94    3668532.38        4.18589                        482505.94
3668532.38        4.07201
         482525.94    3668532.38        4.00944                        482545.94
3668532.38        3.77686
 *** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
Vista\Gran Vista\Gran Vista.i ***        04/27/22
 *** AERMET - VERSION  19191 ***   ***
                       ***        08:26:34

                                  PAGE 250
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL  SigA Data

                                *** THE PERIOD ( 26304 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL       ***
                                   INCLUDING SOURCE(S):     L0000001    , L0000002
, L0000003    , L0000004    , L0000005    ,
                  L0000006    , L0000007    , L0000008    , L0000009    , L0000010
, L0000011    , L0000012    , L0000013    ,
                  L0000014    , L0000015    , L0000016    , L0000017    , L0000018
, L0000019    , L0000020    , L0000021    ,
                  L0000022    , L0000023    , L0000024    , L0000025    , L0000026
, L0000027    , L0000028    ,  . . .      ,

                                      *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                    ** CONC OF PM_10    IN MICROGRAMS/M**3
```

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
482565.94	3668532.38	3.62407	482585.94	3668532.38	2.52639
482605.94	3668532.38	2.25811	482625.94	3668532.38	2.32472
482645.94	3668532.38	2.33428	482665.94	3668532.38	2.27389
482685.94	3668532.38	2.06655	482705.94	3668532.38	1.86436
482845.94	3668532.38	1.68678	482865.94	3668532.38	1.67390
482885.94	3668532.38	1.65845	482905.94	3668532.38	1.64737
482925.94	3668532.38	1.63668	482945.94	3668532.38	1.62760
481045.94	3668552.38	1.50502	481065.94	3668552.38	1.53461
481085.94	3668552.38	1.56578	481105.94	3668552.38	1.60329
481125.94	3668552.38	1.63597	481145.94	3668552.38	1.67048
481165.94	3668552.38	1.71651	481185.94	3668552.38	1.74977
481205.94	3668552.38	1.78575	481225.94	3668552.38	1.83991
481245.94	3668552.38	1.87285	481265.94	3668552.38	1.91087
481285.94	3668552.38	1.94763	481305.94	3668552.38	1.98146
481325.94	3668552.38	2.02585	481345.94	3668552.38	2.07508
481365.94	3668552.38	2.10835	481385.94	3668552.38	2.17721
481405.94	3668552.38	2.18839	481425.94	3668552.38	2.19935
481445.94	3668552.38	2.22375	481465.94	3668552.38	2.25042
481485.94	3668552.38	2.28091	481505.94	3668552.38	2.32072
481525.94	3668552.38	2.36508	481905.94	3668552.38	0.80744
481925.94	3668552.38	0.81699	481945.94	3668552.38	0.82157
481965.94	3668552.38	0.82477	481985.94	3668552.38	0.85406

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         482085.94    3668552.38        0.92207                        482105.94
3668552.38        0.94691
         482125.94    3668552.38        1.01802                        482145.94
3668552.38        1.04557
         482165.94    3668552.38        1.06513                        482185.94
3668552.38        1.09253
         482205.94    3668552.38        1.23662                        482225.94
3668552.38        1.30977
         482245.94    3668552.38        1.34623                        482265.94
3668552.38        1.35729
         482285.94    3668552.38        1.45498                        482305.94
3668552.38        2.98901
         482325.94    3668552.38        4.60211                        482345.94
3668552.38        4.96371
         482365.94    3668552.38        4.34971                        482385.94
3668552.38        4.08481
         482405.94    3668552.38        3.99359                        482425.94
3668552.38        3.96494
         482445.94    3668552.38        3.93688                        482465.94
3668552.38        3.92092
         482485.94    3668552.38        3.86161                        482505.94
3668552.38        3.73553
         482525.94    3668552.38        3.61699                        482545.94
3668552.38        3.37027
         482565.94    3668552.38        3.30108                        482585.94
3668552.38        2.19839
         482605.94    3668552.38        2.03258                        482625.94
3668552.38        2.09724
         482645.94    3668552.38        2.11760                        482665.94
3668552.38        2.08169
         482685.94    3668552.38        1.87562                        482785.94
3668552.38        1.62312
         482805.94    3668552.38        1.61618                        482825.94
3668552.38        1.60616
         482845.94    3668552.38        1.59654                        482865.94
3668552.38        1.58509
 *** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
Vista\Gran Vista\Gran Vista.i ***        04/27/22
 *** AERMET - VERSION  19191 ***   ***
                       ***        08:26:34

                                   PAGE 251
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL  SigA Data

                                *** THE PERIOD ( 26304 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL       ***
                                   INCLUDING SOURCE(S):     L0000001    , L0000002
, L0000003    , L0000004    , L0000005    ,
                  L0000006    , L0000007    , L0000008    , L0000009    , L0000010
, L0000011    , L0000012    , L0000013    ,
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                 L0000014    , L0000015    , L0000016    , L0000017    , L0000018
, L0000019    , L0000020    , L0000021    ,
                 L0000022    , L0000023    , L0000024    , L0000025    , L0000026
, L0000027    , L0000028    ,  . . .      ,

                                          *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                       ** CONC OF PM_10    IN MICROGRAMS/M**3
                  **

       X-COORD (M)   Y-COORD (M)        CONC                        X-COORD (M)
Y-COORD (M)        CONC
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
         482885.94    3668552.38        1.57158                       482905.94
3668552.38        1.56302
         482925.94    3668552.38        1.55425                       482945.94
3668552.38        1.54469
         482965.94    3668552.38        1.53300                       481065.94
3668572.38        1.52335
         481085.94    3668572.38        1.55246                       481105.94
3668572.38        1.58501
         481125.94    3668572.38        1.62136                       481145.94
3668572.38        1.65319
         481165.94    3668572.38        1.69061                       481185.94
3668572.38        1.72725
         481205.94    3668572.38        1.76139                       481225.94
3668572.38        1.80585
         481245.94    3668572.38        1.84048                       481265.94
3668572.38        1.87300
         481285.94    3668572.38        1.90786                       481305.94
3668572.38        1.93642
         481325.94    3668572.38        1.96906                       481345.94
3668572.38        2.02248
         481365.94    3668572.38        2.04677                       481385.94
3668572.38        2.06372
         481405.94    3668572.38        2.08808                       481425.94
3668572.38        2.12324
         481445.94    3668572.38        2.15169                       481465.94
3668572.38        2.18328
         481485.94    3668572.38        2.21413                       481505.94
3668572.38        2.23952
         481905.94    3668572.38        0.75768                       481925.94
3668572.38        0.76181
         481945.94    3668572.38        0.77555                       481965.94
3668572.38        0.77505
         481985.94    3668572.38        0.78238                       482085.94
3668572.38        0.87754
         482105.94    3668572.38        0.89532                       482125.94
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3668572.38        0.97049
         482145.94    3668572.38        0.99373                      482165.94
3668572.38        1.01796
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3668572.38        1.15256
         482225.94    3668572.38        1.24516                      482245.94
3668572.38        1.29719
         482265.94    3668572.38        1.30403                      482285.94
3668572.38        1.33292
         482305.94    3668572.38        2.17522                      482325.94
3668572.38        4.09500
         482345.94    3668572.38        4.13123                      482365.94
3668572.38        4.87537
         482385.94    3668572.38        3.80491                      482405.94
3668572.38        3.61553
         482425.94    3668572.38        3.45540                      482445.94
3668572.38        3.20121
         482465.94    3668572.38        3.16293                      482485.94
3668572.38        3.05538
         482505.94    3668572.38        2.99545                      482525.94
3668572.38        3.18614
         482545.94    3668572.38        3.09850                      482565.94
3668572.38        2.95500
         482585.94    3668572.38        1.93277                      482605.94
3668572.38        1.86433
         482625.94    3668572.38        1.92623                      482645.94
3668572.38        1.87105
         482665.94    3668572.38        1.84196                      482685.94
3668572.38        1.73091
         482745.94    3668572.38        1.58509                      482765.94
3668572.38        1.56910
         482785.94    3668572.38        1.55716                      482805.94
3668572.38        1.54220
         482825.94    3668572.38        1.52731                      482845.94
3668572.38        1.51480
         482865.94    3668572.38        1.50410                      482885.94
3668572.38        1.49371
         482905.94    3668572.38        1.48496                      482925.94
3668572.38        1.47596
         482945.94    3668572.38        1.46806                      482965.94
3668572.38        1.45677
         481065.94    3668592.38        1.50881                      481085.94
3668592.38        1.53948
         481105.94    3668592.38        1.56889                      481125.94
3668592.38        1.60481
 *** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
Vista\Gran Vista\Gran Vista.i ***        04/27/22
 *** AERMET - VERSION  19191 ***   ***
                       ***       08:26:34
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*** MODELOPTs: RegDFAULT CONC ELEV RURAL SigA Data

*** THE PERIOD (26304 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***

INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 , L0000005 , L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 , L0000013 , L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 , L0000021 , L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
481145.94	3668592.38	1.63530	481165.94	3668592.38	1.66748
481185.94	3668592.38	1.70390	481205.94	3668592.38	1.73317
481225.94	3668592.38	1.76528	481245.94	3668592.38	1.80537
481265.94	3668592.38	1.83114	481285.94	3668592.38	1.85950
481305.94	3668592.38	1.88668	481325.94	3668592.38	1.91093
481345.94	3668592.38	1.96460	481365.94	3668592.38	1.98344
481385.94	3668592.38	2.00056	481405.94	3668592.38	2.02405
481425.94	3668592.38	2.05901	481445.94	3668592.38	2.08958
481465.94	3668592.38	2.10784	481485.94	3668592.38	2.11255
481925.94	3668592.38	0.72450	481945.94	3668592.38	0.73192
481965.94	3668592.38	0.73668	481985.94	3668592.38	0.74641
482085.94	3668592.38	0.82237	482105.94	3668592.38	0.84900
482125.94	3668592.38	0.92087	482145.94	3668592.38	0.94776

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        482165.94    3668592.38        0.97426                    482185.94
3668592.38        0.98951
        482205.94    3668592.38        1.05501                    482225.94
3668592.38        1.20112
        482245.94    3668592.38        1.24269                    482265.94
3668592.38        1.28149
        482285.94    3668592.38        1.28944                    482305.94
3668592.38        1.74972
        482325.94    3668592.38        3.71824                    482345.94
3668592.38        3.80257
        482365.94    3668592.38        4.50692                    482385.94
3668592.38        3.44949
        482405.94    3668592.38        3.41320                    482425.94
3668592.38        3.44462
        482445.94    3668592.38        3.26681                    482465.94
3668592.38        3.14867
        482485.94    3668592.38        3.07770                    482505.94
3668592.38        2.99972
        482525.94    3668592.38        2.97294                    482545.94
3668592.38        2.81786
        482565.94    3668592.38        2.72192                    482585.94
3668592.38        1.81410
        482605.94    3668592.38        1.75125                    482625.94
3668592.38        1.80720
        482645.94    3668592.38        1.74708                    482665.94
3668592.38        1.71259
        482685.94    3668592.38        1.65670                    482705.94
3668592.38        1.56306
        482725.94    3668592.38        1.54292                    482745.94
3668592.38        1.51756
        482765.94    3668592.38        1.51025                    482785.94
3668592.38        1.49011
        482805.94    3668592.38        1.46389                    482825.94
3668592.38        1.44859
        482845.94    3668592.38        1.42895                    482865.94
3668592.38        1.42203
        482885.94    3668592.38        1.41439                    482905.94
3668592.38        1.40197
        482925.94    3668592.38        1.39784                    482945.94
3668592.38        1.39586
        481065.94    3668612.38        1.48908                    481085.94
3668612.38        1.52586
        481105.94    3668612.38        1.55276                    481125.94
3668612.38        1.58491
        481145.94    3668612.38        1.61670                    481165.94
3668612.38        1.64408
        481185.94    3668612.38        1.67579                    481205.94
3668612.38        1.70343
        481225.94    3668612.38        1.73096                    481245.94
3668612.38        1.76423
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*** MODELOPTs: RegDFAULT CONC ELEV RURAL SigA Data

*** THE PERIOD (26304 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): L0000001 , L0000002
, L0000003 , L0000004 , L0000005 ,
L0000006 , L0000007 , L0000008 , L0000009 , L0000010
, L0000011 , L0000012 , L0000013 ,
L0000014 , L0000015 , L0000016 , L0000017 , L0000018
, L0000019 , L0000020 , L0000021 ,
L0000022 , L0000023 , L0000024 , L0000025 , L0000026
, L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS
***

** CONC OF PM_10 IN MICROGRAMS/M**3
**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
481345.94	3668612.38	1.87956	481365.94	3668612.38	1.92615
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481425.94	3668612.38	1.99091	481445.94	3668612.38	1.99189
481465.94	3668612.38	2.00950	481925.94	3668612.38	0.69193
481945.94	3668612.38	0.70210	481965.94	3668612.38	0.70273
481985.94	3668612.38	0.70725	482005.94	3668612.38	0.71472
482085.94	3668612.38	0.78726	482105.94	3668612.38	0.81054
482125.94	3668612.38	0.86407	482145.94	3668612.38	0.90668
482165.94	3668612.38	0.93255	482185.94		

3668612.38 0.94900
482205.94 3668612.38 0.97846 482225.94
3668612.38 1.15999
482245.94 3668612.38 1.21400 482265.94
3668612.38 1.26651
482285.94 3668612.38 1.25670 482305.94
3668612.38 1.39786
482325.94 3668612.38 3.10628 482345.94
3668612.38 3.49894
482365.94 3668612.38 3.76698 482385.94
3668612.38 3.31655
482405.94 3668612.38 3.19486 482425.94
3668612.38 3.08640
482445.94 3668612.38 2.99821 482465.94
3668612.38 2.94368
482485.94 3668612.38 2.87631 482505.94
3668612.38 2.78688
482525.94 3668612.38 2.75260 482545.94
3668612.38 2.64440
482565.94 3668612.38 2.58025 482585.94
3668612.38 1.74261
482605.94 3668612.38 1.66931 482625.94
3668612.38 1.73539
482645.94 3668612.38 1.71544 482665.94
3668612.38 1.66309
482685.94 3668612.38 1.54522 482705.94
3668612.38 1.50021
482725.94 3668612.38 1.48671 482745.94
3668612.38 1.47556
482765.94 3668612.38 1.44318 482785.94
3668612.38 1.42156
482805.94 3668612.38 1.40853 482825.94
3668612.38 1.38041
482845.94 3668612.38 1.35381 482865.94
3668612.38 1.34287
482885.94 3668612.38 1.32862 482905.94
3668612.38 1.32211
482925.94 3668612.38 1.32387 482945.94
3668612.38 1.32625
481085.94 3668632.38 1.50939 481105.94
3668632.38 1.53572
481125.94 3668632.38 1.56263 481145.94
3668632.38 1.59423
481165.94 3668632.38 1.61903 481185.94
3668632.38 1.64490
481205.94 3668632.38 1.67232 481225.94
3668632.38 1.69497
481245.94 3668632.38 1.72022 481265.94
3668632.38 1.74521
481285.94 3668632.38 1.76486 481305.94

3668632.38   1.78320
         481325.94   3668632.38   1.79962   481345.94
3668632.38   1.81950
         481365.94   3668632.38   1.86203   481385.94
3668632.38   1.88472
         481405.94   3668632.38   1.88664   481425.94
3668632.38   1.89968
         481445.94   3668632.38   1.92281   481465.94
3668632.38   1.94809
         481485.94   3668632.38   1.97788   481925.94
3668632.38   0.65674
         481945.94   3668632.38   0.66372   481965.94
3668632.38   0.67301

 *** MODELOPTs: RegDFAULT CONC ELEV RURAL SigA Data

                               *** THE PERIOD (26304 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL   ***
                                   INCLUDING SOURCE(S):   L0000001   , L0000002   , L0000003   , L0000004   , L0000005   ,
                                    L0000006   , L0000007   , L0000008   , L0000009   , L0000010   , L0000011   , L0000012   , L0000013   ,
                                    L0000014   , L0000015   , L0000016   , L0000017   , L0000018   , L0000019   , L0000020   , L0000021   ,
                                    L0000022   , L0000023   , L0000024   , L0000025   , L0000026   , L0000027   , L0000028   , . . .   ,

                                                    *** DISCRETE CARTESIAN RECEPTOR POINTS ***

                                                 ** CONC OF PM_10   IN MICROGRAMS/M**3
                  **

       X-COORD (M)   Y-COORD (M)   CONC   X-COORD (M)   Y-COORD (M)   CONC
 - - -

482225.94 3668632.38 1.06528 482245.94
3668632.38 1.18459
482265.94 3668632.38 1.24139 482285.94
3668632.38 1.23713
482305.94 3668632.38 1.28110 482325.94
3668632.38 2.37809
482345.94 3668632.38 3.18505 482365.94
3668632.38 3.31637
482385.94 3668632.38 3.06911 482405.94
3668632.38 2.70888
482425.94 3668632.38 2.75377 482445.94
3668632.38 2.74490
482465.94 3668632.38 2.72603 482485.94
3668632.38 2.68668
482505.94 3668632.38 2.59440 482525.94
3668632.38 2.58618
482545.94 3668632.38 2.53306 482565.94
3668632.38 2.47210
482585.94 3668632.38 1.71174 482605.94
3668632.38 1.61617
482625.94 3668632.38 1.68521 482645.94
3668632.38 1.65113
482665.94 3668632.38 1.60393 482685.94
3668632.38 1.47413
482705.94 3668632.38 1.48614 482725.94
3668632.38 1.45855
482745.94 3668632.38 1.41931 482765.94
3668632.38 1.39268
482785.94 3668632.38 1.36800 482805.94
3668632.38 1.32138
481085.94 3668652.38 1.48544 481105.94
3668652.38 1.51658
481125.94 3668652.38 1.54036 481145.94
3668652.38 1.56778
481165.94 3668652.38 1.59136 481185.94
3668652.38 1.61322
481205.94 3668652.38 1.63678 481225.94
3668652.38 1.65606
481245.94 3668652.38 1.67672 481265.94
3668652.38 1.69844
481285.94 3668652.38 1.71517 481305.94
3668652.38 1.73286
481325.94 3668652.38 1.74686 481345.94
3668652.38 1.76536
481365.94 3668652.38 1.78444 481385.94
3668652.38 1.80172
481405.94 3668652.38 1.82165 481425.94
3668652.38 1.84293
481445.94 3668652.38 1.87034 481465.94
3668652.38 1.89725

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         481485.94    3668652.38        1.92552                      481925.94
3668652.38        0.62361
         481945.94    3668652.38        0.62885                      481965.94
3668652.38        0.63644
         481985.94    3668652.38        0.64432                      482005.94
3668652.38        0.64880
         482105.94    3668652.38        0.74366                      482125.94
3668652.38        0.76330
         482145.94    3668652.38        0.83226                      482165.94
3668652.38        0.85795
         482185.94    3668652.38        0.88350                      482205.94
3668652.38        0.89563
         482225.94    3668652.38        0.96664                      482245.94
3668652.38        1.16035
         482265.94    3668652.38        1.21292                      482285.94
3668652.38        1.25226
         482305.94    3668652.38        1.24414                      482325.94
3668652.38        1.76757
         482345.94    3668652.38        3.01965                      482365.94
3668652.38        3.07250
         482385.94    3668652.38        2.95204                      482405.94
3668652.38        2.51931
 *** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
Vista\Gran Vista\Gran Vista.i ***        04/27/22
 *** AERMET - VERSION  19191 ***   ***
                      ***        08:26:34

                                 PAGE 255
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL  SigA Data

                              *** THE PERIOD ( 26304 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL      ***
                                  INCLUDING SOURCE(S):     L0000001    , L0000002
, L0000003    , L0000004    , L0000005    ,
                  L0000006    , L0000007    , L0000008    , L0000009    , L0000010
, L0000011    , L0000012    , L0000013    ,
                  L0000014    , L0000015    , L0000016    , L0000017    , L0000018
, L0000019    , L0000020    , L0000021    ,
                  L0000022    , L0000023    , L0000024    , L0000025    , L0000026
, L0000027    , L0000028    ,  . . .      ,

                                      *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                     ** CONC OF PM_10    IN MICROGRAMS/M**3
                  **

       X-COORD (M)   Y-COORD (M)        CONC                      X-COORD (M)
Y-COORD (M)        CONC
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
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- -

482425.94	3668652.38	2.48991	482445.94	3668652.38	2.44005
482465.94	3668652.38	2.40809	482485.94	3668652.38	2.41371
482505.94	3668652.38	2.37400	482525.94	3668652.38	2.42081
482545.94	3668652.38	2.38812	482565.94	3668652.38	2.33535
482585.94	3668652.38	1.67053	482605.94	3668652.38	1.57491
482625.94	3668652.38	1.63672	482645.94	3668652.38	1.62983
482665.94	3668652.38	1.57607	482685.94	3668652.38	1.51153
482705.94	3668652.38	1.45110	482725.94	3668652.38	1.38882
482745.94	3668652.38	1.36336	482765.94	3668652.38	1.33221
482785.94	3668652.38	1.27497	481105.94	3668672.38	1.49451
481125.94	3668672.38	1.51521	481145.94	3668672.38	1.53621
481165.94	3668672.38	1.56075	481185.94	3668672.38	1.57913
481205.94	3668672.38	1.59826	481225.94	3668672.38	1.61645
481245.94	3668672.38	1.63258	481265.94	3668672.38	1.65066
481285.94	3668672.38	1.66625	481305.94	3668672.38	1.68136
481325.94	3668672.38	1.69620	481345.94	3668672.38	1.71210
481365.94	3668672.38	1.73031	481385.94	3668672.38	1.74888
481405.94	3668672.38	1.77327	481425.94	3668672.38	1.80106
481445.94	3668672.38	1.82397	481465.94	3668672.38	1.84793
481485.94	3668672.38	1.87464	481505.94	3668672.38	1.90756
481945.94	3668672.38	0.60017	481965.94	3668672.38	0.60781
481985.94	3668672.38	0.61296	482005.94	3668672.38	0.62201
482105.94	3668672.38	0.70734	482125.94	3668672.38	0.73138
482145.94	3668672.38	0.78889	482165.94	3668672.38	0.82893
482185.94	3668672.38	0.85684	482205.94		

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3668672.38        0.86778
         482225.94    3668672.38        0.89407                          482245.94
3668672.38        1.10903
         482265.94    3668672.38        1.19388                          482285.94
3668672.38        1.26579
         482305.94    3668672.38        1.23603                          482325.94
3668672.38        1.42757
         482345.94    3668672.38        2.79491                          482365.94
3668672.38        2.80806
         482385.94    3668672.38        2.99338                          482405.94
3668672.38        2.55751
         482425.94    3668672.38        2.48593                          482445.94
3668672.38        2.43123
         482465.94    3668672.38        2.40738                          482485.94
3668672.38        2.39605
         482505.94    3668672.38        2.35558                          482525.94
3668672.38        2.32685
         482545.94    3668672.38        2.27354                          482565.94
3668672.38        2.22239
         482585.94    3668672.38        1.61503                          482605.94
3668672.38        1.52812
         482625.94    3668672.38        1.59616                          482645.94
3668672.38        1.50871
         482665.94    3668672.38        1.46119                          482685.94
3668672.38        1.41865
         482705.94    3668672.38        1.38057                          482725.94
3668672.38        1.33352
         482745.94    3668672.38        1.32027                          481105.94
3668692.38        1.46519
         481125.94    3668692.38        1.48773                          481145.94
3668692.38        1.50602
 *** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
Vista\Gran Vista\Gran Vista.i ***        04/27/22
 *** AERMET - VERSION  19191 ***   ***
                      ***        08:26:34

                                   PAGE 256
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL  SigA Data

                               *** THE PERIOD ( 26304 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL       ***
                                   INCLUDING SOURCE(S):     L0000001    , L0000002
, L0000003    , L0000004    , L0000005    ,
                  L0000006    , L0000007    , L0000008    , L0000009    , L0000010
, L0000011    , L0000012    , L0000013    ,
                  L0000014    , L0000015    , L0000016    , L0000017    , L0000018
, L0000019    , L0000020    , L0000021    ,
                  L0000022    , L0000023    , L0000024    , L0000025    , L0000026
, L0000027    , L0000028    ,  . . .      ,
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*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
481165.94	3668692.38	1.52692	481185.94	3668692.38	1.54289
481205.94	3668692.38	1.55888	481225.94	3668692.38	1.57427
481245.94	3668692.38	1.58827	481265.94	3668692.38	1.60292
481285.94	3668692.38	1.61745	481365.94	3668692.38	1.68231
481385.94	3668692.38	1.71009	481405.94	3668692.38	1.73208
481425.94	3668692.38	1.75321	481445.94	3668692.38	1.77665
481465.94	3668692.38	1.80156	481485.94	3668692.38	1.82859
481505.94	3668692.38	1.85829	481945.94	3668692.38	0.57453
481965.94	3668692.38	0.58118	481985.94	3668692.38	0.59071
482005.94	3668692.38	0.59551	482105.94	3668692.38	0.68474
482125.94	3668692.38	0.69496	482145.94	3668692.38	0.74266
482165.94	3668692.38	0.80260	482185.94	3668692.38	0.82708
482205.94	3668692.38	0.84385	482225.94	3668692.38	0.85582
482245.94	3668692.38	1.01745	482265.94	3668692.38	1.19286
482285.94	3668692.38	1.27145	482305.94	3668692.38	1.25835
482325.94	3668692.38	1.28780	482345.94	3668692.38	2.40923
482365.94	3668692.38	2.58533	482385.94	3668692.38	2.80384
482405.94	3668692.38	2.40040	482425.94	3668692.38	2.35515
482445.94	3668692.38	2.31431	482465.94	3668692.38	2.28472
482485.94	3668692.38	2.25964	482505.94	3668692.38	2.23693

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         482525.94    3668692.38        2.18784                        482545.94
3668692.38        2.16314
         482565.94    3668692.38        2.06654                        482585.94
3668692.38        1.62494
         482605.94    3668692.38        1.54180                        482625.94
3668692.38        1.55631
         482645.94    3668692.38        1.45865                        482665.94
3668692.38        1.39573
         482685.94    3668692.38        1.35059                        482705.94
3668692.38        1.34260
         482725.94    3668692.38        1.31039                        481125.94
3668712.38        1.45849
         481145.94    3668712.38        1.47329                        481165.94
3668712.38        1.48958
         481185.94    3668712.38        1.50535                        481205.94
3668712.38        1.51866
         481225.94    3668712.38        1.53211                        481245.94
3668712.38        1.54489
         481365.94    3668712.38        1.64030                        481385.94
3668712.38        1.66697
         481405.94    3668712.38        1.68757                        481425.94
3668712.38        1.70875
         481445.94    3668712.38        1.73225                        481465.94
3668712.38        1.76229
         481485.94    3668712.38        1.78783                        481505.94
3668712.38        1.81711
         481525.94    3668712.38        1.89631                        481945.94
3668712.38        0.55656
         481965.94    3668712.38        0.56012                        481985.94
3668712.38        0.56838
         482005.94    3668712.38        0.57484                        482025.94
3668712.38        0.58347
         482125.94    3668712.38        0.67424                        482145.94
3668712.38        0.70239
         482165.94    3668712.38        0.77887                        482185.94
3668712.38        0.79931
         482205.94    3668712.38        0.82380                        482225.94
3668712.38        0.83298
         482245.94    3668712.38        0.92398                        482265.94
3668712.38        1.18791
 *** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
Vista\Gran Vista\Gran Vista.i ***        04/27/22
 *** AERMET - VERSION  19191 ***   ***
                      ***        08:26:34

                                 PAGE 257
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL  SigA Data

                                *** THE PERIOD ( 26304 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL    ***
```

INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 , L0000005 , L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 , L0000013 , L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 , L0000021 , L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
482285.94	3668712.38	1.24680	482305.94	3668712.38	1.31012
482325.94	3668712.38	1.28712	482345.94	3668712.38	1.92377
482365.94	3668712.38	2.33264	482385.94	3668712.38	2.58730
482405.94	3668712.38	2.24661	482425.94	3668712.38	2.19489
482445.94	3668712.38	2.15211	482465.94	3668712.38	2.12618
482485.94	3668712.38	2.10437	482505.94	3668712.38	2.09441
482525.94	3668712.38	2.07552	482545.94	3668712.38	2.04207
482565.94	3668712.38	1.87901	482585.94	3668712.38	1.67704
482605.94	3668712.38	1.59727	482625.94	3668712.38	1.52561
482645.94	3668712.38	1.45973	482665.94	3668712.38	1.38787
482685.94	3668712.38	1.35606	482705.94	3668712.38	1.32260
482725.94	3668712.38	1.29267	481125.94	3668732.38	1.42575
481145.94	3668732.38	1.43984	481165.94	3668732.38	1.45332
481185.94	3668732.38	1.46672	481205.94	3668732.38	1.47840
481385.94	3668732.38	1.62738	481405.94	3668732.38	1.64832
481425.94	3668732.38	1.67246	481445.94		

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3668732.38        1.70032
         481465.94    3668732.38        1.72462                    481485.94
3668732.38        1.75195
         481505.94    3668732.38        1.78954                    481965.94
3668732.38        0.54100
         481985.94    3668732.38        0.54899                    482005.94
3668732.38        0.55550
         482025.94    3668732.38        0.56271                    482125.94
3668732.38        0.65893
         482145.94    3668732.38        0.67487                    482165.94
3668732.38        0.74269
         482185.94    3668732.38        0.77909                    482205.94
3668732.38        0.80830
         482225.94    3668732.38        0.81480                    482245.94
3668732.38        0.84610
         482265.94    3668732.38        1.12817                    482285.94
3668732.38        1.24389
         482305.94    3668732.38        1.35140                    482325.94
3668732.38        1.30364
         482345.94    3668732.38        1.52714                    482365.94
3668732.38        2.20112
         482385.94    3668732.38        2.31903                    482405.94
3668732.38        2.00784
         482425.94    3668732.38        1.83978                    482445.94
3668732.38        1.84573
         482465.94    3668732.38        1.86377                    482485.94
3668732.38        1.84946
         482505.94    3668732.38        1.86311                    482525.94
3668732.38        1.86073
         482545.94    3668732.38        1.91667                    482565.94
3668732.38        1.77286
         482585.94    3668732.38        1.68231                    482605.94
3668732.38        1.60227
         482625.94    3668732.38        1.52009                    482645.94
3668732.38        1.43621
         482665.94    3668732.38        1.36506                    482685.94
3668732.38        1.32041
         482705.94    3668732.38        1.27296                    482725.94
3668732.38        1.24174
         482745.94    3668732.38        1.21892                    481145.94
3668752.38        1.40543
         481165.94    3668752.38        1.41701                    481405.94
3668752.38        1.61347
         481425.94    3668752.38        1.63737                    481445.94
3668752.38        1.66588
         481465.94    3668752.38        1.69018                    481485.94
3668752.38        1.71714
         481505.94    3668752.38        1.80722                    481965.94
3668752.38        0.52343
 *** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
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 *** MODELOPTs: RegDFAULT CONC ELEV RURAL SigA Data

                              *** THE PERIOD (26304 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL   ***
                                  INCLUDING SOURCE(S):   L0000001   , L0000002
, L0000003   , L0000004   , L0000005   ,
                   L0000006   , L0000007   , L0000008   , L0000009   , L0000010
, L0000011   , L0000012   , L0000013   ,
                   L0000014   , L0000015   , L0000016   , L0000017   , L0000018
, L0000019   , L0000020   , L0000021   ,
                   L0000022   , L0000023   , L0000024   , L0000025   , L0000026
, L0000027   , L0000028   , . . .   ,

                                                *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                          ** CONC OF PM_10   IN MICROGRAMS/M**3
                  **

       X-COORD (M)   Y-COORD (M)   CONC   X-COORD (M)
Y-COORD (M)   CONC
 - - -

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        482505.94    3668752.38        1.84101                    482525.94
3668752.38        1.84333
        482545.94    3668752.38        1.87558                    482565.94
3668752.38        1.82777
        482585.94    3668752.38        1.69543                    482605.94
3668752.38        1.56555
        482625.94    3668752.38        1.41910                    482645.94
3668752.38        1.34338
        482665.94    3668752.38        1.29243                    482685.94
3668752.38        1.24557
        482705.94    3668752.38        1.21872                    482725.94
3668752.38        1.18880
        482745.94    3668752.38        1.16157                    482765.94
3668752.38        1.14351
        481405.94    3668772.38        1.58298                    481425.94
3668772.38        1.60521
        481445.94    3668772.38        1.63148                    481465.94
3668772.38        1.65773
        481485.94    3668772.38        1.71069                    481965.94
3668772.38        0.50736
        481985.94    3668772.38        0.51346                    482005.94
3668772.38        0.52022
        482025.94    3668772.38        0.52616                    482125.94
3668772.38        0.64689
        482145.94    3668772.38        0.66259                    482165.94
3668772.38        0.67468
        482185.94    3668772.38        0.75805                    482205.94
3668772.38        0.79115
        482225.94    3668772.38        0.82768                    482245.94
3668772.38        0.83001
        482265.94    3668772.38        0.93899                    482285.94
3668772.38        1.25255
        482305.94    3668772.38        1.33815                    482325.94
3668772.38        1.46389
        482345.94    3668772.38        1.72921                    482365.94
3668772.38        1.96865
        482385.94    3668772.38        1.94577                    482405.94
3668772.38        1.99955
        482425.94    3668772.38        1.75417                    482445.94
3668772.38        1.76715
        482465.94    3668772.38        1.80534                    482485.94
3668772.38        1.78217
        482505.94    3668772.38        1.77227                    482525.94
3668772.38        1.77634
        482545.94    3668772.38        1.74132                    482565.94
3668772.38        1.68482
        482585.94    3668772.38        1.60363                    482605.94
3668772.38        1.48235
        482625.94    3668772.38        1.35020                    482645.94
3668772.38        1.24715
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3668792.38        0.97657
         482285.94    3668792.38        1.11114                    482305.94
3668792.38        1.25579
         482325.94    3668792.38        1.37174                    482345.94
3668792.38        1.54867
         482365.94    3668792.38        1.71882                    482385.94
3668792.38        1.82212
         482405.94    3668792.38        1.99809                    482425.94
3668792.38        1.57843
         482445.94    3668792.38        1.63063                    482465.94
3668792.38        1.69539
         482485.94    3668792.38        1.65817                    482505.94
3668792.38        1.65043
         482525.94    3668792.38        1.65724                    482545.94
3668792.38        1.66177
         482565.94    3668792.38        1.54537                    482585.94
3668792.38        1.44202
         482605.94    3668792.38        1.24537                    482625.94
3668792.38        1.16759
         482645.94    3668792.38        1.13900                    482665.94
3668792.38        1.11934
         482685.94    3668792.38        1.11290                    482705.94
3668792.38        1.09079
         482725.94    3668792.38        1.04608                    482745.94
3668792.38        1.05510
         482765.94    3668792.38        1.04067                    482785.94
3668792.38        1.02909
         482805.94    3668792.38        0.99433                    481445.94
3668812.38        1.65630
         481465.94    3668812.38        1.66324                    481985.94
3668812.38        0.48271
         482005.94    3668812.38        0.48947                    482025.94
3668812.38        0.49542
         482045.94    3668812.38        0.50192                    482145.94
3668812.38        0.63918
         482165.94    3668812.38        0.66526                    482185.94
3668812.38        0.69388
         482205.94    3668812.38        0.70819                    482225.94
3668812.38        0.77012
         482245.94    3668812.38        0.81206                    482265.94
3668812.38        0.88719
         482285.94    3668812.38        1.01017                    482305.94
3668812.38        1.14230
         482325.94    3668812.38        1.24571                    482345.94
3668812.38        1.31817
         482365.94    3668812.38        1.51038                    482385.94
3668812.38        1.72426
         482405.94    3668812.38        1.85209                    482425.94
3668812.38        1.51481
         482445.94    3668812.38        1.55928                    482465.94
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3668812.38   1.61871
         482485.94   3668812.38   1.58200   482505.94
3668812.38   1.49668
         482525.94   3668812.38   1.42398   482545.94
3668812.38   1.36733
         482565.94   3668812.38   1.30166   482585.94
3668812.38   1.24230
         482605.94   3668812.38   1.20494   482625.94
3668812.38   1.14989
         482645.94   3668812.38   1.12665   482665.94
3668812.38   1.11095
         482685.94   3668812.38   1.08422   482705.94
3668812.38   1.03739
         482725.94   3668812.38   0.98714   482745.94
3668812.38   0.99455
         482765.94   3668812.38   1.00714   482785.94
3668812.38   0.99325

 *** MODELOPTs: RegDFAULT CONC ELEV RURAL SigA Data

                                *** THE PERIOD (26304 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL   ***
                                    INCLUDING SOURCE(S):   L0000001   , L0000002   , L0000003   , L0000004   , L0000005   ,
                                    L0000006   , L0000007   , L0000008   , L0000009   , L0000010   , L0000011   , L0000012   , L0000013   ,
                                    L0000014   , L0000015   , L0000016   , L0000017   , L0000018   , L0000019   , L0000020   , L0000021   ,
                                    L0000022   , L0000023   , L0000024   , L0000025   , L0000026   , L0000027   , L0000028   , . . .   ,

                                                    *** DISCRETE CARTESIAN RECEPTOR POINTS ***

                                                    ** CONC OF PM_10   IN MICROGRAMS/M**3   **

       X-COORD (M)   Y-COORD (M)   CONC   X-COORD (M)   Y-COORD (M)   CONC
 - - -

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        482005.94    3668832.38        0.47646                    482025.94
3668832.38        0.48206
        482045.94    3668832.38        0.48791                    482145.94
3668832.38        0.61633
        482165.94    3668832.38        0.64142                    482185.94
3668832.38        0.66054
        482205.94    3668832.38        0.67274                    482225.94
3668832.38        0.73861
        482245.94    3668832.38        0.77254                    482265.94
3668832.38        0.80791
        482285.94    3668832.38        0.88074                    482305.94
3668832.38        0.90837
        482325.94    3668832.38        0.96550                    482345.94
3668832.38        0.99028
        482365.94    3668832.38        1.33663                    482385.94
3668832.38        1.62990
        482405.94    3668832.38        1.75543                    482425.94
3668832.38        1.46735
        482445.94    3668832.38        1.49545                    482465.94
3668832.38        1.55774
        482485.94    3668832.38        1.51734                    482505.94
3668832.38        1.48971
        482525.94    3668832.38        1.42942                    482545.94
3668832.38        1.34682
        482565.94    3668832.38        1.30998                    482585.94
3668832.38        1.27655
        482605.94    3668832.38        1.21298                    482625.94
3668832.38        1.15509
        482645.94    3668832.38        1.10664                    482665.94
3668832.38        1.06166
        482685.94    3668832.38        1.04688                    482705.94
3668832.38        1.03526
        482725.94    3668832.38        0.98807                    482745.94
3668832.38        0.94545
        482765.94    3668832.38        0.95240                    482785.94
3668832.38        0.95916
        482805.94    3668832.38        0.94499                    482825.94
3668832.38        0.93923
        482845.94    3668832.38        0.93304                    481985.94
3668852.38        0.45815
        482005.94    3668852.38        0.46512                    482025.94
3668852.38        0.47235
        482045.94    3668852.38        0.47666                    482145.94
3668852.38        0.59862
        482165.94    3668852.38        0.62638                    482185.94
3668852.38        0.64341
        482205.94    3668852.38        0.66145                    482225.94
3668852.38        0.69168
        482245.94    3668852.38        0.73443                    482265.94
3668852.38        0.77799
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         482285.94    3668852.38        0.83134                      482305.94
3668852.38        0.89496
         482325.94    3668852.38        0.95277                      482345.94
3668852.38        0.96965
         482365.94    3668852.38        1.28083                      482385.94
3668852.38        1.53918
         482405.94    3668852.38        1.63708                      482425.94
3668852.38        1.41710
         482445.94    3668852.38        1.43596                      482465.94
3668852.38        1.49133
         482485.94    3668852.38        1.45828                      482505.94
3668852.38        1.48190
         482525.94    3668852.38        1.44701                      482545.94
3668852.38        1.38328
         482565.94    3668852.38        1.30269                      482585.94
3668852.38        1.19786
         482605.94    3668852.38        1.16212                      482625.94
3668852.38        1.09123
         482645.94    3668852.38        1.04818                      482665.94
3668852.38        1.03239
         482685.94    3668852.38        1.02571                      482705.94
3668852.38        1.09227
         482725.94    3668852.38        1.09384                      482745.94
3668852.38        0.94591
         482765.94    3668852.38        0.90822                      482785.94
3668852.38        0.91054
 *** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
Vista\Gran Vista\Gran Vista.i ***        04/27/22
 *** AERMET - VERSION  19191 ***   ***
                      ***        08:26:34

                                  PAGE 261
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL  SigA Data

                               *** THE PERIOD ( 26304 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL       ***
                                   INCLUDING SOURCE(S):     L0000001    , L0000002
, L0000003    , L0000004    , L0000005    ,
                  L0000006    , L0000007    , L0000008    , L0000009    , L0000010
, L0000011    , L0000012    , L0000013    ,
                  L0000014    , L0000015    , L0000016    , L0000017    , L0000018
, L0000019    , L0000020    , L0000021    ,
                  L0000022    , L0000023    , L0000024    , L0000025    , L0000026
, L0000027    , L0000028    ,  . . .      ,

                                                *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                               ** CONC OF PM_10    IN MICROGRAMS/M**3
                  **
```

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
482805.94	3668852.38	0.91687	482825.94	3668852.38	0.91373
482845.94	3668852.38	0.90552	482865.94	3668852.38	0.89486
482885.94	3668852.38	0.88223	482905.94	3668852.38	0.87289
482925.94	3668852.38	0.86520	482945.94	3668852.38	0.86035
482965.94	3668852.38	0.85500	482985.94	3668852.38	0.84877
483005.94	3668852.38	0.83817	483025.94	3668852.38	0.83109
483045.94	3668852.38	0.82745	483065.94	3668852.38	0.82668
483085.94	3668852.38	0.82727	483105.94	3668852.38	0.82779
483125.94	3668852.38	0.82865	483145.94	3668852.38	0.82854
481985.94	3668872.38	0.44897	482005.94	3668872.38	0.45422
482025.94	3668872.38	0.46144	482045.94	3668872.38	0.46770
482065.94	3668872.38	0.47958	482125.94	3668872.38	0.55943
482145.94	3668872.38	0.57441	482165.94	3668872.38	0.59597
482185.94	3668872.38	0.62593	482205.94	3668872.38	0.65751
482225.94	3668872.38	0.68748	482245.94	3668872.38	0.72198
482265.94	3668872.38	0.77582	482285.94	3668872.38	0.86218
482305.94	3668872.38	0.94805	482325.94	3668872.38	0.99022
482345.94	3668872.38	0.96660	482365.94	3668872.38	1.20909
482385.94	3668872.38	1.45932	482405.94	3668872.38	1.56571
482425.94	3668872.38	1.36448	482445.94	3668872.38	1.38372
482465.94	3668872.38	1.43985	482485.94	3668872.38	1.39095
482505.94	3668872.38	1.41773	482525.94	3668872.38	1.35334
482545.94	3668872.38	1.28128	482565.94		

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3668872.38        1.22547
         482585.94    3668872.38        1.17137                          482605.94
3668872.38        1.13369
         482625.94    3668872.38        1.06806                          482645.94
3668872.38        1.06165
         482665.94    3668872.38        1.05782                          482685.94
3668872.38        1.05580
         482705.94    3668872.38        1.05404                          482725.94
3668872.38        1.05444
         482745.94    3668872.38        1.04830                          482765.94
3668872.38        0.91996
         482785.94    3668872.38        0.87763                          482805.94
3668872.38        0.88120
         482825.94    3668872.38        0.88430                          482845.94
3668872.38        0.87545
         482865.94    3668872.38        0.86813                          482885.94
3668872.38        0.86090
         482905.94    3668872.38        0.85284                          482925.94
3668872.38        0.84608
         482945.94    3668872.38        0.83983                          482965.94
3668872.38        0.83303
         482985.94    3668872.38        0.82556                          483005.94
3668872.38        0.81638
         483025.94    3668872.38        0.80910                          483045.94
3668872.38        0.80422
         483065.94    3668872.38        0.80092                          483085.94
3668872.38        0.80134
         483105.94    3668872.38        0.80282                          483125.94
3668872.38        0.80367
         483145.94    3668872.38        0.80518                          483165.94
3668872.38        0.80509
         483185.94    3668872.38        0.80481                          482005.94
3668892.38        0.44462
         482025.94    3668892.38        0.45208                          482045.94
3668892.38        0.45857
 *** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
Vista\Gran Vista\Gran Vista.i ***        04/27/22
 *** AERMET - VERSION  19191 ***   ***
                      ***        08:26:34

                                   PAGE 262
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL  SigA Data

                                *** THE PERIOD ( 26304 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL       ***
                                   INCLUDING SOURCE(S):     L0000001    , L0000002
, L0000003    , L0000004    , L0000005    ,
                  L0000006    , L0000007    , L0000008    , L0000009    , L0000010
, L0000011    , L0000012    , L0000013    ,
                  L0000014    , L0000015    , L0000016    , L0000017    , L0000018
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, L0000019   , L0000020   , L0000021   ,
                L0000022   , L0000023   , L0000024   , L0000025   , L0000026
, L0000027   , L0000028   , . . .   ,

                                        *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                      ** CONC OF PM_10   IN MICROGRAMS/M**3
                **

       X-COORD (M)   Y-COORD (M)   CONC   X-COORD (M)
Y-COORD (M)   CONC
 - - -

```
         482825.94    3668892.38        0.85361                    482845.94
3668892.38        0.83607
         482865.94    3668892.38        0.82971                    482885.94
3668892.38        0.82561
         482905.94    3668892.38        0.82121                    482925.94
3668892.38        0.81831
         482945.94    3668892.38        0.81777                    482965.94
3668892.38        0.80503
         482985.94    3668892.38        0.79870                    483005.94
3668892.38        0.78990
         483025.94    3668892.38        0.78219                    483045.94
3668892.38        0.77786
         483065.94    3668892.38        0.77670                    483085.94
3668892.38        0.77718
         483105.94    3668892.38        0.77649                    483125.94
3668892.38        0.77747
         483145.94    3668892.38        0.77891                    483165.94
3668892.38        0.78185
         483185.94    3668892.38        0.78381                    483205.94
3668892.38        0.78432
         483225.94    3668892.38        0.78456                    482005.94
3668912.38        0.43692
         482025.94    3668912.38        0.44487                    482045.94
3668912.38        0.45228
         482125.94    3668912.38        0.53085                    482145.94
3668912.38        0.53652
         482165.94    3668912.38        0.54545                    482185.94
3668912.38        0.60681
         482205.94    3668912.38        0.61741                    482225.94
3668912.38        0.63666
         482245.94    3668912.38        0.63112                    482265.94
3668912.38        0.65972
         482285.94    3668912.38        0.94721                    482305.94
3668912.38        0.97769
         482325.94    3668912.38        1.03679                    482345.94
3668912.38        0.99245
         482365.94    3668912.38        1.08106                    482385.94
3668912.38        1.31395
         482405.94    3668912.38        1.39246                    482425.94
3668912.38        1.25586
         482445.94    3668912.38        1.27374                    482465.94
3668912.38        1.24889
         482485.94    3668912.38        1.21845                    482505.94
3668912.38        1.21012
 *** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
Vista\Gran Vista\Gran Vista.i ***        04/27/22
 *** AERMET - VERSION  19191 ***   ***
                      ***       08:26:34
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*** MODELOPTs: RegDFAULT CONC ELEV RURAL SigA Data

*** THE PERIOD (26304 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 , L0000005 , L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 , L0000013 , L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 , L0000021 , L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
482525.94	3668912.38	1.16046	482545.94	3668912.38	1.15829
482565.94	3668912.38	1.16288	482585.94	3668912.38	1.15296
482605.94	3668912.38	1.14046	482625.94	3668912.38	0.99722
482645.94	3668912.38	0.99151	482665.94	3668912.38	0.98593
482685.94	3668912.38	0.98715	482705.94	3668912.38	0.98618
482725.94	3668912.38	0.98459	482745.94	3668912.38	0.98675
482765.94	3668912.38	0.97982	482785.94	3668912.38	0.88690
482805.94	3668912.38	0.85625	482825.94	3668912.38	0.84258
482845.94	3668912.38	0.84021	482865.94	3668912.38	0.83208
482885.94	3668912.38	0.81471	482905.94	3668912.38	0.79454
482925.94	3668912.38	0.79513	482945.94	3668912.38	0.79919
482965.94	3668912.38	0.79184	482985.94	3668912.38	0.78603
483005.94	3668912.38	0.78177	483025.94	3668912.38	0.77998
483045.94	3668912.38	0.78203	483065.94		

3668912.38 0.78499
483085.94 3668912.38 0.78326 483105.94
3668912.38 0.77356
483125.94 3668912.38 0.76327 483145.94
3668912.38 0.75567
483165.94 3668912.38 0.75960 483185.94
3668912.38 0.76149
483205.94 3668912.38 0.76242 483225.94
3668912.38 0.76255
482125.94 3668932.38 0.51664 482145.94
3668932.38 0.52209
482165.94 3668932.38 0.53068 482185.94
3668932.38 0.58932
482205.94 3668932.38 0.59806 482225.94
3668932.38 0.61571
482245.94 3668932.38 0.61040 482265.94
3668932.38 0.63972
482285.94 3668932.38 0.93571 482305.94
3668932.38 0.97247
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3668932.38 0.96380
482365.94 3668932.38 1.01885 482385.94
3668932.38 1.25121
482405.94 3668932.38 1.33344 482425.94
3668932.38 1.24551
482445.94 3668932.38 1.17883 482465.94
3668932.38 1.15652
482485.94 3668932.38 1.14351 482505.94
3668932.38 1.12719
482525.94 3668932.38 1.10136 482545.94
3668932.38 1.10887
482565.94 3668932.38 1.10989 482585.94
3668932.38 1.10943
482605.94 3668932.38 1.10168 482625.94
3668932.38 0.95912
482645.94 3668932.38 0.95708 482665.94
3668932.38 0.95428
482685.94 3668932.38 0.95283 482705.94
3668932.38 0.95287
482725.94 3668932.38 0.95328 482745.94
3668932.38 0.95063
482765.94 3668932.38 0.95172 482785.94
3668932.38 0.86129
482805.94 3668932.38 0.85063 482825.94
3668932.38 0.83004
482845.94 3668932.38 0.81761 482865.94
3668932.38 0.81964
482885.94 3668932.38 0.82351 482905.94
3668932.38 0.77925
482925.94 3668932.38 0.77987 482945.94

3668932.38   0.78315
         482965.94   3668932.38   0.77974   482985.94
3668932.38   0.78065

 *** MODELOPTs: RegDFAULT CONC ELEV RURAL SigA Data

                              *** THE PERIOD (26304 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL   ***
                              INCLUDING SOURCE(S):   L0000001   , L0000002 , L0000003   , L0000004   , L0000005   ,
                 L0000006   , L0000007   , L0000008   , L0000009   , L0000010 , L0000011   , L0000012   , L0000013   ,
                 L0000014   , L0000015   , L0000016   , L0000017   , L0000018 , L0000019   , L0000020   , L0000021   ,
                 L0000022   , L0000023   , L0000024   , L0000025   , L0000026 , L0000027   , L0000028   , . . .   ,

                                                 *** DISCRETE CARTESIAN RECEPTOR POINTS ***

                                 ** CONC OF PM_10   IN MICROGRAMS/M**3
                **

       X-COORD (M)   Y-COORD (M)   CONC   X-COORD (M)   Y-COORD (M)   CONC
 - - -

```
        482265.94    3668952.38        0.62411                    482285.94
3668952.38        0.90882
        482305.94    3668952.38        0.93524                    482325.94
3668952.38        0.97543
        482345.94    3668952.38        0.92535                    482365.94
3668952.38        0.97210
        482385.94    3668952.38        1.18889                    482405.94
3668952.38        1.26440
        482425.94    3668952.38        1.17949                    482445.94
3668952.38        1.12697
        482465.94    3668952.38        1.10352                    482485.94
3668952.38        1.09107
        482505.94    3668952.38        1.08989                    482525.94
3668952.38        1.05498
        482545.94    3668952.38        1.05581                    482565.94
3668952.38        1.06010
        482585.94    3668952.38        1.06149                    482605.94
3668952.38        1.05905
        482625.94    3668952.38        0.91984                    482645.94
3668952.38        0.91334
        482665.94    3668952.38        0.91457                    482685.94
3668952.38        0.91517
        482705.94    3668952.38        0.91822                    482725.94
3668952.38        0.92023
        482745.94    3668952.38        0.91886                    482765.94
3668952.38        0.89595
        482785.94    3668952.38        0.86315                    482805.94
3668952.38        0.84850
        482825.94    3668952.38        0.81099                    482845.94
3668952.38        0.79760
        482865.94    3668952.38        0.80778                    482885.94
3668952.38        0.80115
        482905.94    3668952.38        0.76247                    482925.94
3668952.38        0.77170
        482945.94    3668952.38        0.77126                    482965.94
3668952.38        0.76674
        482985.94    3668952.38        0.76239                    483005.94
3668952.38        0.76489
        483025.94    3668952.38        0.76156                    483045.94
3668952.38        0.75577
        483065.94    3668952.38        0.75073                    483085.94
3668952.38        0.74586
        483105.94    3668952.38        0.74234                    483125.94
3668952.38        0.72705
        483145.94    3668952.38        0.72686                    483165.94
3668952.38        0.72644
        483185.94    3668952.38        0.72152                    482125.94
3668972.38        0.48934
        482145.94    3668972.38        0.49477                    482165.94
3668972.38        0.50889
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```
         482185.94    3668972.38        0.55366                       482205.94
3668972.38        0.56368
         482225.94    3668972.38        0.57645                       482245.94
3668972.38        0.59990
         482265.94    3668972.38        0.61334                       482285.94
3668972.38        0.88042
         482305.94    3668972.38        0.90442                       482325.94
3668972.38        0.93746
         482345.94    3668972.38        0.89642                       482365.94
3668972.38        0.92048
         482385.94    3668972.38        1.13180                       482405.94
3668972.38        1.20586
 *** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
Vista\Gran Vista\Gran Vista.i ***        04/27/22
 *** AERMET - VERSION  19191 ***   ***
                       ***        08:26:34

                                  PAGE 265
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL  SigA Data

                               *** THE PERIOD ( 26304 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL       ***
                                   INCLUDING SOURCE(S):     L0000001    , L0000002
, L0000003    , L0000004    , L0000005    ,
                  L0000006    , L0000007    , L0000008    , L0000009    , L0000010
, L0000011    , L0000012    , L0000013    ,
                  L0000014    , L0000015    , L0000016    , L0000017    , L0000018
, L0000019    , L0000020    , L0000021    ,
                  L0000022    , L0000023    , L0000024    , L0000025    , L0000026
, L0000027    , L0000028    ,  . . .      ,

                                      *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                   ** CONC OF PM_10    IN MICROGRAMS/M**3
                  **

       X-COORD (M)   Y-COORD (M)        CONC                       X-COORD (M)
Y-COORD (M)        CONC
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
         482425.94    3668972.38        1.12260                       482445.94
3668972.38        1.07291
         482465.94    3668972.38        1.05176                       482485.94
3668972.38        1.04001
         482505.94    3668972.38        1.03269                       482525.94
3668972.38        1.00879
         482545.94    3668972.38        1.01269                       482565.94
3668972.38        1.01284
         482585.94    3668972.38        1.01559                       482605.94
```

3668972.38 1.01783
482625.94 3668972.38 0.87872 482645.94
3668972.38 0.87323
482665.94 3668972.38 0.87755 482685.94
3668972.38 0.88544
482705.94 3668972.38 0.88961 482725.94
3668972.38 0.89299
482745.94 3668972.38 0.89400 482765.94
3668972.38 0.86798
482785.94 3668972.38 0.85041 482805.94
3668972.38 0.84456
482825.94 3668972.38 0.77474 482845.94
3668972.38 0.78551
482865.94 3668972.38 0.79205 482885.94
3668972.38 0.78670
482905.94 3668972.38 0.75294 482925.94
3668972.38 0.76775
482945.94 3668972.38 0.75977 482965.94
3668972.38 0.75749
482985.94 3668972.38 0.74575 483005.94
3668972.38 0.75157
483025.94 3668972.38 0.74038 483045.94
3668972.38 0.73211
483065.94 3668972.38 0.72723 483085.94
3668972.38 0.72565
483105.94 3668972.38 0.72342 483125.94
3668972.38 0.71653
483145.94 3668972.38 0.71573 483165.94
3668972.38 0.71006
482125.94 3668992.38 0.47677 482145.94
3668992.38 0.49243
482165.94 3668992.38 0.50142 482185.94
3668992.38 0.53752
482205.94 3668992.38 0.54775 482225.94
3668992.38 0.55726
482245.94 3668992.38 0.58010 482265.94
3668992.38 0.60381
482285.94 3668992.38 0.85465 482305.94
3668992.38 0.86791
482325.94 3668992.38 0.90545 482345.94
3668992.38 0.86506
482365.94 3668992.38 0.90232 482385.94
3668992.38 1.07855
482405.94 3668992.38 1.14914 482425.94
3668992.38 1.06397
482445.94 3668992.38 1.02405 482465.94
3668992.38 1.00432
482485.94 3668992.38 0.99324 482505.94
3668992.38 0.96066
482525.94 3668992.38 0.94282 482545.94

3668992.38   0.97164
         482565.94   3668992.38   0.96911   482585.94
3668992.38   0.96972
         482605.94   3668992.38   0.97051   482625.94
3668992.38   0.83524
         482645.94   3668992.38   0.83456   482665.94
3668992.38   0.84388
         482685.94   3668992.38   0.85497   482705.94
3668992.38   0.86625
         482725.94   3668992.38   0.86755   482745.94
3668992.38   0.87474
         482765.94   3668992.38   0.84800   482785.94
3668992.38   0.84720
         482805.94   3668992.38   0.83564   482825.94
3668992.38   0.75726
         482845.94   3668992.38   0.77396   482865.94
3668992.38   0.77472
         482885.94   3668992.38   0.76865   482905.94
3668992.38   0.75223
         482925.94   3668992.38   0.76157   482945.94
3668992.38   0.75315

 *** MODELOPTs: RegDFAULT CONC ELEV RURAL SigA Data

                              *** THE PERIOD (26304 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL   ***
                                  INCLUDING SOURCE(S):   L0000001   , L0000002
, L0000003   , L0000004   , L0000005   ,
                  L0000006   , L0000007   , L0000008   , L0000009   , L0000010
, L0000011   , L0000012   , L0000013   ,
                  L0000014   , L0000015   , L0000016   , L0000017   , L0000018
, L0000019   , L0000020   , L0000021   ,
                  L0000022   , L0000023   , L0000024   , L0000025   , L0000026
, L0000027   , L0000028   , . . .   ,

                                     *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                  ** CONC OF PM_10   IN MICROGRAMS/M**3
                  **

       X-COORD (M)   Y-COORD (M)   CONC   X-COORD (M)
Y-COORD (M)   CONC
 - - -

```
        482965.94    3668992.38        0.74485                    482985.94
3668992.38        0.73417
        483005.94    3668992.38        0.74061                    483025.94
3668992.38        0.73064
        483045.94    3668992.38        0.72566                    483065.94
3668992.38        0.71730
        483085.94    3668992.38        0.71395                    483105.94
3668992.38        0.70852
        483125.94    3668992.38        0.70819                    483145.94
3668992.38        0.70159
        482125.94    3669012.38        0.46515                    482145.94
3669012.38        0.47972
        482165.94    3669012.38        0.49318                    482185.94
3669012.38        0.52206
        482205.94    3669012.38        0.53285                    482225.94
3669012.38        0.56326
        482245.94    3669012.38        0.56047                    482265.94
3669012.38        0.58641
        482285.94    3669012.38        0.82326                    482305.94
3669012.38        0.83800
        482325.94    3669012.38        0.87406                    482345.94
3669012.38        0.83222
        482365.94    3669012.38        0.87133                    482385.94
3669012.38        1.03363
        482405.94    3669012.38        1.08865                    482425.94
3669012.38        1.01876
        482445.94    3669012.38        0.98857                    482465.94
3669012.38        0.96565
        482485.94    3669012.38        0.87734                    482505.94
3669012.38        0.88351
        482525.94    3669012.38        0.90334                    482545.94
3669012.38        0.94210
        482565.94    3669012.38        0.93491                    482585.94
3669012.38        0.94252
        482605.94    3669012.38        0.94444                    482625.94
3669012.38        0.80862
        482645.94    3669012.38        0.82114                    482665.94
3669012.38        0.82315
        482685.94    3669012.38        0.83039                    482705.94
3669012.38        0.83604
        482725.94    3669012.38        0.84133                    482745.94
3669012.38        0.85416
        482765.94    3669012.38        0.83132                    482785.94
3669012.38        0.82944
        482805.94    3669012.38        0.82472                    482825.94
3669012.38        0.74791
        482845.94    3669012.38        0.76288                    482865.94
3669012.38        0.76501
        482885.94    3669012.38        0.75333                    482905.94
3669012.38        0.74283
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```
         482925.94    3669012.38        0.75149                      482945.94
3669012.38        0.74788
         482965.94    3669012.38        0.73083                      482985.94
3669012.38        0.72092
         483005.94    3669012.38        0.72786                      483025.94
3669012.38        0.72070
         483045.94    3669012.38        0.71707                      483065.94
3669012.38        0.70927
         483085.94    3669012.38        0.70343                      483105.94
3669012.38        0.70144
         483125.94    3669012.38        0.69349                      482125.94
3669032.38        0.45378
         482145.94    3669032.38        0.46827                      482165.94
3669032.38        0.48583
         482185.94    3669032.38        0.50770                      482205.94
3669032.38        0.51834
         482225.94    3669032.38        0.54388                      482245.94
3669032.38        0.54288
         482265.94    3669032.38        0.57139                      482285.94
3669032.38        0.79611
         482305.94    3669032.38        0.80868                      482325.94
3669032.38        0.84223
         482345.94    3669032.38        0.80168                      482365.94
3669032.38        0.83539
         482385.94    3669032.38        0.99743                      482405.94
3669032.38        1.05215
         482425.94    3669032.38        0.98138                      482445.94
3669032.38        0.95367
         482465.94    3669032.38        0.93333                      482485.94
3669032.38        0.85455
 *** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
Vista\Gran Vista\Gran Vista.i ***        04/27/22
 *** AERMET - VERSION  19191 ***   ***
                      ***        08:26:34

                                   PAGE 267
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL  SigA Data

                               *** THE PERIOD ( 26304 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL       ***
                                   INCLUDING SOURCE(S):     L0000001    , L0000002
, L0000003    , L0000004    , L0000005    ,
                  L0000006    , L0000007    , L0000008    , L0000009    , L0000010
, L0000011    , L0000012    , L0000013    ,
                  L0000014    , L0000015    , L0000016    , L0000017    , L0000018
, L0000019    , L0000020    , L0000021    ,
                  L0000022    , L0000023    , L0000024    , L0000025    , L0000026
, L0000027    , L0000028    ,  . . .      ,

                                              *** DISCRETE CARTESIAN RECEPTOR POINTS
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***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
482505.94	3669032.38	0.86203	482525.94	3669032.38	0.87813
482545.94	3669032.38	0.90072	482565.94	3669032.38	0.89610
482585.94	3669032.38	0.90525	482605.94	3669032.38	0.90546
482625.94	3669032.38	0.78778	482645.94	3669032.38	0.80252
482665.94	3669032.38	0.81781	482685.94	3669032.38	0.82224
482705.94	3669032.38	0.82259	482725.94	3669032.38	0.82477
482745.94	3669032.38	0.82546	482765.94	3669032.38	0.81448
482785.94	3669032.38	0.81087	482805.94	3669032.38	0.80782
482825.94	3669032.38	0.73721	482845.94	3669032.38	0.75462
482865.94	3669032.38	0.75256	482885.94	3669032.38	0.74320
482905.94	3669032.38	0.72894	482925.94	3669032.38	0.73901
482945.94	3669032.38	0.73572	482965.94	3669032.38	0.71674
482985.94	3669032.38	0.70946	483005.94	3669032.38	0.71628
483025.94	3669032.38	0.70657	483045.94	3669032.38	0.70394
483065.94	3669032.38	0.69896	483085.94	3669032.38	0.69414
483105.94	3669032.38	0.68459	482125.94	3669052.38	0.44256
482145.94	3669052.38	0.45569	482165.94	3669052.38	0.47689
482185.94	3669052.38	0.49375	482205.94	3669052.38	0.50418
482225.94	3669052.38	0.52791	482245.94	3669052.38	0.52727
482265.94	3669052.38	0.55599	482285.94	3669052.38	0.77335
482305.94	3669052.38	0.78540	482325.94		

3669052.38   0.81483
         482345.94   3669052.38   0.77989   482365.94
3669052.38   0.80748
         482385.94   3669052.38   0.95963   482405.94
3669052.38   1.01073
         482425.94   3669052.38   0.94747   482445.94
3669052.38   0.92070
         482465.94   3669052.38   0.90540   482485.94
3669052.38   0.86518
         482505.94   3669052.38   0.85948   482525.94
3669052.38   0.85944
         482545.94   3669052.38   0.86157   482565.94
3669052.38   0.85641
         482585.94   3669052.38   0.86518   482605.94
3669052.38   0.86539
         482625.94   3669052.38   0.76712   482645.94
3669052.38   0.78371
         482665.94   3669052.38   0.78759   482685.94
3669052.38   0.79189
         482705.94   3669052.38   0.79284   482725.94
3669052.38   0.79712
         482745.94   3669052.38   0.78647   482765.94
3669052.38   0.79682
         482785.94   3669052.38   0.79305   482805.94
3669052.38   0.79302
         482825.94   3669052.38   0.76033   482845.94
3669052.38   0.75190
         482865.94   3669052.38   0.74317   482885.94
3669052.38   0.73223
         482905.94   3669052.38   0.71510   482925.94
3669052.38   0.73001
         482945.94   3669052.38   0.72380   482965.94
3669052.38   0.71057
         482985.94   3669052.38   0.70395   483005.94
3669052.38   0.70542
         483025.94   3669052.38   0.70046   483045.94
3669052.38   0.68884
         483065.94   3669052.38   0.68210   483085.94
3669052.38   0.68027

 *** MODELOPTs: RegDFAULT CONC ELEV RURAL SigA Data

                               *** THE PERIOD (26304 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL   ***
                                   INCLUDING SOURCE(S):   L0000001   , L0000002

```
, L0000003    , L0000004    , L0000005    ,
                L0000006    , L0000007    , L0000008    , L0000009    , L0000010
, L0000011    , L0000012    , L0000013    ,
                L0000014    , L0000015    , L0000016    , L0000017    , L0000018
, L0000019    , L0000020    , L0000021    ,
                L0000022    , L0000023    , L0000024    , L0000025    , L0000026
, L0000027    , L0000028    ,  . . .      ,

                                          *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                        ** CONC OF PM_10    IN MICROGRAMS/M**3
                 **

       X-COORD (M)   Y-COORD (M)        CONC                        X-COORD (M)
Y-COORD (M)        CONC
 - - -
```

```
         482765.94    3669072.38        0.77988                    482785.94
3669072.38        0.76348
         482805.94    3669072.38        0.75879                    482825.94
3669072.38        0.75944
         482845.94    3669072.38        0.74428                    482865.94
3669072.38        0.73407
         482885.94    3669072.38        0.72811                    482905.94
3669072.38        0.72296
         482925.94    3669072.38        0.71816                    482945.94
3669072.38        0.71110
         482965.94    3669072.38        0.70442                    482985.94
3669072.38        0.69426
         483005.94    3669072.38        0.68657                    483025.94
3669072.38        0.68091
         483045.94    3669072.38        0.67504                    483065.94
3669072.38        0.67092
         482125.94    3669092.38        0.42150                    482145.94
3669092.38        0.42885
         482165.94    3669092.38        0.45807                    482185.94
3669092.38        0.46930
         482205.94    3669092.38        0.47517                    482225.94
3669092.38        0.48008
         482245.94    3669092.38        0.50246                    482265.94
3669092.38        0.56662
         482285.94    3669092.38        0.71975                    482305.94
3669092.38        0.74254
         482325.94    3669092.38        0.76052                    482345.94
3669092.38        0.72614
         482365.94    3669092.38        0.76045                    482385.94
3669092.38        0.89025
         482405.94    3669092.38        0.95089                    482425.94
3669092.38        0.87861
         482445.94    3669092.38        0.86677                    482465.94
3669092.38        0.85323
         482485.94    3669092.38        0.82512                    482505.94
3669092.38        0.78207
         482525.94    3669092.38        0.78410                    482545.94
3669092.38        0.78210
         482565.94    3669092.38        0.78044                    482585.94
3669092.38        0.77987
         482605.94    3669092.38        0.78959                    482625.94
3669092.38        0.71286
         482645.94    3669092.38        0.72209                    482665.94
3669092.38        0.74114
         482685.94    3669092.38        0.74449                    482705.94
3669092.38        0.74601
         482725.94    3669092.38        0.74370                    482745.94
3669092.38        0.75383
 *** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
Vista\Gran Vista\Gran Vista.i ***        04/27/22
```

                            *** THE PERIOD (26304 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL   ***
                            INCLUDING SOURCE(S):   L0000001   , L0000002
, L0000003   , L0000004   , L0000005   ,
                  L0000006   , L0000007   , L0000008   , L0000009   , L0000010
, L0000011   , L0000012   , L0000013   ,
                  L0000014   , L0000015   , L0000016   , L0000017   , L0000018
, L0000019   , L0000020   , L0000021   ,
                  L0000022   , L0000023   , L0000024   , L0000025   , L0000026
, L0000027   , L0000028   , . . .   ,

                                             *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                          ** CONC OF PM_10   IN MICROGRAMS/M**3
                  **

       X-COORD (M)   Y-COORD (M)   CONC   X-COORD (M)
Y-COORD (M)   CONC
 - - -

```
3669112.38        0.61526
         482305.94    3669112.38        0.65987                    482325.94
3669112.38        0.70670
         482345.94    3669112.38        0.73272                    482365.94
3669112.38        0.78607
         482385.94    3669112.38        0.85898                    482405.94
3669112.38        0.87796
         482425.94    3669112.38        0.83564                    482445.94
3669112.38        0.81818
         482465.94    3669112.38        0.80617                    482485.94
3669112.38        0.78918
         482505.94    3669112.38        0.77641                    482525.94
3669112.38        0.76961
         482545.94    3669112.38        0.76735                    482565.94
3669112.38        0.76649
         482585.94    3669112.38        0.76768                    482605.94
3669112.38        0.76733
         482625.94    3669112.38        0.75113                    482645.94
3669112.38        0.75464
         482665.94    3669112.38        0.75599                    482685.94
3669112.38        0.76296
         482705.94    3669112.38        0.76043                    482725.94
3669112.38        0.76224
         482745.94    3669112.38        0.75645                    482765.94
3669112.38        0.76268
         482785.94    3669112.38        0.73530                    482805.94
3669112.38        0.72009
         482105.94    3669132.38        0.39541                    482216.96
3667990.58      114.80735
         482229.50    3668011.75      124.81276                    482236.55
3668031.34      119.77299
         482242.04    3668047.80      112.69261                    482250.66
3668068.19      105.18266
         482258.50    3668087.00       95.77702                    482269.48
3668107.38       85.91499
         482274.96    3668126.19       67.69879                    482282.02
3668145.79       51.69672
         482285.15    3668166.17       39.34573                    482279.67
3668186.55       30.95188
         482184.29    3668008.02       62.72206                    482281.36
3668219.30       23.34263
         482169.53    3668350.14        4.52976                    482099.08
3668346.78        2.98824
         482075.60    3668387.88        1.80845                    482092.37
3668418.91        1.54614
         482069.73    3668475.10        1.17789                    481993.41
3668559.81        0.81967
         482077.28    3668908.69        0.46953                    481998.44
3668921.27        0.43454
         481850.00    3668378.65        1.80357                    481874.32
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*** THE PERIOD (26304 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): L0000001 , L0000002
, L0000003 , L0000004 , L0000005 ,
L0000006 , L0000007 , L0000008 , L0000009 , L0000010
, L0000011 , L0000012 , L0000013 ,
L0000014 , L0000015 , L0000016 , L0000017 , L0000018
, L0000019 , L0000020 , L0000021 ,
L0000022 , L0000023 , L0000024 , L0000025 , L0000026
, L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS
***

** CONC OF PM_10 IN MICROGRAMS/M**3
**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
482756.35	3667981.60	15.32224	482507.26	3668238.23	17.70505
482301.58	3668296.73	14.46011	482254.40	3668321.26	6.32811
482067.59	3668560.91	0.88288	482129.86	3668802.45	0.62659
482105.33	3669132.68	0.39500	483039.40	3669106.26	0.67172
483256.41	3668898.69	0.76751	483120.55	3668832.65	0.85233
482863.91	3668834.53	0.91512	482724.27	3668704.33	1.30801
482814.85	3668632.62	1.30482	482945.05	3668615.64	1.31207

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         482979.02    3668566.57        1.44408                        482916.75
3668496.75        1.79785
         482694.08    3668589.22        1.60857                        482711.06
3668513.74        1.98230
         482775.22    3668417.50        2.58154                        482886.56
3668459.01        2.10305
         482945.05    3668364.66        2.59352                        482860.14
3668294.84        3.96020
         481786.42    3668055.19        7.21922                        481722.26
3667900.46        7.35774
         481922.29    3667809.88       10.95478                        481984.56
3667962.73       15.77938
         481582.62    3668149.54        1.97708                        481676.97
3668398.63        4.22411
         481614.70    3668496.75        2.88684                        481473.17
3668604.32        2.04736
         481529.78    3668715.65        1.93752                        481454.30
3668845.85        1.69866
         481337.31    3668670.36        1.70968                        481137.28
3668776.03        1.35628
         481016.51    3668502.42        1.49702                        481208.99
3668317.49        2.02104
 *** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
Vista\Gran Vista\Gran Vista.i ***        04/27/22
 *** AERMET - VERSION  19191 ***   ***
                      ***        08:26:34

                                  PAGE 271
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL  SigA Data

                               *** THE   1ST HIGHEST  1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP:  ALL      ***
                                  INCLUDING SOURCE(S):     L0000001    , L0000002
, L0000003    , L0000004    , L0000005    ,
                  L0000006    , L0000007    , L0000008    , L0000009    , L0000010
, L0000011    , L0000012    , L0000013    ,
                  L0000014    , L0000015    , L0000016    , L0000017    , L0000018
, L0000019    , L0000020    , L0000021    ,
                  L0000022    , L0000023    , L0000024    , L0000025    , L0000026
, L0000027    , L0000028    ,  . . .      ,

                                                *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                               ** CONC OF PM_10    IN MICROGRAMS/M**3
                  **

      X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)              X-COORD (M)
Y-COORD (M)        CONC     (YYMMDDHH)
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
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- - - -
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3667912.38     5344.34323  (11011008)
        481765.94   3667912.38     5535.81811  (11011008)                481785.94
3667912.38     5696.74407  (11011008)
        481805.94   3667912.38     5858.92778  (11011008)                481825.94
3667912.38     6066.18027  (11011008)
        481845.94   3667912.38     6242.19292  (11011008)                481865.94
3667912.38     6375.43474  (11011008)
        481885.94   3667912.38     6354.41801  (11011008)                481905.94
3667912.38     6323.78197  (11011008)
        481925.94   3667912.38     6227.54477  (11011008)                481945.94
3667912.38     5989.59856  (11011008)
        482465.94   3667912.38     3754.46027  (10012708)                482485.94
3667912.38     3425.75958  (11121208)
        482505.94   3667912.38     4023.84733  (11122308)                482525.94
3667912.38     4705.85147  (11122308)
        482545.94   3667912.38     5326.13003  (11122308)                482565.94
3667912.38     4838.28382  (11122308)
        482585.94   3667912.38     4615.22862  (11122308)                482605.94
3667912.38     4512.70986  (11122308)
        482625.94   3667912.38     4248.53188  (11122308)                482645.94
3667912.38     4199.79755  (11122308)
        482665.94   3667912.38     4176.26959  (11122308)                481745.94
3667932.38     5518.16199  (12010608)
        481765.94   3667932.38     5807.09101  (12010608)                481785.94
3667932.38     5982.98939  (12010608)
        481805.94   3667932.38     6186.20483  (12010608)                481825.94
3667932.38     6382.24556  (12010608)
        481845.94   3667932.38     6552.08690  (12010608)                481865.94
3667932.38     6734.45526  (12010608)
        481885.94   3667932.38     6884.13402  (12010608)                481905.94
3667932.38     6814.56361  (12010608)
 *** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
Vista\Gran Vista\Gran Vista.i ***        04/27/22
 *** AERMET - VERSION  19191 ***   ***
                      ***        08:26:34

                                  PAGE 272
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL  SigA Data

                              *** THE   1ST HIGHEST  1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP:  ALL      ***
                                  INCLUDING SOURCE(S):     L0000001    , L0000002
, L0000003    , L0000004    , L0000005    ,
                L0000006    , L0000007    , L0000008    , L0000009    , L0000010
, L0000011    , L0000012    , L0000013    ,
                L0000014    , L0000015    , L0000016    , L0000017    , L0000018
, L0000019    , L0000020    , L0000021    ,
                L0000022    , L0000023    , L0000024    , L0000025    , L0000026
, L0000027    , L0000028    ,  . . .      ,
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*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
481925.94	3667932.38	6705.40984	(12010608)	481945.94	3667932.38	6659.89403	(12010608)
481965.94	3667932.38	6948.35908	(12010608)	482485.94	3667932.38	3445.78423	(11122308)
482505.94	3667932.38	4247.62839	(11122308)	482525.94	3667932.38	5318.59895	(11122308)
482545.94	3667932.38	5983.91242	(11122308)	482565.94	3667932.38	6301.85245	(11122308)
482585.94	3667932.38	5649.68816	(11122308)	482605.94	3667932.38	5466.25437	(11122308)
482625.94	3667932.38	5384.69200	(11122308)	482645.94	3667932.38	5200.08956	(11122308)
482665.94	3667932.38	5029.22580	(11122308)	482685.94	3667932.38	4853.51846	(11122308)
481745.94	3667952.38	5291.11069	(10010708)	481765.94	3667952.38	5843.89633	(12010608)
481785.94	3667952.38	6012.95959	(12010608)	481805.94	3667952.38	6181.49275	(12010608)
481825.94	3667952.38	6396.00523	(12010608)	481845.94	3667952.38	6601.33465	(12010608)
481865.94	3667952.38	6789.38513	(12010608)	481885.94	3667952.38	6953.99011	(12010608)
481905.94	3667952.38	6961.79782	(12010608)	481925.94	3667952.38	6864.98914	(12010608)
481945.94	3667952.38	6818.97587	(12010608)	481965.94	3667952.38	6995.77895	(12010608)
482485.94	3667952.38	3590.93788	(11121508)	482505.94	3667952.38	4215.45992	(11122308)
482525.94	3667952.38	5111.07076	(11122308)	482545.94	3667952.38	6165.16408	(11122308)
482565.94	3667952.38	6567.64123	(11122308)	482585.94	3667952.38	6423.70167	(11122308)
482605.94	3667952.38	5768.59936	(11122308)	482625.94	3667952.38	5758.13626	(11122308)
482645.94	3667952.38	5767.80976	(11122308)	482665.94	3667952.38	5583.73706	(11122308)
482685.94	3667952.38	5452.15832	(11122308)	482705.94	3667952.38	5362.49622	(11122308)
481765.94	3667972.38	5560.77905	(10010708)	481785.94	3667972.38	5775.37793	(10010708)

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        481805.94   3667972.38     5875.13427  (10010708)                481825.94
3667972.38     6137.09924  (10010708)
        481845.94   3667972.38     6304.10704  (10010708)                481865.94
3667972.38     6465.17935  (10010708)
        481885.94   3667972.38     6604.39538  (10010708)                481905.94
3667972.38     6754.26358  (10010708)
        481925.94   3667972.38     6730.42097  (10010708)                481945.94
3667972.38     6431.29492  (10010708)
        482505.94   3667972.38     4278.01930  (11121508)                482525.94
3667972.38     4777.89747  (11121508)
        482545.94   3667972.38     6076.49742  (11121508)                482565.94
3667972.38     6871.25780  (11121508)
        482585.94   3667972.38     7143.59167  (11121508)                482605.94
3667972.38     6328.62544  (11121508)
        482625.94   3667972.38     5881.91455  (11121508)                482645.94
3667972.38     5852.33610  (11121508)
        482665.94   3667972.38     5619.10750  (11121508)                482685.94
3667972.38     5478.13583  (11121508)
        482705.94   3667972.38     5275.81362  (11122308)                482725.94
3667972.38     5273.10563  (11121508)
        482745.94   3667972.38     6133.55428  (11122308)                481765.94
3667992.38     4788.02852  (10010708)
        481785.94   3667992.38     5321.01170  (10010708)                481805.94
3667992.38     5438.85036  (10010708)
        481825.94   3667992.38     5635.17415  (10010708)                481845.94
3667992.38     5787.83531  (10010708)
        481865.94   3667992.38     5921.20940  (10010708)                481885.94
3667992.38     6052.41208  (10010708)
        481905.94   3667992.38     6166.24191  (10010708)                482505.94
3667992.38     4154.42071  (11121508)
        482525.94   3667992.38     5608.18333  (11121508)                482545.94
3667992.38     5830.04904  (11121508)
        482565.94   3667992.38     6933.31867  (11121508)                482585.94
3667992.38     7143.57139  (11121508)
        482605.94   3667992.38     5813.98325  (11121508)                482625.94
3667992.38     5892.26932  (11121508)
        482645.94   3667992.38     5777.24009  (11121508)                482665.94
3667992.38     5667.36318  (11121508)
        482685.94   3667992.38     5457.72677  (11121508)                482705.94
3667992.38     5732.98964  (11121508)
 *** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
Vista\Gran Vista\Gran Vista.i ***        04/27/22
 *** AERMET - VERSION  19191 ***   ***
                      ***        08:26:34

                                  PAGE 273
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL  SigA Data

                               *** THE   1ST HIGHEST  1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP:  ALL      ***
```

INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 , L0000005 , L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 , L0000013 , L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 , L0000021 , L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
482725.94	3667992.38	6422.58397	(11121508)	481785.94	3668012.38	4697.53617	(10010708)
481805.94	3668012.38	4878.59867	(11122608)	481825.94	3668012.38	5037.22232	(11122608)
481845.94	3668012.38	5299.36830	(11122608)	481865.94	3668012.38	5489.10846	(11122608)
482185.94	3668012.38	6873.62437	(10122708)	482485.94	3668012.38	4251.06682	(11121508)
482505.94	3668012.38	4376.34453	(11121508)	482525.94	3668012.38	5258.22598	(11121508)
482545.94	3668012.38	6269.74860	(11121508)	482565.94	3668012.38	6477.40436	(11121508)
482585.94	3668012.38	5471.02826	(11121508)	482605.94	3668012.38	5549.12005	(11121508)
482625.94	3668012.38	5577.72617	(11121508)	482645.94	3668012.38	5428.76156	(11121508)
482665.94	3668012.38	5613.43332	(11121508)	482685.94	3668012.38	6264.02487	(11121508)
482705.94	3668012.38	6051.55954	(11121508)	482725.94	3668012.38	5831.70419	(11121508)
481785.94	3668032.38	4547.46466	(11122608)	481805.94	3668032.38	4976.71161	(11122608)
481825.94	3668032.38	5096.70944	(11122608)	482165.94	3668032.38	7022.60126	(10122708)
482185.94	3668032.38	6927.72774	(10122708)	482465.94	3668032.38	4875.57195	(11121508)
482485.94	3668032.38	4599.93232	(11121508)	482505.94	3668032.38	5062.38645	(11121508)
482525.94	3668032.38	5476.85983	(11121508)	482545.94	3668032.38	5899.46538	(11121508)
482565.94	3668032.38	5146.69228	(11121508)	482585.94			

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3668032.38     5202.62205  (11121508)
        482605.94   3668032.38     5150.54697  (11121508)                482625.94
3668032.38     5103.69599  (11121508)
        482645.94   3668032.38     5124.97891  (11121508)                482665.94
3668032.38     5905.17667  (11121508)
        482685.94   3668032.38     5625.28417  (11121508)                482705.94
3668032.38     5520.14039  (11121508)
        481785.94   3668052.38     4435.40356  (11122608)                482145.94
3668052.38     6951.75613  (10122708)
        482165.94   3668052.38     6866.58141  (10122708)                482185.94
3668052.38     6623.30707  (10122708)
        482445.94   3668052.38     5476.34959  (11121508)                482465.94
3668052.38     5190.40494  (11121508)
        482485.94   3668052.38     4783.43380  (11121508)                482505.94
3668052.38     4683.38040  (11121508)
        482525.94   3668052.38     4550.34435  (11121508)                482545.94
3668052.38     4685.00014  (11121508)
        482565.94   3668052.38     4634.94106  (11121508)                482585.94
3668052.38     4623.41912  (11121508)
        482605.94   3668052.38     4598.89233  (11121508)                482625.94
3668052.38     4506.05393  (11121508)
        482645.94   3668052.38     4467.33282  (11121508)                482665.94
3668052.38     4976.84836  (11121508)
        482685.94   3668052.38     4990.16909  (11121508)                482125.94
3668072.38     6981.44380  (10122708)
        482145.94   3668072.38     6806.56572  (10122708)                482165.94
3668072.38     6529.92279  (10122708)
        482185.94   3668072.38     6243.13584  (10122708)                482205.94
3668072.38     6162.98258  (10122708)
        482425.94   3668072.38     4310.27409  (11121508)                482445.94
3668072.38     4415.07001  (11121508)
        482465.94   3668072.38     4429.67321  (11121508)                482485.94
3668072.38     4371.02182  (11121508)
        482505.94   3668072.38     4307.51508  (11121508)                482525.94
3668072.38     4040.28557  (11121508)
        482545.94   3668072.38     4182.24581  (11121508)                482565.94
3668072.38     4074.03090  (11121508)
        482585.94   3668072.38     4028.83485  (11121508)                482605.94
3668072.38     4061.73572  (11121508)
        482625.94   3668072.38     3989.70235  (11121508)                482645.94
3668072.38     3814.67861  (11121508)
        482665.94   3668072.38     3699.62604  (11121508)                482105.94
3668092.38     6566.37983  (10122708)
        482125.94   3668092.38     6656.41896  (10122708)                482145.94
3668092.38     6473.10222  (10122708)
        482165.94   3668092.38     6334.86030  (10122708)                482185.94
3668092.38     5898.09689  (11123008)
        482205.94   3668092.38     5519.40431  (11123008)                482405.94
3668092.38     4403.72244  (10012908)
 *** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
```

 *** MODELOPTs: RegDFAULT CONC ELEV RURAL SigA Data

                             *** THE   1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL   ***
                                INCLUDING SOURCE(S):   L0000001   , L0000002
, L0000003   , L0000004   , L0000005   ,
                   L0000006   , L0000007   , L0000008   , L0000009   , L0000010
, L0000011   , L0000012   , L0000013   ,
                   L0000014   , L0000015   , L0000016   , L0000017   , L0000018
, L0000019   , L0000020   , L0000021   ,
                   L0000022   , L0000023   , L0000024   , L0000025   , L0000026
, L0000027   , L0000028   , . . .   ,

                                                *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                             ** CONC OF PM_10   IN MICROGRAMS/M**3
                  **

      X-COORD (M) Y-COORD (M)   CONC   (YYMMDDHH)   X-COORD (M)
Y-COORD (M)   CONC   (YYMMDDHH)
 -
- -
        482425.94   3668092.38   3595.57452 (10121017)   482445.94
3668092.38   3584.95901 (10121017)
        482465.94   3668092.38   3506.11354 (10121017)   482485.94
3668092.38   3467.57409 (11121508)
        482505.94   3668092.38   3486.34182 (11121508)   482525.94
3668092.38   3480.21629 (11121508)
        482545.94   3668092.38   3445.54003 (11121508)   482565.94
3668092.38   3415.68479 (11121508)
        482585.94   3668092.38   3370.09433 (11121508)   482605.94
3668092.38   3347.87645 (11121508)
        482625.94   3668092.38   3284.21817 (11121508)   482645.94
3668092.38   3136.68961 (11121508)
        482065.94   3668112.38   7161.60920 (10122708)   482085.94
3668112.38   6748.96446 (10122708)
        482105.94   3668112.38   6296.97920 (10122708)   482125.94
3668112.38   6057.41279 (10122708)
        482145.94   3668112.38   5977.48327 (11123008)   482165.94
3668112.38   5881.99680 (11123008)
        482185.94   3668112.38   5592.24942 (11123008)   482205.94
3668112.38   4601.54757 (11123008)
        482225.94   3668112.38   4256.68745 (12011608)   482385.94
3668112.38   5694.39548 (10012908)

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        482405.94   3668112.38     4582.39316  (10012908)                482425.94
3668112.38     3434.40536  (10012908)
        482445.94   3668112.38     3121.89055  (10121017)                482465.94
3668112.38     3134.06637  (10121017)
        482485.94   3668112.38     3096.69555  (10121017)                482505.94
3668112.38     3014.30204  (10121017)
        482525.94   3668112.38     2886.06091  (10121017)                482545.94
3668112.38     2739.23582  (10121017)
        482565.94   3668112.38     2638.48352  (11121508)                482585.94
3668112.38     2621.61065  (11121508)
        482605.94   3668112.38     2611.03773  (11121508)                482625.94
3668112.38     2550.43923  (11121508)
        482045.94   3668132.38     7043.95548  (10122708)                482065.94
3668132.38     6911.76288  (10122708)
        482085.94   3668132.38     6413.23501  (10122708)                482105.94
3668132.38     5964.32548  (10122708)
        482125.94   3668132.38     5865.23369  (11123008)                482145.94
3668132.38     5231.49097  (11123008)
        482165.94   3668132.38     4867.36565  (11123008)                482185.94
3668132.38     4414.05145  (11123008)
        482205.94   3668132.38     4009.73232  (12011608)                482225.94
3668132.38     3566.29275  (12011608)
        482405.94   3668132.38     4670.17600  (10012908)                482425.94
3668132.38     3595.54650  (10012908)
        482445.94   3668132.38     2656.85640  (10012908)                482465.94
3668132.38     2691.53567  (10121017)
        482485.94   3668132.38     2738.33747  (10121017)                482505.94
3668132.38     2734.85880  (10121017)
        482525.94   3668132.38     2691.20151  (10121017)                482545.94
3668132.38     2617.65873  (10121017)
        482565.94   3668132.38     2510.80085  (10121017)                482585.94
3668132.38     2377.03718  (10121017)
        482605.94   3668132.38     2237.70640  (10121017)                482025.94
3668152.38     6680.79695  (10122708)
        482045.94   3668152.38     6528.72943  (10122708)                482065.94
3668152.38     6253.99773  (10122708)
        482085.94   3668152.38     5899.55123  (11123008)                482105.94
3668152.38     5616.67061  (11123008)
        482125.94   3668152.38     5123.36392  (11123008)                482145.94
3668152.38     4502.12548  (11123008)
        482165.94   3668152.38     3760.19587  (11123008)                482185.94
3668152.38     3360.49467  (12011608)
        482205.94   3668152.38     3220.58187  (12011608)                482225.94
3668152.38     2998.25322  (12011608)
        482245.94   3668152.38     2860.44115  (12021008)                482425.94
3668152.38     3746.69644  (10012908)
        482445.94   3668152.38     2787.20249  (10012908)                482465.94
3668152.38     2269.58125  (12010417)
        482485.94   3668152.38     2327.05128  (10121017)                482505.94
3668152.38     2384.60052  (10121017)
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*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 , L0000005 ,
L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 , L0000013 ,
L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 , L0000021 ,
L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
482025.94	3668172.38	6091.70124	(10122708)	482045.94	3668172.38	5809.78777	(10122708)
482065.94	3668172.38	5506.46859	(11123008)	482085.94	3668172.38	5206.34290	(11123008)
482105.94	3668172.38	4757.44910	(11123008)	482125.94	3668172.38	4071.98842	(11123008)
482145.94	3668172.38	3507.26189	(11123008)	482165.94	3668172.38	3020.38349	(12011608)
482185.94	3668172.38	2664.61900	(12011608)	482205.94	3668172.38	2460.67789	(12010417)
482225.94	3668172.38	2662.47412	(12010417)	482245.94	3668172.38	2798.04379	(12010417)
482445.94	3668172.38	2948.61262	(10012908)	482465.94			

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3668172.38     2199.07026  (10012908)
        482485.94   3668172.38     2000.75237  (12010417)              482505.94
3668172.38     2011.37279  (10121017)
        482525.94   3668172.38     2081.87522  (10121017)              482545.94
3668172.38     2119.50513  (10121017)
        482565.94   3668172.38     2119.05248  (10121017)              481505.94
3668192.38     1039.31842  (10123108)
        481525.94   3668192.38      949.03914  (10123108)              481545.94
3668192.38      903.93948  (12121108)
        481565.94   3668192.38      964.21807  (12121108)              481585.94
3668192.38      989.48437  (12121108)
        481985.94   3668192.38     5746.02417  (10122708)              482005.94
3668192.38     5626.88399  (10122708)
        482025.94   3668192.38     5344.38423  (10122708)              482045.94
3668192.38     5115.88567  (11123008)
        482065.94   3668192.38     4790.74416  (11123008)              482085.94
3668192.38     4393.96935  (11123008)
        482105.94   3668192.38     3922.40689  (11123008)              482125.94
3668192.38     3377.85175  (11123008)
        482145.94   3668192.38     2825.89901  (12011608)              482165.94
3668192.38     2356.52706  (12011608)
        482185.94   3668192.38     2193.39463  (12010417)              482205.94
3668192.38     2259.07937  (12010417)
        482225.94   3668192.38     2395.78435  (12010417)              482245.94
3668192.38     2518.99638  (12010417)
        482265.94   3668192.38     2605.52634  (12010417)              482465.94
3668192.38     2323.20350  (10012908)
        482485.94   3668192.38     1881.02398  (12010417)              482505.94
3668192.38     1769.92058  (12010417)
        482525.94   3668192.38     1735.79884  (10121017)              482545.94
3668192.38     1805.97533  (10121017)
        481445.94   3668212.38     1713.12261  (10010108)              481465.94
3668212.38     1201.37320  (10123108)
        481485.94   3668212.38     1059.99203  (12121108)              481505.94
3668212.38     1081.46080  (12121108)
        481525.94   3668212.38     1015.21924  (12121108)              481545.94
3668212.38     1037.24608  (12121108)
        481565.94   3668212.38     1066.54396  (12121108)              481585.94
3668212.38     1070.14176  (12121108)
        481605.94   3668212.38     1161.79669  (12121108)              481965.94
3668212.38     5051.82947  (10122708)
        481985.94   3668212.38     5042.00922  (10122708)              482005.94
3668212.38     4943.09328  (11123008)
        482025.94   3668212.38     4703.12409  (11123008)              482045.94
3668212.38     4366.85976  (11123008)
        482065.94   3668212.38     3943.56886  (11123008)              482085.94
3668212.38     3456.17057  (11123008)
        482105.94   3668212.38     2905.36164  (11123008)              482125.94
3668212.38     2432.55433  (12011608)
        482145.94   3668212.38     2127.31313  (12011608)              482165.94
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3668212.38   1890.68798 (12010417)
        482185.94   3668212.38   2031.90289 (12010417)   482205.94
3668212.38   2124.55081 (12010417)
        482225.94   3668212.38   2193.57270 (12010417)   482245.94
3668212.38   2275.81308 (12010417)
        482265.94   3668212.38   2352.93758 (12010417)   482485.94
3668212.38   1844.02312 (10012908)
        482505.94   3668212.38   1664.49533 (12010417)   482525.94
3668212.38   1572.31329 (12010417)
        481405.94   3668232.38   2558.20057 (10010108)   481425.94
3668232.38   2317.49172 (10010108)
        481445.94   3668232.38   1799.63925 (12121108)   481465.94
3668232.38   1198.98917 (12121108)
        481485.94   3668232.38   1160.75823 (12121108)   481505.94
3668232.38   1205.93388 (12121108)
        481525.94   3668232.38   1179.69390 (12121108)   481545.94
3668232.38   1136.60087 (12121108)

 *** MODELOPTs: RegDFAULT CONC ELEV RURAL SigA Data

                              *** THE   1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL   ***
                                  INCLUDING SOURCE(S):   L0000001   , L0000002 , L0000003   , L0000004   , L0000005   ,
                 L0000006   , L0000007   , L0000008   , L0000009   , L0000010 , L0000011   , L0000012   , L0000013   ,
                 L0000014   , L0000015   , L0000016   , L0000017   , L0000018 , L0000019   , L0000020   , L0000021   ,
                 L0000022   , L0000023   , L0000024   , L0000025   , L0000026 , L0000027   , L0000028   , . . .   ,

                                                 *** DISCRETE CARTESIAN RECEPTOR POINTS ***

                                              ** CONC OF PM_10   IN MICROGRAMS/M**3
                **

      X-COORD (M) Y-COORD (M)   CONC   (YYMMDDHH)   X-COORD (M) Y-COORD (M)   CONC   (YYMMDDHH)
 - - -

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        481965.94   3668232.38     4263.72030  (11123008)               481985.94
3668232.38     4459.36556  (11123008)
        482005.94   3668232.38     4177.84908  (11123008)               482025.94
3668232.38     3846.32972  (11123008)
        482045.94   3668232.38     3505.15388  (11123008)               482065.94
3668232.38     3010.95921  (11123008)
        482085.94   3668232.38     2473.58394  (11123008)               482105.94
3668232.38     2112.75447  (12011608)
        482125.94   3668232.38     1826.86796  (12011608)               482145.94
3668232.38     1674.03173  (12010417)
        482165.94   3668232.38     1784.82914  (12010908)               482185.94
3668232.38     1879.78240  (12010417)
        482205.94   3668232.38     1964.05782  (12010417)               482225.94
3668232.38     2031.18835  (12010417)
        482245.94   3668232.38     2076.79457  (12010417)               482265.94
3668232.38     2119.60121  (12010417)
        482505.94   3668232.38     1556.68937  (12010417)               481365.94
3668252.38     2497.73554  (12121108)
        481385.94   3668252.38     2607.73703  (12121108)               481405.94
3668252.38     2421.85589  (12121108)
        481425.94   3668252.38     2260.05604  (12121108)               481445.94
3668252.38     1879.61628  (12121108)
        481465.94   3668252.38     1396.09813  (12121108)               481485.94
3668252.38     1192.58801  (12121108)
        481505.94   3668252.38     1235.85346  (12121108)               481525.94
3668252.38     1211.16071  (12121108)
        481545.94   3668252.38     1162.51449  (12121108)               481565.94
3668252.38     1104.48439  (12121108)
        481585.94   3668252.38     1182.24134  (12121108)               481605.94
3668252.38     1153.42272  (12121108)
        481925.94   3668252.38     4240.90830  (12011608)               481945.94
3668252.38     4068.36055  (12011608)
        481965.94   3668252.38     3757.47514  (11123008)               481985.94
3668252.38     3393.27158  (11123008)
        482005.94   3668252.38     2831.71910  (11123008)               482025.94
3668252.38     2322.00233  (12011608)
        482045.94   3668252.38     2036.31421  (11123008)               482065.94
3668252.38     1800.48309  (11123008)
        482085.94   3668252.38     1665.51709  (12011608)               482105.94
3668252.38     1592.06645  (12011608)
        482125.94   3668252.38     1483.67118  (12010417)               482145.94
3668252.38     1860.44163  (12010908)
        482165.94   3668252.38     2200.81864  (12010908)               482185.94
3668252.38     2196.59037  (12010908)
        482205.94   3668252.38     1750.80340  (12010417)               482225.94
3668252.38     1871.14858  (12010417)
        482245.94   3668252.38     1918.74895  (12010417)               481325.94
3668272.38     2423.27656  (12121108)
        481345.94   3668272.38     2621.78762  (12121108)               481365.94
3668272.38     2765.92052  (12121108)
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        481385.94   3668272.38     2732.52818  (12121108)                481405.94
3668272.38     2669.84799  (12121108)
        481425.94   3668272.38     2449.76387  (12121108)                481445.94
3668272.38     2238.85770  (12121108)
        481465.94   3668272.38     2218.85171  (12121108)                481485.94
3668272.38     1192.61758  (12121108)
        481505.94   3668272.38     1223.24412  (12121108)                481525.94
3668272.38     1243.07107  (12121108)
        481545.94   3668272.38     1195.27078  (12121108)                481565.94
3668272.38     1070.77858  (12121108)
        481585.94   3668272.38     1187.70903  (12121108)                481605.94
3668272.38     1157.33805  (12121108)
        481625.94   3668272.38     1205.95296  (12121108)                481905.94
3668272.38     3319.82947  (12011608)
        481925.94   3668272.38     3406.49609  (12011608)                481945.94
3668272.38     3299.71901  (12011608)
        481965.94   3668272.38     2912.02099  (12011608)                481985.94
3668272.38     2491.67899  (11123008)
        482005.94   3668272.38     2106.05807  (11123008)                482025.94
3668272.38     1877.30883  (10011208)
        482045.94   3668272.38     1771.54651  (10121508)                482065.94
3668272.38     2014.65356  (10121508)
        482085.94   3668272.38     2202.79326  (10121508)                482105.94
3668272.38     2309.17570  (10121508)
        482125.94   3668272.38     2110.30438  (10121508)                482145.94
3668272.38     1884.38548  (12010908)
 *** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
Vista\Gran Vista\Gran Vista.i ***        04/27/22
 *** AERMET - VERSION  19191 ***   ***
                       ***        08:26:34

                                  PAGE 277
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL  SigA Data

                               *** THE   1ST HIGHEST  1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP:  ALL      ***
                                  INCLUDING SOURCE(S):     L0000001    , L0000002
, L0000003    , L0000004    , L0000005    ,
                  L0000006    , L0000007    , L0000008    , L0000009    , L0000010
, L0000011    , L0000012    , L0000013    ,
                  L0000014    , L0000015    , L0000016    , L0000017    , L0000018
, L0000019    , L0000020    , L0000021    ,
                  L0000022    , L0000023    , L0000024    , L0000025    , L0000026
, L0000027    , L0000028    ,  . . .      ,

                                                *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                             ** CONC OF PM_10    IN MICROGRAMS/M**3
                  **
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X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
482165.94	3668272.38	2452.25871	(12010908)	482185.94	3668272.38	3252.94407	(12010908)
482205.94	3668272.38	1683.89854	(12010908)	482225.94	3668272.38	1701.20949	(12010417)
481265.94	3668292.38	1821.57527	(12121108)	481285.94	3668292.38	1979.24594	(12121108)
481305.94	3668292.38	2229.12985	(12121108)	481325.94	3668292.38	2618.92110	(12121108)
481345.94	3668292.38	2867.54859	(12121108)	481365.94	3668292.38	2868.03035	(12121108)
481385.94	3668292.38	2986.16188	(12121108)	481405.94	3668292.38	2896.11272	(12121108)
481425.94	3668292.38	2613.21218	(12121108)	481445.94	3668292.38	2455.55507	(12121108)
481465.94	3668292.38	2226.71438	(12121108)	481485.94	3668292.38	1232.35103	(12121108)
481505.94	3668292.38	1191.72078	(12121108)	481525.94	3668292.38	1274.40963	(12121108)
481545.94	3668292.38	1215.75468	(12121108)	481565.94	3668292.38	1057.03380	(12121108)
481585.94	3668292.38	1110.05613	(12121108)	481605.94	3668292.38	1195.22909	(12121108)
481625.94	3668292.38	1221.88664	(12011608)	481885.94	3668292.38	2593.86075	(12011608)
481905.94	3668292.38	2399.77090	(12011608)	481925.94	3668292.38	2716.51052	(12011608)
481945.94	3668292.38	2345.15504	(12011608)	481965.94	3668292.38	2464.03684	(12011608)
481985.94	3668292.38	1909.90555	(10011208)	482005.94	3668292.38	1698.07625	(10011208)
482025.94	3668292.38	1557.68090	(10121508)	482045.94	3668292.38	1757.66625	(10121508)
482065.94	3668292.38	1976.33259	(10121508)	482085.94	3668292.38	2139.17378	(10121508)
482105.94	3668292.38	2158.08243	(10121508)	482125.94	3668292.38	1990.75505	(10121508)
482145.94	3668292.38	1742.64364	(12010908)	482165.94	3668292.38	2341.77867	(12010908)
482185.94	3668292.38	3262.71501	(12010908)	482205.94	3668292.38	1873.87315	(12010908)
481225.94	3668312.38	1795.00972	(12121108)	481245.94	3668312.38	1906.01597	(12121108)
481265.94	3668312.38	2055.99246	(12121108)	481285.94	3668312.38	2221.14483	(12121108)
481305.94	3668312.38	2371.90844	(12121108)	481325.94			

3668312.38   2732.94590 (12121108)
        481345.94   3668312.38   2940.11941 (12121108)   481365.94
3668312.38   2956.88292 (12121108)
        481385.94   3668312.38   2939.61418 (12121108)   481405.94
3668312.38   2775.52556 (12121108)
        481425.94   3668312.38   2602.75453 (12121108)   481445.94
3668312.38   2316.70084 (12121108)
        481465.94   3668312.38   2057.81744 (12121108)   481485.94
3668312.38   1819.96102 (12121108)
        481505.94   3668312.38   1168.86641 (12121108)   481525.94
3668312.38   1261.16418 (12121108)
        481545.94   3668312.38   1241.50655 (12121108)   481565.94
3668312.38   1147.56666 (12121108)
        481585.94   3668312.38   1085.40518 (10122708)   481605.94
3668312.38   1436.09266 (12011608)
        481625.94   3668312.38   1711.53145 (12011608)   481885.94
3668312.38   1719.65939 (12011608)
        481905.94   3668312.38   1841.24934 (10011208)   481925.94
3668312.38   1956.46202 (10011208)
        481945.94   3668312.38   1875.12530 (10011208)   481965.94
3668312.38   2093.44121 (10011208)
        481985.94   3668312.38   1656.84046 (10011208)   482005.94
3668312.38   1481.31372 (10121508)
        482025.94   3668312.38   1704.84183 (10121508)   482045.94
3668312.38   1913.64350 (10121508)
        482065.94   3668312.38   2051.97751 (10121508)   482085.94
3668312.38   2108.28044 (10121508)
        482105.94   3668312.38   2076.42511 (10121508)   482125.94
3668312.38   1887.79059 (10121508)
        482145.94   3668312.38   1722.49216 (12010908)   482165.94
3668312.38   2713.92984 (12010908)
        482185.94   3668312.38   3625.85889 (12010908)   482285.94
3668312.38   2122.43020 (12010908)
        482305.94   3668312.38   1533.30888 (10012908)   482325.94
3668312.38   2289.02023 (10012908)

                              *** THE   1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL   ***
                                 INCLUDING SOURCE(S):   L0000001   , L0000002
, L0000003   , L0000004   , L0000005   ,
                 L0000006   , L0000007   , L0000008   , L0000009   , L0000010
, L0000011   , L0000012   , L0000013   ,
                 L0000014   , L0000015   , L0000016   , L0000017   , L0000018

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, L0000019    , L0000020    , L0000021    ,
                L0000022    , L0000023    , L0000024    , L0000025    , L0000026
, L0000027    , L0000028    ,  . . .      ,

                                          *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                       ** CONC OF PM_10    IN MICROGRAMS/M**3
                  **

      X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)              X-COORD (M)
Y-COORD (M)        CONC     (YYMMDDHH)
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        482345.94   3668312.38     3231.66276  (10012908)               482365.94
3668312.38     4208.16109  (10012908)
        482385.94   3668312.38     4810.97739  (10012908)               482405.94
3668312.38     4947.90321  (10012908)
        482425.94   3668312.38     4572.15419  (10012908)               482445.94
3668312.38     3897.90490  (10012908)
        482465.94   3668312.38     3095.00851  (10012908)               482485.94
3668312.38     2336.02774  (10012908)
        482505.94   3668312.38     1740.84031  (10012908)               482525.94
3668312.38     1290.62550  (10012908)
        482545.94   3668312.38     1063.10717  (12010417)               482565.94
3668312.38     1123.01931  (11122117)
        482585.94   3668312.38     1197.09630  (11112317)               482605.94
3668312.38     1213.66507  (10120317)
        482625.94   3668312.38     1575.67494  (12011108)               482645.94
3668312.38     1855.51362  (12011108)
        482665.94   3668312.38     1817.75275  (12011108)               482685.94
3668312.38     1496.98765  (12011108)
        482705.94   3668312.38      995.15290  (12011108)               482725.94
3668312.38      902.73431  (12011108)
        482745.94   3668312.38      779.18250  (12011108)               482765.94
3668312.38      692.80378  (12012017)
        482785.94   3668312.38      655.18814  (12010617)               482805.94
3668312.38      640.83005  (12010617)
        482825.94   3668312.38      582.97779  (12010617)               482845.94
3668312.38      584.63418  (11123009)
        482865.94   3668312.38      607.85278  (11123009)               481205.94
3668332.38     1873.81588  (12121108)
        481225.94   3668332.38     1965.27894  (12121108)               481245.94
3668332.38     2079.86757  (12121108)
        481265.94   3668332.38     2226.44575  (12121108)               481285.94
3668332.38     2362.57382  (12121108)
        481305.94   3668332.38     2549.09167  (12121108)               481325.94
3668332.38     2748.68044  (12121108)
        481345.94   3668332.38     2821.97268  (12121108)               481365.94
3668332.38     2850.80245  (12121108)
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        481385.94   3668332.38     2727.25895  (12121108)                481405.94
3668332.38     2652.98074  (12121108)
        481425.94   3668332.38     2537.37889  (12121108)                481445.94
3668332.38     2237.35957  (12121108)
        481465.94   3668332.38     2294.98459  (12121108)                481485.94
3668332.38     2139.80286  (12121108)
        481505.94   3668332.38     1273.91488  (12121108)                481525.94
3668332.38     1177.99448  (12121108)
        481545.94   3668332.38     1499.80289  (10122708)                481565.94
3668332.38     1793.25598  (10122708)
        481585.94   3668332.38     1743.91773  (12011608)                481605.94
3668332.38     2063.92996  (12011608)
        481625.94   3668332.38     2594.11864  (12011608)                481645.94
3668332.38     2776.46603  (12011608)
        481865.94   3668332.38     1314.84443  (10011208)                481885.94
3668332.38     1261.58022  (10011208)
        481905.94   3668332.38     1606.91812  (10011208)                481925.94
3668332.38     1442.09911  (10011208)
        481945.94   3668332.38     1344.08744  (10011208)                481965.94
3668332.38      944.45811  (10121717)
        481985.94   3668332.38     1034.84743  (12120308)                482005.94
3668332.38     1258.44766  (12120308)
        482025.94   3668332.38     1558.44898  (10121508)                482045.94
3668332.38     1879.95129  (10121508)
        482065.94   3668332.38     2080.66219  (10121508)                482085.94
3668332.38     2168.44976  (10121508)
        482105.94   3668332.38     2054.52902  (10121508)                482125.94
3668332.38     1827.84334  (10121508)
        482145.94   3668332.38     1739.08666  (12010908)                482165.94
3668332.38     2577.02597  (12010908)
        482245.94   3668332.38     1987.79085  (12010908)                482265.94
3668332.38     1742.60061  (12010908)
        482285.94   3668332.38     1704.99887  (12010908)                482305.94
3668332.38     1343.21640  (10012908)
        482325.94   3668332.38     2012.19992  (10012908)                482345.94
3668332.38     2841.68925  (10012908)
        482365.94   3668332.38     3798.44363  (10012908)                482385.94
3668332.38     4453.63796  (10012908)
        482405.94   3668332.38     4912.47177  (10012908)                482425.94
3668332.38     4629.96460  (10012908)
        482445.94   3668332.38     3951.19154  (10012908)                482465.94
3668332.38     3206.19846  (10012908)
        482485.94   3668332.38     2565.01619  (10012908)                482505.94
3668332.38     2035.16238  (10012908)
 *** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
Vista\Gran Vista\Gran Vista.i ***        04/27/22
 *** AERMET - VERSION  19191 ***   ***
                      ***       08:26:34
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*** MODELOPTs: RegDFAULT CONC ELEV RURAL SigA Data

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 , L0000005 ,
L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 , L0000013 ,
L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 , L0000021 ,
L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
482525.94	3668332.38	1515.57969	(10012908)	482545.94	3668332.38	1034.15683	(10012908)
482565.94	3668332.38	1279.41972	(11122117)	482585.94	3668332.38	1192.02403	(11112317)
482605.94	3668332.38	1306.41665	(10120317)	482625.94	3668332.38	1374.45503	(10120317)
482645.94	3668332.38	1376.76911	(10120317)	482665.94	3668332.38	1383.09634	(12011108)
482685.94	3668332.38	1237.84722	(12011108)	482705.94	3668332.38	988.32963	(12011108)
482725.94	3668332.38	831.44980	(12011108)	482745.94	3668332.38	723.95986	(12011108)
482765.94	3668332.38	644.41254	(12012017)	482785.94	3668332.38	604.24698	(12012017)
482805.94	3668332.38	548.41801	(12012017)	482825.94	3668332.38	512.38224	(12010617)
482845.94	3668332.38	516.56873	(11123009)	482865.94	3668332.38	545.49693	(11123009)
482885.94	3668332.38	571.33874	(11123009)	481185.94	3668352.38	1930.24977	(12121108)
481205.94	3668352.38	1990.81509	(12121108)	481225.94	3668352.38	2060.02624	(12121108)
481245.94	3668352.38	2180.76408	(12121108)	481265.94	3668352.38	2315.79354	(12121108)
481285.94	3668352.38	2414.71655	(12121108)	481305.94	3668352.38	2555.13880	(12121108)
481325.94	3668352.38	2662.66408	(12121108)	481345.94			

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3668352.38     2812.80001  (12121108)
        481365.94   3668352.38     2690.58466  (12121108)                481385.94
3668352.38     2435.88374  (12121108)
        481405.94   3668352.38     2401.96729  (12121108)                481425.94
3668352.38     2346.88380  (12121108)
        481445.94   3668352.38     2178.60281  (12121108)                481465.94
3668352.38     2200.53432  (10122708)
        481485.94   3668352.38     2341.72136  (10122708)                481505.94
3668352.38     2006.62338  (10122708)
        481525.94   3668352.38     2050.39392  (10122708)                481545.94
3668352.38     2376.69080  (10122708)
        481565.94   3668352.38     2367.97129  (12011608)                481585.94
3668352.38     2469.69849  (12011608)
        481605.94   3668352.38     2825.73856  (12011608)                481625.94
3668352.38     3486.66440  (12011608)
        481645.94   3668352.38     3704.84742  (12011608)                481865.94
3668352.38      960.40701  (10011208)
        481885.94   3668352.38     1199.66146  (10011208)                481905.94
3668352.38     1121.06154  (10011208)
        481925.94   3668352.38     1137.84206  (10011208)                481945.94
3668352.38      761.78237  (11020808)
        481965.94   3668352.38      692.15784  (12120308)                481985.94
3668352.38      785.74457  (12120308)
        482005.94   3668352.38      881.69951  (12120308)                482025.94
3668352.38      923.75079  (12120308)
        482045.94   3668352.38      847.61106  (12120308)                482065.94
3668352.38      858.24532  (12120308)
        482085.94   3668352.38     1041.66084  (10121508)                482245.94
3668352.38      743.14881  (10122008)
        482265.94   3668352.38      816.47586  (10122008)                482285.94
3668352.38     1269.10609  (12010908)
        482305.94   3668352.38     1277.11303  (10012908)                482325.94
3668352.38     1773.97187  (10012908)
        482345.94   3668352.38     2498.30011  (10012908)                482365.94
3668352.38     3395.92649  (10012908)
        482385.94   3668352.38     4135.08576  (10012908)                482405.94
3668352.38     4546.96067  (10012908)
        482425.94   3668352.38     4504.50712  (10012908)                482445.94
3668352.38     4097.15523  (10012908)
        482465.94   3668352.38     3380.10102  (10012908)                482485.94
3668352.38     2630.51660  (10012908)
        482505.94   3668352.38     2023.55591  (10012908)                482525.94
3668352.38     1532.54742  (10012908)
        482545.94   3668352.38     1129.55628  (10012908)                482565.94
3668352.38     1419.87279  (11122117)
        482585.94   3668352.38     1267.69535  (11112317)                482605.94
3668352.38     1248.39183  (11112317)
        482625.94   3668352.38     1264.92857  (10120317)                482645.94
3668352.38     1311.60471  (10120317)
        482665.94   3668352.38     1231.53664  (10120317)                482685.94
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                                *** THE   1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL   ***
                                   INCLUDING SOURCE(S):   L0000001   , L0000002
, L0000003   , L0000004   , L0000005   ,
                  L0000006   , L0000007   , L0000008   , L0000009   , L0000010
, L0000011   , L0000012   , L0000013   ,
                  L0000014   , L0000015   , L0000016   , L0000017   , L0000018
, L0000019   , L0000020   , L0000021   ,
                  L0000022   , L0000023   , L0000024   , L0000025   , L0000026
, L0000027   , L0000028   , . . .   ,

                                                *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                             ** CONC OF PM_10   IN MICROGRAMS/M**3
                  **

      X-COORD (M) Y-COORD (M)   CONC   (YYMMDDHH)   X-COORD (M)
Y-COORD (M)   CONC   (YYMMDDHH)
 -
- -
        482745.94   3668352.38   642.09063 (12011108)   482765.94
3668352.38   619.81903 (12012017)
        482785.94   3668352.38   598.50797 (12012017)   482805.94
3668352.38   570.70100 (12012017)
        482825.94   3668352.38   530.64703 (12012017)   482845.94
3668352.38   472.42641 (12012017)
        482865.94   3668352.38   476.75869 (11123009)   482885.94
3668352.38   507.17346 (11123009)
        482905.94   3668352.38   534.39868 (11123009)   482925.94
3668352.38   558.83002 (11123009)
        481165.94   3668372.38   1945.29515 (12121108)   481185.94
3668372.38   1993.62099 (12121108)
        481205.94   3668372.38   2039.36090 (12121108)   481225.94
3668372.38   2079.99493 (12121108)
        481245.94   3668372.38   2147.63844 (12121108)   481265.94
3668372.38   2249.51708 (12121108)
        481285.94   3668372.38   2349.27495 (12121108)   481305.94
3668372.38   2581.84438 (12121108)

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        481325.94   3668372.38     2536.49121  (12121108)              481345.94
3668372.38     2606.87389  (12121108)
        481365.94   3668372.38     2496.13040  (12121108)              481385.94
3668372.38     2124.09555  (12121108)
        481405.94   3668372.38     2093.28296  (12121108)              481425.94
3668372.38     2362.45581  (10122708)
        481445.94   3668372.38     2672.38429  (10122708)              481465.94
3668372.38     2854.35103  (10122708)
        481485.94   3668372.38     2960.95894  (10122708)              481505.94
3668372.38     3032.74770  (10122708)
        481525.94   3668372.38     2714.23692  (10122708)              481545.94
3668372.38     3314.09857  (10122708)
        481565.94   3668372.38     3343.82064  (12011608)              481585.94
3668372.38     3307.68786  (12011608)
        481605.94   3668372.38     4192.71579  (12011608)              481625.94
3668372.38     4298.31394  (12011608)
        481645.94   3668372.38     4326.63464  (12011608)              481665.94
3668372.38     4490.51760  (12011608)
        481865.94   3668372.38      949.86264  (10011208)              481885.94
3668372.38      978.05936  (10011208)
        481905.94   3668372.38      852.21658  (10011208)              481925.94
3668372.38      810.78540  (10121717)
        481945.94   3668372.38      637.75871  (11020808)              481965.94
3668372.38      625.47927  (12120308)
        481985.94   3668372.38      686.38010  (12120308)              482005.94
3668372.38      725.31057  (12120308)
        482025.94   3668372.38      742.91092  (12120308)              482045.94
3668372.38      737.96884  (12120308)
        482065.94   3668372.38      683.90951  (12120308)              482225.94
3668372.38      740.17056  (10112508)
        482245.94   3668372.38      832.38939  (10112508)              482265.94
3668372.38      787.34629  (10122008)
        482285.94   3668372.38     1291.89856  (12010908)              482305.94
3668372.38     1201.61996  (12010417)
        482325.94   3668372.38     1572.79773  (10012908)              482345.94
3668372.38     2202.58129  (10012908)
        482365.94   3668372.38     2956.65695  (10012908)              482385.94
3668372.38     3748.29684  (10012908)
        482405.94   3668372.38     4452.41345  (10012908)              482425.94
3668372.38     4574.23546  (10012908)
        482445.94   3668372.38     4161.22745  (10012908)              482465.94
3668372.38     3466.04838  (10012908)
        482485.94   3668372.38     2886.47103  (10012908)              482505.94
3668372.38     2288.81557  (10012908)
        482525.94   3668372.38     1795.75801  (10012908)              482545.94
3668372.38     1286.19059  (10012908)
        482565.94   3668372.38     1458.41349  (11122117)              482585.94
3668372.38     1340.02237  (11122117)
        482605.94   3668372.38     1328.66012  (11112317)              482625.94
3668372.38     1176.01274  (11112317)
```

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): L0000001 , L0000002
, L0000003 , L0000004 , L0000005 ,
L0000006 , L0000007 , L0000008 , L0000009 , L0000010
, L0000011 , L0000012 , L0000013 ,
L0000014 , L0000015 , L0000016 , L0000017 , L0000018
, L0000019 , L0000020 , L0000021 ,
L0000022 , L0000023 , L0000024 , L0000025 , L0000026
, L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS
***

** CONC OF PM_10 IN MICROGRAMS/M**3
**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
482885.94	3668372.38	438.87099	(11123009)	482905.94	3668372.38	469.98837	(11123009)
482925.94	3668372.38	498.50408	(11123009)	481145.94	3668392.38	1926.39019	(12121108)
481165.94	3668392.38	1955.24755	(12121108)	481185.94	3668392.38	1978.31394	(12121108)
481205.94	3668392.38	2035.89282	(12121108)	481225.94	3668392.38	2051.60807	(12121108)
481245.94	3668392.38	2104.53482	(12121108)	481265.94			

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3668392.38     2270.27968  (12121108)
        481285.94   3668392.38     2364.12883  (12121108)                481305.94
3668392.38     2397.99354  (12121108)
        481325.94   3668392.38     2371.57104  (12121108)                481345.94
3668392.38     2178.04502  (12121108)
        481365.94   3668392.38     1857.71828  (12121108)                481385.94
3668392.38     2142.38948  (10122708)
        481405.94   3668392.38     2573.57648  (10122708)                481425.94
3668392.38     2904.75384  (10122708)
        481445.94   3668392.38     3137.75518  (10122708)                481465.94
3668392.38     3218.97599  (10122708)
        481485.94   3668392.38     3313.78950  (10122708)                481505.94
3668392.38     3772.59503  (10122708)
        481525.94   3668392.38     3923.31316  (12011608)                481545.94
3668392.38     3956.27931  (10122708)
        481565.94   3668392.38     4094.41719  (12011608)                481585.94
3668392.38     4235.06109  (12011608)
        481605.94   3668392.38     4527.97256  (12011608)                481625.94
3668392.38     3931.15375  (12011608)
        481645.94   3668392.38     4455.73051  (12011608)                481665.94
3668392.38     4136.35905  (12011608)
        481865.94   3668392.38      826.56434  (10011208)                481885.94
3668392.38      773.68113  (10121717)
        481905.94   3668392.38      743.92647  (10121717)                481925.94
3668392.38      666.94976  (10121717)
        481945.94   3668392.38      669.32551  (12120308)                481965.94
3668392.38      693.53711  (12120308)
        481985.94   3668392.38      732.36549  (12120308)                482005.94
3668392.38      751.54809  (12120308)
        482025.94   3668392.38      717.69879  (12120308)                482045.94
3668392.38      699.50139  (12120308)
        482065.94   3668392.38      653.77122  (10121508)                482205.94
3668392.38      630.80027  (10112508)
        482225.94   3668392.38      784.77267  (10112508)                482245.94
3668392.38      888.00677  (10112508)
        482265.94   3668392.38      766.71994  (10122008)                482285.94
3668392.38     1318.20558  (12010908)
        482305.94   3668392.38     1131.21269  (12010417)                482325.94
3668392.38     1401.67801  (10012908)
        482345.94   3668392.38     1958.13469  (10012908)                482365.94
3668392.38     2633.10086  (10012908)
        482385.94   3668392.38     3917.21047  (10012908)                482405.94
3668392.38     4493.31945  (10012908)
        482425.94   3668392.38     4589.66105  (10012908)                482445.94
3668392.38     4345.30550  (10012908)
        482465.94   3668392.38     4012.41463  (10012908)                482485.94
3668392.38     3752.45005  (10012908)
        482505.94   3668392.38     3649.17617  (10012908)                482525.94
3668392.38     2416.97718  (10012908)
        482545.94   3668392.38     1540.89882  (10012908)                482565.94
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3668392.38     1486.66501  (11122117)
        482585.94   3668392.38     1416.69311  (11122117)                482605.94
3668392.38     1372.96835  (11112317)
        482625.94   3668392.38     1249.55517  (11112317)                482645.94
3668392.38     1065.67960  (12011617)
        482665.94   3668392.38     1052.50104  (10120317)                482685.94
3668392.38      911.51302  (10120317)
        482705.94   3668392.38      768.23267  (10120317)                482725.94
3668392.38      685.08006  (11121917)
        482745.94   3668392.38      637.34637  (11121917)                482765.94
3668392.38      571.58663  (11121917)
        482785.94   3668392.38      490.15348  (11121917)                482805.94
3668392.38      442.06773  (10012208)
        482825.94   3668392.38      408.20099  (10012208)                482845.94
3668392.38      395.62639  (10012509)
        482865.94   3668392.38      388.55086  (10012509)                482885.94
3668392.38      377.44520  (10012509)
        482905.94   3668392.38      403.00583  (11123009)                482925.94
3668392.38      434.47906  (11123009)
        481125.94   3668412.38     1879.80085  (12121108)                481145.94
3668412.38     1890.71898  (12121108)
 *** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
Vista\Gran Vista\Gran Vista.i ***        04/27/22
 *** AERMET - VERSION  19191 ***   ***
                       ***        08:26:34

                                   PAGE 282
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL  SigA Data

                                *** THE   1ST HIGHEST  1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP:  ALL      ***
                                   INCLUDING SOURCE(S):     L0000001    , L0000002
, L0000003    , L0000004    , L0000005    ,
                  L0000006    , L0000007    , L0000008    , L0000009    , L0000010
, L0000011    , L0000012    , L0000013    ,
                  L0000014    , L0000015    , L0000016    , L0000017    , L0000018
, L0000019    , L0000020    , L0000021    ,
                  L0000022    , L0000023    , L0000024    , L0000025    , L0000026
, L0000027    , L0000028    ,  . . .      ,

                                                *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                          ** CONC OF PM_10    IN MICROGRAMS/M**3
                  **

      X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)              X-COORD (M)
Y-COORD (M)        CONC     (YYMMDDHH)
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - -
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        481165.94   3668412.38     1893.54312  (12121108)                481185.94
3668412.38     1925.33882  (12121108)
        481205.94   3668412.38     1976.25545  (12121108)                481225.94
3668412.38     1973.30287  (12121108)
        481245.94   3668412.38     2161.83026  (12121108)                481265.94
3668412.38     2179.27702  (12121108)
        481285.94   3668412.38     2203.53812  (12121108)                481305.94
3668412.38     2140.44054  (12121108)
        481325.94   3668412.38     2041.21269  (10122708)                481345.94
3668412.38     2302.34684  (10122708)
        481365.94   3668412.38     2267.19634  (10122708)                481385.94
3668412.38     2434.25049  (10122708)
        481405.94   3668412.38     3017.21484  (10122708)                481425.94
3668412.38     3286.56534  (10122708)
        481445.94   3668412.38     3546.98528  (10122708)                481465.94
3668412.38     3725.83441  (10122708)
        481485.94   3668412.38     3721.40675  (10122708)                481505.94
3668412.38     3990.07374  (10122708)
        481525.94   3668412.38     3986.85796  (10122708)                481545.94
3668412.38     3897.58258  (10122708)
        481565.94   3668412.38     3754.31694  (10122708)                481585.94
3668412.38     3821.84408  (10122708)
        481605.94   3668412.38     3735.73760  (10122708)                481625.94
3668412.38     3586.13248  (10122708)
        481645.94   3668412.38     3336.28550  (11123008)                481665.94
3668412.38     3406.39507  (11123008)
        481865.94   3668412.38      697.51511  (11020808)                481885.94
3668412.38      753.26039  (10121717)
        481905.94   3668412.38      562.83147  (11020808)                481925.94
3668412.38      483.49719  (11020808)
        481945.94   3668412.38      593.76352  (12120308)                481965.94
3668412.38      676.25624  (12120308)
        481985.94   3668412.38      709.34349  (12120308)                482005.94
3668412.38      715.11229  (12120308)
        482025.94   3668412.38      606.01773  (12120308)                482045.94
3668412.38      602.31839  (12120308)
        482065.94   3668412.38      546.89080  (10121508)                482085.94
3668412.38      480.73358  (10011808)
        482185.94   3668412.38      593.87748  (10011808)                482205.94
3668412.38      615.16009  (10112508)
        482225.94   3668412.38      788.23785  (10112508)                482245.94
3668412.38      923.82163  (10112508)
        482265.94   3668412.38      914.68941  (10112508)                482285.94
3668412.38     1033.88125  (12010908)
        482305.94   3668412.38     1073.92404  (12010417)                482325.94
3668412.38     1252.12241  (10012908)
        482345.94   3668412.38     1745.53308  (10012908)                482365.94
3668412.38     2775.23736  (10012908)
        482385.94   3668412.38     3703.05247  (10012908)                482405.94
3668412.38     4372.46165  (10012908)
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        482425.94   3668412.38     4681.81698  (10012908)                482445.94
3668412.38     5642.65956  (10012908)
        482465.94   3668412.38     6246.48681  (10012908)                482485.94
3668412.38     5246.40356  (10012908)
        482505.94   3668412.38     3912.02048  (10012908)                482525.94
3668412.38     2628.81967  (10012908)
        482545.94   3668412.38     1786.89530  (10012908)                482565.94
3668412.38     1501.64987  (11122117)
        482585.94   3668412.38     1484.19952  (11122117)                482605.94
3668412.38     1394.40413  (11112317)
        482625.94   3668412.38     1306.72040  (11112317)                482645.94
3668412.38     1127.68861  (11112317)
        482665.94   3668412.38      997.32961  (12011617)                482685.94
3668412.38      891.40774  (10120317)
        482705.94   3668412.38      732.64792  (10120317)                482725.94
3668412.38      656.16559  (11121917)
        482745.94   3668412.38      620.51150  (11121917)                482765.94
3668412.38      483.47506  (11121917)
        482785.94   3668412.38      401.82125  (11121917)                482805.94
3668412.38      378.60067  (12011909)
        482825.94   3668412.38      382.89040  (10012509)                482845.94
3668412.38      386.96954  (10012509)
        482865.94   3668412.38      386.49337  (10012509)                482885.94
3668412.38      381.17963  (10012509)
        482905.94   3668412.38      372.40266  (10012509)                481105.94
3668432.38     1809.13777  (12121108)
        481125.94   3668432.38     1804.06118  (12121108)                481145.94
3668432.38     1790.25766  (12121108)
        481165.94   3668432.38     1773.69726  (12121108)                481185.94
3668432.38     1765.05314  (12121108)
 *** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
Vista\Gran Vista\Gran Vista.i ***        04/27/22
 *** AERMET - VERSION  19191 ***   ***
                      ***        08:26:34

                                  PAGE 283
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL  SigA Data

                              *** THE   1ST HIGHEST  1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP:  ALL      ***
                                  INCLUDING SOURCE(S):     L0000001    , L0000002
, L0000003    , L0000004    , L0000005    ,
                  L0000006    , L0000007    , L0000008    , L0000009    , L0000010
, L0000011    , L0000012    , L0000013    ,
                  L0000014    , L0000015    , L0000016    , L0000017    , L0000018
, L0000019    , L0000020    , L0000021    ,
                  L0000022    , L0000023    , L0000024    , L0000025    , L0000026
, L0000027    , L0000028    ,  . . .      ,

                                          *** DISCRETE CARTESIAN RECEPTOR POINTS
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***

** CONC OF PM_10 IN MICROGRAMS/M**3
**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
481205.94	3668432.38	1760.42589	(12121108)	481225.94	3668432.38	1771.48223	(12121108)
481245.94	3668432.38	1978.82634	(12121108)	481265.94	3668432.38	1998.80454	(12121108)
481285.94	3668432.38	2003.76012	(10122708)	481305.94	3668432.38	2229.07341	(10122708)
481325.94	3668432.38	2449.19133	(10122708)	481345.94	3668432.38	2671.60927	(10122708)
481365.94	3668432.38	2888.30462	(10122708)	481385.94	3668432.38	3135.27968	(10122708)
481405.94	3668432.38	3332.03085	(10122708)	481425.94	3668432.38	3587.94347	(10122708)
481445.94	3668432.38	3681.15887	(10122708)	481465.94	3668432.38	3619.70229	(10122708)
481485.94	3668432.38	3765.36279	(10122708)	481505.94	3668432.38	3882.41640	(10122708)
481525.94	3668432.38	3912.81052	(10122708)	481545.94	3668432.38	3829.40474	(10122708)
481565.94	3668432.38	3612.22745	(10122708)	481585.94	3668432.38	3573.16713	(10122708)
481605.94	3668432.38	3374.06984	(10122708)	481625.94	3668432.38	3307.07414	(11123008)
481645.94	3668432.38	3196.07910	(11123008)	481865.94	3668432.38	601.23557	(11020808)
481885.94	3668432.38	531.71613	(11020808)	481905.94	3668432.38	433.18026	(11020808)
481925.94	3668432.38	436.76276	(12120308)	481945.94	3668432.38	573.33390	(12120308)
481965.94	3668432.38	619.75105	(12120308)	481985.94	3668432.38	633.39776	(12120308)
482005.94	3668432.38	516.13773	(12120308)	482025.94	3668432.38	491.55398	(12120308)
482045.94	3668432.38	522.11102	(10121508)	482065.94	3668432.38	433.97860	(10122117)
482085.94	3668432.38	429.26942	(10011808)	482185.94	3668432.38	521.84231	(10011808)
482205.94	3668432.38	613.99837	(10112508)	482225.94	3668432.38	761.89509	(10112508)
482245.94	3668432.38	904.95246	(10112508)	482265.94	3668432.38	1002.25049	(10112508)
482285.94	3668432.38	674.19930	(10122008)	482305.94			

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3668432.38     1003.75828  (12010417)
        482325.94   3668432.38     1125.01095  (10012908)                482345.94
3668432.38     1558.82251  (10012908)
        482365.94   3668432.38     2416.61253  (10012908)                482385.94
3668432.38     3268.71320  (10012908)
        482405.94   3668432.38     3922.55367  (10012908)                482425.94
3668432.38     4298.38995  (10012908)
        482445.94   3668432.38     4361.48935  (10012908)                482465.94
3668432.38     4042.88936  (10012908)
        482485.94   3668432.38     3747.37931  (10012908)                482505.94
3668432.38     4403.02690  (10012908)
        482525.94   3668432.38     3135.41205  (10012908)                482545.94
3668432.38     2051.31687  (10012908)
        482565.94   3668432.38     1488.13563  (11122117)                482585.94
3668432.38     1588.81119  (11122117)
        482605.94   3668432.38     1388.36879  (11112317)                482625.94
3668432.38     1338.27343  (11112317)
        482645.94   3668432.38     1217.39943  (11112317)                482665.94
3668432.38     1007.13325  (12011617)
        482685.94   3668432.38      901.85353  (12011617)                482705.94
3668432.38      744.80434  (12011617)
        482725.94   3668432.38      639.02524  (10120317)                482745.94
3668432.38      520.31971  (11121917)
        482825.94   3668432.38      373.74040  (12011909)                482845.94
3668432.38      371.01615  (10012509)
        482865.94   3668432.38      376.28511  (10012509)                482885.94
3668432.38      377.12583  (10012509)
        481085.94   3668452.38     1718.92581  (12121108)                481105.94
3668452.38     1699.15825  (12121108)
        481125.94   3668452.38     1671.79797  (12121108)                481145.94
3668452.38     1636.37736  (12121108)
        481165.94   3668452.38     1596.21386  (12121108)                481185.94
3668452.38     1553.31358  (12121108)
        481205.94   3668452.38     1515.62831  (12121108)                481225.94
3668452.38     1464.34605  (12121108)
        481245.94   3668452.38     1663.88283  (10122708)                481265.94
3668452.38     2154.97360  (10122708)
        481285.94   3668452.38     2353.32355  (10122708)                481305.94
3668452.38     2565.72705  (10122708)
 *** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
Vista\Gran Vista\Gran Vista.i ***        04/27/22
 *** AERMET - VERSION  19191 ***   ***
                      ***        08:26:34

                                 PAGE 284
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL  SigA Data

                              *** THE   1ST HIGHEST  1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP:  ALL      ***
                                 INCLUDING SOURCE(S):     L0000001    , L0000002
```

```
, L0000003    , L0000004    , L0000005    ,
                L0000006    , L0000007    , L0000008    , L0000009    , L0000010
, L0000011    , L0000012    , L0000013    ,
                L0000014    , L0000015    , L0000016    , L0000017    , L0000018
, L0000019    , L0000020    , L0000021    ,
                L0000022    , L0000023    , L0000024    , L0000025    , L0000026
, L0000027    , L0000028    ,  . . .      ,

                                          *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                       ** CONC OF PM_10    IN MICROGRAMS/M**3
                  **

      X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)              X-COORD (M)
Y-COORD (M)        CONC     (YYMMDDHH)
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        481325.94   3668452.38     2850.69346  (10122708)               481345.94
3668452.38     3064.82421  (10122708)
        481365.94   3668452.38     3249.09681  (10122708)               481385.94
3668452.38     3434.35464  (10122708)
        481405.94   3668452.38     3572.64008  (10122708)               481425.94
3668452.38     3675.49852  (10122708)
        481445.94   3668452.38     3404.13772  (10122708)               481465.94
3668452.38     3454.88165  (10122708)
        481485.94   3668452.38     3411.74626  (10122708)               481505.94
3668452.38     3515.53454  (10122708)
        481525.94   3668452.38     3550.63187  (10122708)               481545.94
3668452.38     3492.35952  (10122708)
        481565.94   3668452.38     3071.87910  (11123008)               481585.94
3668452.38     3065.59216  (11123008)
        481605.94   3668452.38     3062.84080  (11123008)               481625.94
3668452.38     3033.26499  (11123008)
        481885.94   3668452.38      407.29011  (11020808)               481905.94
3668452.38      364.69383  (12120308)
        481925.94   3668452.38      463.57758  (12120308)               481945.94
3668452.38      509.33394  (12120308)
        481965.94   3668452.38      546.93875  (12120308)               481985.94
3668452.38      425.51317  (12120308)
        482005.94   3668452.38      423.47773  (12120308)               482025.94
3668452.38      435.41140  (12120308)
        482045.94   3668452.38      419.55933  (10121508)               482065.94
3668452.38      387.32240  (10122117)
        482165.94   3668452.38      457.35751  (10011808)               482185.94
3668452.38      472.52514  (10112508)
        482205.94   3668452.38      608.08578  (10112508)               482225.94
3668452.38      754.88422  (10112508)
        482245.94   3668452.38      886.78638  (10112508)               482265.94
3668452.38      978.78223  (10112508)
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        482285.94   3668452.38      643.35586  (10122008)               482305.94
3668452.38      935.64708  (12010417)
        482325.94   3668452.38     1024.44985  (10012908)               482345.94
3668452.38     1386.72254  (10012908)
        482365.94   3668452.38     2141.98450  (10012908)               482385.94
3668452.38     2959.04458  (10012908)
        482405.94   3668452.38     3647.00662  (10012908)               482425.94
3668452.38     4319.39159  (10012908)
        482445.94   3668452.38     4666.84994  (10012908)               482465.94
3668452.38     6291.47240  (10012908)
        482485.94   3668452.38     5689.87038  (10012908)               482505.94
3668452.38     4651.79670  (10012908)
        482525.94   3668452.38     3380.78223  (10012908)               482545.94
3668452.38     2330.59795  (10012908)
        482565.94   3668452.38     1482.50031  (11122117)               482585.94
3668452.38     1614.43382  (11122117)
        482605.94   3668452.38     1356.84543  (11112317)               482625.94
3668452.38     1342.70400  (11112317)
        482645.94   3668452.38     1220.62397  (11112317)               482665.94
3668452.38      935.43347  (12011617)
        482685.94   3668452.38      882.85708  (12011617)               482705.94
3668452.38      757.19822  (12011617)
        482725.94   3668452.38      575.92687  (12011617)               482745.94
3668452.38      426.54736  (11121917)
        482885.94   3668452.38      365.83317  (10012509)               481065.94
3668472.38     1612.79878  (12121108)
        481085.94   3668472.38     1580.68432  (12121108)               481105.94
3668472.38     1541.23103  (12121108)
        481125.94   3668472.38     1494.66462  (12121108)               481145.94
3668472.38     1441.74469  (12121108)
        481165.94   3668472.38     1383.43818  (12121108)               481185.94
3668472.38     1332.51381  (12121108)
        481205.94   3668472.38     1432.29898  (10122708)               481225.94
3668472.38     1597.25648  (10122708)
        481245.94   3668472.38     1838.79995  (10122708)               481265.94
3668472.38     2155.61612  (10122708)
        481285.94   3668472.38     2464.59739  (10122708)               481305.94
3668472.38     2572.08345  (10122708)
        481325.94   3668472.38     2626.77915  (10122708)               481345.94
3668472.38     2876.68521  (10122708)
        481365.94   3668472.38     3020.86722  (10122708)               481385.94
3668472.38     3207.41147  (10122708)
        481405.94   3668472.38     3264.08764  (10122708)               481425.94
3668472.38     3340.52692  (10122708)
        481445.94   3668472.38     3221.29915  (10122708)               481465.94
3668472.38     3092.11002  (10122708)
        481485.94   3668472.38     3156.27131  (10122708)               481505.94
3668472.38     3117.70149  (10122708)
 *** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
Vista\Gran Vista\Gran Vista.i ***        04/27/22
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                            *** THE   1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL   ***
                                INCLUDING SOURCE(S):   L0000001   , L0000002 , L0000003   , L0000004   , L0000005   ,
                                 L0000006   , L0000007   , L0000008   , L0000009   , L0000010 , L0000011   , L0000012   , L0000013   ,
                                 L0000014   , L0000015   , L0000016   , L0000017   , L0000018 , L0000019   , L0000020   , L0000021   ,
                                 L0000022   , L0000023   , L0000024   , L0000025   , L0000026 , L0000027   , L0000028   , . . .   ,

                                                *** DISCRETE CARTESIAN RECEPTOR POINTS ***

                                             ** CONC OF PM_10   IN MICROGRAMS/M**3
                **

      X-COORD (M) Y-COORD (M)   CONC   (YYMMDDHH)   X-COORD (M) Y-COORD (M)   CONC   (YYMMDDHH)
 - - -

3668472.38 658.10555 (10122008)
482305.94 3668472.38 876.32649 (12010417) 482325.94
3668472.38 924.06995 (10012908)
482345.94 3668472.38 1243.50174 (10012908) 482365.94
3668472.38 1868.49249 (10012908)
482385.94 3668472.38 2670.06895 (10012908) 482405.94
3668472.38 3477.58454 (10012908)
482425.94 3668472.38 4627.16583 (10012908) 482445.94
3668472.38 6091.96879 (10012908)
482465.94 3668472.38 6248.87550 (10012908) 482485.94
3668472.38 5750.08258 (10012908)
482505.94 3668472.38 4805.01078 (10012908) 482525.94
3668472.38 3593.12314 (10012908)
482545.94 3668472.38 2593.08014 (10012908) 482565.94
3668472.38 1504.01432 (10012908)
482585.94 3668472.38 1574.94824 (11122117) 482605.94
3668472.38 1243.64276 (11112317)
482625.94 3668472.38 1297.24584 (11112317) 482645.94
3668472.38 1205.23104 (11112317)
482665.94 3668472.38 1002.30958 (11112317) 482685.94
3668472.38 826.61319 (12011617)
482705.94 3668472.38 726.45908 (12011617) 482725.94
3668472.38 492.54134 (12011617)
481045.94 3668492.38 1494.94209 (12121108) 481065.94
3668492.38 1452.94192 (12121108)
481085.94 3668492.38 1404.49921 (12121108) 481105.94
3668492.38 1350.07365 (12121108)
481125.94 3668492.38 1290.25800 (12121108) 481145.94
3668492.38 1225.64735 (12121108)
481165.94 3668492.38 1349.50741 (10122708) 481185.94
3668492.38 1508.78912 (10122708)
481205.94 3668492.38 1689.61434 (10122708) 481225.94
3668492.38 1844.33502 (10122708)
481245.94 3668492.38 2001.88907 (10122708) 481265.94
3668492.38 2189.36213 (10122708)
481285.94 3668492.38 2350.89542 (10122708) 481305.94
3668492.38 2472.61341 (10122708)
481325.94 3668492.38 2583.34674 (10122708) 481345.94
3668492.38 2704.48120 (10122708)
481365.94 3668492.38 2685.07360 (10122708) 481385.94
3668492.38 2746.85882 (10122708)
481405.94 3668492.38 2764.05296 (10122708) 481425.94
3668492.38 2806.94134 (10122708)
481445.94 3668492.38 2808.11630 (10122708) 481465.94
3668492.38 2842.16746 (10122708)
481485.94 3668492.38 2780.90118 (10122708) 481505.94
3668492.38 2665.41806 (11123008)
481525.94 3668492.38 2417.35569 (11123008) 481545.94
3668492.38 2369.71386 (11123008)
481565.94 3668492.38 2331.18007 (11123008) 481585.94

3668492.38   2275.18496 (11123008)
        481605.94   3668492.38   2240.82475 (11123008)   481885.94
3668492.38   349.98443 (12120308)
        481905.94   3668492.38   372.07556 (12120308)   481925.94
3668492.38   401.41370 (12120308)
        481945.94   3668492.38   293.65397 (12120308)   481965.94
3668492.38   292.61489 (11022508)

                                *** THE   1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL   ***
                                   INCLUDING SOURCE(S):   L0000001   , L0000002 , L0000003   , L0000004   , L0000005   ,
                 L0000006   , L0000007   , L0000008   , L0000009   , L0000010 , L0000011   , L0000012   , L0000013   ,
                 L0000014   , L0000015   , L0000016   , L0000017   , L0000018 , L0000019   , L0000020   , L0000021   ,
                 L0000022   , L0000023   , L0000024   , L0000025   , L0000026 , L0000027   , L0000028   , . . .   ,

                                                *** DISCRETE CARTESIAN RECEPTOR POINTS ***

                                          ** CONC OF PM_10   IN MICROGRAMS/M**3
                  **

      X-COORD (M) Y-COORD (M)   CONC   (YYMMDDHH)   X-COORD (M) Y-COORD (M)   CONC   (YYMMDDHH)
 -
        481985.94   3668492.38   306.78784 (11022508)   482005.94
3668492.38   313.05933 (10122117)
        482025.94   3668492.38   321.08799 (10122117)   482045.94
3668492.38   311.42933 (10122117)
        482125.94   3668492.38   391.53690 (10011808)   482145.94
3668492.38   334.09298 (10011808)
        482165.94   3668492.38   343.13665 (10011808)   482185.94
3668492.38   449.57360 (10112508)
        482205.94   3668492.38   602.63828 (10112508)   482225.94
3668492.38   736.54662 (10112508)
        482245.94   3668492.38   851.65865 (10112508)   482265.94
3668492.38   926.27260 (10112508)
        482285.94   3668492.38   669.48529 (10122008)   482305.94
3668492.38   802.82560 (12010417)

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        482325.94   3668492.38      814.05980  (12010417)              482345.94
3668492.38     1114.09500  (10012908)
        482365.94   3668492.38     1344.21399  (10012908)              482385.94
3668492.38     2325.15926  (10012908)
        482405.94   3668492.38     3610.75976  (10012908)              482425.94
3668492.38     4781.98616  (10012908)
        482445.94   3668492.38     5611.12082  (10012908)              482465.94
3668492.38     5846.44297  (10012908)
        482485.94   3668492.38     5476.61913  (10012908)              482505.94
3668492.38     4688.88152  (10012908)
        482525.94   3668492.38     3616.31900  (10012908)              482545.94
3668492.38     2819.15016  (10012908)
        482565.94   3668492.38     1679.95877  (10012908)              482585.94
3668492.38     1495.95761  (11122117)
        482605.94   3668492.38     1107.81212  (11122117)              482625.94
3668492.38     1187.03117  (11112317)
        482645.94   3668492.38     1143.60014  (11112317)              482665.94
3668492.38     1053.03822  (11112317)
        482685.94   3668492.38      796.76024  (12011617)              482705.94
3668492.38      606.26353  (12011617)
        481025.94   3668512.38     1369.49756  (12121108)              481045.94
3668512.38     1320.04235  (12121108)
        481065.94   3668512.38     1265.27305  (12121108)              481085.94
3668512.38     1205.76611  (12121108)
        481105.94   3668512.38     1158.25635  (10122708)              481125.94
3668512.38     1297.01561  (10122708)
        481145.94   3668512.38     1441.80394  (10122708)              481165.94
3668512.38     1589.76227  (10122708)
        481185.94   3668512.38     1741.50654  (10122708)              481205.94
3668512.38     1892.29736  (10122708)
        481225.94   3668512.38     2041.02310  (10122708)              481245.94
3668512.38     2174.02901  (10122708)
        481265.94   3668512.38     2299.41214  (10122708)              481285.94
3668512.38     2418.81322  (10122708)
        481305.94   3668512.38     2489.74777  (10122708)              481325.94
3668512.38     2544.29406  (10122708)
        481345.94   3668512.38     2588.61291  (10122708)              481365.94
3668512.38     2605.67118  (10122708)
        481385.94   3668512.38     2600.71998  (10122708)              481405.94
3668512.38     2581.33865  (10122708)
        481425.94   3668512.38     2578.53114  (10122708)              481445.94
3668512.38     2504.45872  (10122708)
        481465.94   3668512.38     2540.04698  (11123008)              481485.94
3668512.38     2274.81387  (11123008)
        481505.94   3668512.38     2199.44207  (11123008)              481525.94
3668512.38     2142.89172  (11123008)
        481545.94   3668512.38     2080.32715  (11123008)              481565.94
3668512.38     2002.04957  (11123008)
        481585.94   3668512.38     1957.33363  (11123008)              481905.94
3668512.38      371.97797  (12120308)
```

*** MODELOPTs: RegDFAULT CONC ELEV RURAL SigA Data

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 , L0000005 ,
L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 , L0000013 ,
L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 , L0000021 ,
L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
482305.94	3668512.38	737.00462	(12010417)	482325.94	3668512.38	760.85871	(12010417)
482345.94	3668512.38	1028.33692	(10012908)	482365.94	3668512.38	1153.24358	(10012908)
482385.94	3668512.38	2016.34113	(10012908)	482405.94			

3668512.38 3161.75426 (10012908)
482425.94 3668512.38 4432.88569 (10012908) 482445.94
3668512.38 5420.78144 (10012908)
482465.94 3668512.38 5840.51430 (10012908) 482485.94
3668512.38 5676.32018 (10012908)
482505.94 3668512.38 4988.62010 (10012908) 482525.94
3668512.38 4046.25669 (10012908)
482545.94 3668512.38 2994.79542 (10012908) 482565.94
3668512.38 1867.26543 (10012908)
482585.94 3668512.38 1337.91858 (11122117) 482605.94
3668512.38 1001.60472 (11122117)
482625.94 3668512.38 1040.58768 (11112317) 482645.94
3668512.38 1062.34564 (11112317)
482665.94 3668512.38 990.88351 (11112317) 482685.94
3668512.38 755.98280 (11112317)
482705.94 3668512.38 555.80914 (12011617) 482885.94
3668512.38 359.94711 (12011909)
482905.94 3668512.38 346.93800 (12011909) 482925.94
3668512.38 331.62526 (12011909)
481045.94 3668532.38 1127.10978 (12121108) 481065.94
3668532.38 1116.95283 (10122708)
481085.94 3668532.38 1248.64005 (10122708) 481105.94
3668532.38 1385.72414 (10122708)
481125.94 3668532.38 1526.27228 (10122708) 481145.94
3668532.38 1667.98135 (10122708)
481165.94 3668532.38 1808.32634 (10122708) 481185.94
3668532.38 1943.84921 (10122708)
481205.94 3668532.38 2073.17877 (10122708) 481225.94
3668532.38 2191.69210 (10122708)
481245.94 3668532.38 2294.39776 (10122708) 481265.94
3668532.38 2381.85204 (10122708)
481285.94 3668532.38 2443.68503 (10122708) 481305.94
3668532.38 2484.97628 (10122708)
481325.94 3668532.38 2504.58008 (10122708) 481345.94
3668532.38 2499.53643 (10122708)
481365.94 3668532.38 2469.61946 (10122708) 481385.94
3668532.38 2423.21263 (10122708)
481405.94 3668532.38 2378.69113 (10122708) 481425.94
3668532.38 2277.53725 (10122708)
481445.94 3668532.38 2179.76299 (11123008) 481465.94
3668532.38 2110.77441 (11123008)
481485.94 3668532.38 2061.26627 (11123008) 481505.94
3668532.38 1986.25235 (11123008)
481525.94 3668532.38 1906.28545 (11123008) 481545.94
3668532.38 1798.40553 (11123008)
481565.94 3668532.38 1693.44204 (11123008) 481905.94
3668532.38 350.58936 (12120308)
481925.94 3668532.38 268.62620 (12120308) 481945.94
3668532.38 268.02479 (11022508)
481965.94 3668532.38 278.51591 (11022508) 481985.94

3668532.38   278.01448 (11022508)
        482005.94   3668532.38   271.81281 (11022508)   482105.94
3668532.38   344.46702 (10011808)
        482125.94   3668532.38   335.65832 (10011808)   482145.94
3668532.38   297.96241 (12111208)
        482165.94   3668532.38   310.85023 (10112508)   482185.94
3668532.38   418.10058 (10112508)
        482205.94   3668532.38   594.06626 (10112508)   482225.94
3668532.38   717.31131 (10112508)
        482245.94   3668532.38   818.19555 (10112508)   482265.94
3668532.38   878.00163 (10112508)
        482285.94   3668532.38   762.95813 (10112508)   482305.94
3668532.38   645.02256 (12010417)
        482325.94   3668532.38   718.05732 (12010417)   482345.94
3668532.38   936.47632 (10012908)
        482365.94   3668532.38   1063.36959 (10012908)   482385.94
3668532.38   1771.56767 (10012908)
        482405.94   3668532.38   2821.22893 (10012908)   482425.94
3668532.38   4035.23739 (10012908)
        482445.94   3668532.38   5019.30807 (10012908)   482465.94
3668532.38   5573.79170 (10012908)
        482485.94   3668532.38   5621.13479 (10012908)   482505.94
3668532.38   5108.29285 (10012908)
        482525.94   3668532.38   4249.52798 (10012908)   482545.94
3668532.38   3143.19324 (10012908)

 *** MODELOPTs: RegDFAULT CONC ELEV RURAL SigA Data

                             *** THE   1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL   ***
                                 INCLUDING SOURCE(S):   L0000001   , L0000002 , L0000003   , L0000004   , L0000005   ,
                  L0000006   , L0000007   , L0000008   , L0000009   , L0000010 , L0000011   , L0000012   , L0000013   ,
                  L0000014   , L0000015   , L0000016   , L0000017   , L0000018 , L0000019   , L0000020   , L0000021   ,
                  L0000022   , L0000023   , L0000024   , L0000025   , L0000026 , L0000027   , L0000028   , . . .   ,

                                                 *** DISCRETE CARTESIAN RECEPTOR POINTS ***

                                              ** CONC OF PM_10   IN MICROGRAMS/M**3
                    **

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
482565.94	3668532.38	2004.35224	(10012908)	482585.94	3668532.38	1121.86939	(11122117)
482605.94	3668532.38	896.78013	(11122117)	482625.94	3668532.38	917.66058	(11122117)
482645.94	3668532.38	944.17335	(11112317)	482665.94	3668532.38	884.93709	(11112317)
482685.94	3668532.38	634.42411	(11112317)	482705.94	3668532.38	490.46149	(12011617)
482845.94	3668532.38	363.74724	(12011909)	482865.94	3668532.38	364.13794	(12011909)
482885.94	3668532.38	360.49668	(12011909)	482905.94	3668532.38	352.43672	(12011909)
482925.94	3668532.38	340.90104	(12011909)	482945.94	3668532.38	326.31143	(12011909)
481045.94	3668552.38	1203.15947	(10122708)	481065.94	3668552.38	1333.42542	(10122708)
481085.94	3668552.38	1467.06386	(10122708)	481105.94	3668552.38	1601.98206	(10122708)
481125.94	3668552.38	1735.66777	(10122708)	481145.94	3668552.38	1865.43316	(10122708)
481165.94	3668552.38	1988.58656	(10122708)	481185.94	3668552.38	2101.49037	(10122708)
481205.94	3668552.38	2201.52143	(10122708)	481225.94	3668552.38	2287.18366	(10122708)
481245.94	3668552.38	2352.18606	(10122708)	481265.94	3668552.38	2396.99180	(10122708)
481285.94	3668552.38	2418.91761	(10122708)	481305.94	3668552.38	2416.53848	(10122708)
481325.94	3668552.38	2390.92262	(10122708)	481345.94	3668552.38	2342.93800	(10122708)
481365.94	3668552.38	2267.06844	(10122708)	481385.94	3668552.38	2186.35980	(10122708)
481405.94	3668552.38	2077.97847	(11123008)	481425.94	3668552.38	2046.53743	(11123008)
481445.94	3668552.38	2007.55068	(11123008)	481465.94	3668552.38	1946.05079	(11123008)
481485.94	3668552.38	1862.77640	(11123008)	481505.94	3668552.38	1761.64398	(11123008)
481525.94	3668552.38	1643.24958	(11123008)	481905.94	3668552.38	235.87073	(11022508)
481925.94	3668552.38	250.70617	(11022508)	481945.94	3668552.38	261.61606	(11022508)
481965.94	3668552.38	262.84990	(11022508)	481985.94	3668552.38	261.47139	(11022508)
482085.94	3668552.38	267.79234	(10011808)	482105.94	3668552.38	276.66359	(12111208)

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        482125.94   3668552.38      317.26261  (10011808)                482145.94
3668552.38      286.88250  (12111208)
        482165.94   3668552.38      316.33077  (10112508)                482185.94
3668552.38      416.58872  (10112508)
        482205.94   3668552.38      585.58002  (10112508)                482225.94
3668552.38      708.71287  (10112508)
        482245.94   3668552.38      801.97855  (10112508)                482265.94
3668552.38      855.47289  (10112508)
        482285.94   3668552.38      842.86516  (10112508)                482305.94
3668552.38      458.62519  (10012617)
        482325.94   3668552.38      667.43973  (12010417)                482345.94
3668552.38      728.29846  (10012908)
        482365.94   3668552.38      936.65274  (10012908)                482385.94
3668552.38     1476.47108  (10012908)
        482405.94   3668552.38     2408.32871  (10012908)                482425.94
3668552.38     3533.14861  (10012908)
        482445.94   3668552.38     4592.45549  (10012908)                482465.94
3668552.38     5305.76125  (10012908)
        482485.94   3668552.38     5556.01234  (10012908)                482505.94
3668552.38     5306.79388  (10012908)
        482525.94   3668552.38     4488.22437  (10012908)                482545.94
3668552.38     3109.06215  (10012908)
        482565.94   3668552.38     2106.99294  (10012908)                482585.94
3668552.38      954.80990  (12111908)
        482605.94   3668552.38      846.95286  (12111908)                482625.94
3668552.38      822.61360  (11122117)
        482645.94   3668552.38      830.45253  (11112317)                482665.94
3668552.38      808.10994  (11112317)
        482685.94   3668552.38      551.76504  (11112317)                482785.94
3668552.38      326.15723  (10110308)
        482805.94   3668552.38      328.92130  (12011909)                482825.94
3668552.38      342.29074  (12011909)
        482845.94   3668552.38      351.33042  (12011909)                482865.94
3668552.38      356.17331  (12011909)
 *** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
Vista\Gran Vista\Gran Vista.i ***        04/27/22
 *** AERMET - VERSION  19191 ***   ***
                      ***        08:26:34

                                   PAGE 289
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL  SigA Data

                                *** THE   1ST HIGHEST  1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP:  ALL      ***
                                   INCLUDING SOURCE(S):     L0000001    , L0000002
, L0000003    , L0000004    , L0000005    ,
                  L0000006    , L0000007    , L0000008    , L0000009    , L0000010
, L0000011    , L0000012    , L0000013    ,
                  L0000014    , L0000015    , L0000016    , L0000017    , L0000018
, L0000019    , L0000020    , L0000021    ,
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L0000022 , L0000023 , L0000024 , L0000025 , L0000026
, L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS
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** CONC OF PM_10 IN MICROGRAMS/M**3
**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
482885.94	3668552.38	356.97661	(12011909)	482905.94	3668552.38	353.19575	(12011909)
482925.94	3668552.38	345.66209	(12011909)	482945.94	3668552.38	334.93597	(12011909)
482965.94	3668552.38	321.53475	(12011909)	481065.94	3668572.38	1539.95004	(10122708)
481085.94	3668572.38	1667.60287	(10122708)	481105.94	3668572.38	1791.87030	(10122708)
481125.94	3668572.38	1910.06206	(10122708)	481145.94	3668572.38	2019.31987	(10122708)
481165.94	3668572.38	2116.86504	(10122708)	481185.94	3668572.38	2199.91169	(10122708)
481205.94	3668572.38	2265.85750	(10122708)	481225.94	3668572.38	2312.86280	(10122708)
481245.94	3668572.38	2338.39319	(10122708)	481265.94	3668572.38	2341.34718	(10122708)
481285.94	3668572.38	2321.26450	(10122708)	481305.94	3668572.38	2277.54159	(10122708)
481325.94	3668572.38	2211.29345	(10122708)	481345.94	3668572.38	2126.02687	(10122708)
481365.94	3668572.38	2017.19935	(10122708)	481385.94	3668572.38	1972.98003	(11123008)
481405.94	3668572.38	1949.84014	(11123008)	481425.94	3668572.38	1907.69827	(11123008)
481445.94	3668572.38	1838.98097	(11123008)	481465.94	3668572.38	1749.74215	(11123008)
481485.94	3668572.38	1640.18579	(11123008)	481505.94	3668572.38	1511.46860	(11123008)
481905.94	3668572.38	235.69091	(11022508)	481925.94	3668572.38	246.09089	(11022508)
481945.94	3668572.38	252.02718	(11022508)	481965.94	3668572.38	247.38376	(11022508)
481985.94	3668572.38	236.46638	(11022508)	482085.94	3668572.38	265.49024	(10011808)
482105.94	3668572.38	280.87122	(12111208)	482125.94	3668572.38	297.27351	(10011808)
482145.94	3668572.38	275.30148	(12111208)	482165.94			

3668572.38   322.89030 (10112508)
        482185.94   3668572.38   417.15480 (10112508)   482205.94
3668572.38   576.56176 (10112508)
        482225.94   3668572.38   699.80838 (10112508)   482245.94
3668572.38   785.20719 (10112508)
        482265.94   3668572.38   832.97936 (10112508)   482285.94
3668572.38   829.22822 (10112508)
        482305.94   3668572.38   531.91619 (10122008)   482325.94
3668572.38   629.68983 (12010417)
        482345.94   3668572.38   630.19972 (12010417)   482365.94
3668572.38   1003.54597 (10012908)
        482385.94   3668572.38   1225.73119 (10012908)   482405.94
3668572.38   1967.71948 (10012908)
        482425.94   3668572.38   3026.22621 (10012908)   482445.94
3668572.38   3918.98982 (10012908)
        482465.94   3668572.38   4661.62760 (10012908)   482485.94
3668572.38   4720.51728 (10012908)
        482505.94   3668572.38   4354.80545 (10012908)   482525.94
3668572.38   4205.40222 (10012908)
        482545.94   3668572.38   3185.56770 (10012908)   482565.94
3668572.38   2093.60940 (10012908)
        482585.94   3668572.38   973.79784 (12111908)   482605.94
3668572.38   886.54942 (12111908)
        482625.94   3668572.38   769.27886 (12111908)   482645.94
3668572.38   650.68253 (11122117)
        482665.94   3668572.38   638.66265 (11112317)   482685.94
3668572.38   496.74994 (11112317)
        482745.94   3668572.38   384.29124 (12011617)   482765.94
3668572.38   363.25205 (12011617)
        482785.94   3668572.38   334.05706 (12011617)   482805.94
3668572.38   317.02663 (10110308)
        482825.94   3668572.38   322.44060 (12011909)   482845.94
3668572.38   335.37986 (12011909)
        482865.94   3668572.38   344.24976 (12011909)   482885.94
3668572.38   349.03843 (12011909)
        482905.94   3668572.38   349.60719 (12011909)   482925.94
3668572.38   346.33117 (12011909)
        482945.94   3668572.38   339.42726 (12011909)   482965.94
3668572.38   329.65089 (12011909)
        481065.94   3668592.38   1722.55844 (10122708)   481085.94
3668592.38   1836.18647 (10122708)
        481105.94   3668592.38   1941.79213 (10122708)   481125.94
3668592.38   2036.74601 (10122708)

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***

INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 , L0000005 , L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 , L0000013 , L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 , L0000021 , L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
481145.94	3668592.38	2118.43241	(10122708)	481165.94	3668592.38	2184.44391	(10122708)
481185.94	3668592.38	2232.63963	(10122708)	481205.94	3668592.38	2261.14023	(10122708)
481225.94	3668592.38	2268.66709	(10122708)	481245.94	3668592.38	2254.53140	(10122708)
481265.94	3668592.38	2218.04143	(10122708)	481285.94	3668592.38	2159.91713	(10122708)
481305.94	3668592.38	2081.03427	(10122708)	481325.94	3668592.38	1982.94413	(10122708)
481345.94	3668592.38	1915.45807	(11123008)	481365.94	3668592.38	1900.06167	(11123008)
481385.94	3668592.38	1862.90280	(11123008)	481405.94	3668592.38	1806.51090	(11123008)
481425.94	3668592.38	1732.73591	(11123008)	481445.94	3668592.38	1637.92782	(11123008)
481465.94	3668592.38	1520.96857	(11123008)	481485.94	3668592.38	1389.88049	(11123008)
481925.94	3668592.38	238.81505	(11022508)	481945.94	3668592.38	240.00038	(11022508)
481965.94	3668592.38	232.40705	(11022508)	481985.94	3668592.38	216.23663	(11022508)
482085.94	3668592.38	260.26826	(12111208)	482105.94	3668592.38	283.13838	(12111208)
482125.94	3668592.38	274.04407	(12111208)	482145.94	3668592.38	262.94938	(12111208)
482165.94	3668592.38	328.51973	(10112508)	482185.94	3668592.38	420.51201	(10112508)

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        482205.94   3668592.38      554.04405  (10112508)              482225.94
3668592.38      691.35437  (10112508)
        482245.94   3668592.38      768.71957  (10112508)              482265.94
3668592.38      805.20392  (10112508)
        482285.94   3668592.38      801.40405  (10112508)              482305.94
3668592.38      543.63003  (10122008)
        482325.94   3668592.38      575.23196  (12010417)              482345.94
3668592.38      586.38739  (12010417)
        482365.94   3668592.38      856.23115  (10012908)              482385.94
3668592.38      968.43072  (10012908)
        482405.94   3668592.38     1670.17541  (10012908)              482425.94
3668592.38     2675.73025  (10012908)
        482445.94   3668592.38     3811.43923  (10012908)              482465.94
3668592.38     4643.18656  (10012908)
        482485.94   3668592.38     4995.30834  (10012908)              482505.94
3668592.38     4777.08023  (10012908)
        482525.94   3668592.38     4234.89004  (10012908)              482545.94
3668592.38     3141.90013  (10012908)
        482565.94   3668592.38     2177.94646  (10012908)              482585.94
3668592.38      981.08140  (12111908)
        482605.94   3668592.38      916.11276  (12111908)              482625.94
3668592.38      815.04665  (12111908)
        482645.94   3668592.38      692.24622  (12111908)              482665.94
3668592.38      567.80805  (11112317)
        482685.94   3668592.38      509.46999  (11112317)              482705.94
3668592.38      380.77494  (10032208)
        482725.94   3668592.38      389.12670  (12011617)              482745.94
3668592.38      382.99451  (12011617)
        482765.94   3668592.38      382.34962  (12011617)              482785.94
3668592.38      354.08738  (12011617)
        482805.94   3668592.38      316.13621  (10110308)              482825.94
3668592.38      316.04874  (10110308)
        482845.94   3668592.38      317.52203  (12011909)              482865.94
3668592.38      329.69292  (12011909)
        482885.94   3668592.38      338.15419  (12011909)              482905.94
3668592.38      343.17340  (12011909)
        482925.94   3668592.38      343.55750  (12011909)              482945.94
3668592.38      339.99882  (12011909)
        481065.94   3668612.38     1868.46890  (10122708)              481085.94
3668612.38     1960.82138  (10122708)
        481105.94   3668612.38     2041.05364  (10122708)              481125.94
3668612.38     2106.87741  (10122708)
        481145.94   3668612.38     2156.21400  (10122708)              481165.94
3668612.38     2187.29097  (10122708)
        481185.94   3668612.38     2198.76474  (10122708)              481205.94
3668612.38     2189.72204  (10122708)
        481225.94   3668612.38     2159.80562  (10122708)              481245.94
3668612.38     2109.23926  (10122708)
        481265.94   3668612.38     2038.70395  (10122708)              481285.94
3668612.38     1949.58594  (10122708)
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*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 , L0000005 ,
L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 , L0000013 ,
L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 , L0000021 ,
L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
481345.94	3668612.38	1815.86377	(11123008)	481365.94	3668612.38	1777.40143	(11123008)
481385.94	3668612.38	1711.46665	(11123008)	481405.94	3668612.38	1627.60134	(11123008)
481425.94	3668612.38	1525.45449	(11123008)	481445.94	3668612.38	1406.71627	(11123008)
481465.94	3668612.38	1279.93370	(11123008)	481925.94	3668612.38	228.99415	(11022508)
481945.94	3668612.38	225.36813	(11022508)	481965.94	3668612.38	215.87998	(11022508)
481985.94	3668612.38	197.39030	(11022508)	482005.94	3668612.38	174.01952	(11022508)
482085.94	3668612.38	263.18309	(12111208)	482105.94	3668612.38	281.22697	(12111208)
482125.94	3668612.38	268.98576	(12111208)	482145.94	3668612.38	251.37124	(10112508)
482165.94	3668612.38	333.27351	(10112508)	482185.94	3668612.38	424.75929	(10112508)
482205.94	3668612.38	532.34666	(10112508)	482225.94			

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3668612.38      681.74471  (10112508)
        482245.94   3668612.38      747.89708  (10112508)              482265.94
3668612.38      769.47024  (10112508)
        482285.94   3668612.38      770.47844  (10112508)              482305.94
3668612.38      655.26629  (10112508)
        482325.94   3668612.38      476.58106  (12010417)              482345.94
3668612.38      542.59762  (12010417)
        482365.94   3668612.38      626.08203  (10012908)              482385.94
3668612.38      840.81240  (10012908)
        482405.94   3668612.38     1406.81167  (10012908)              482425.94
3668612.38     2291.85634  (10012908)
        482445.94   3668612.38     3324.01759  (10012908)              482465.94
3668612.38     4200.39100  (10012908)
        482485.94   3668612.38     4668.91127  (10012908)              482505.94
3668612.38     4565.49482  (10012908)
        482525.94   3668612.38     4146.01136  (10012908)              482545.94
3668612.38     3247.40400  (10012908)
        482565.94   3668612.38     2377.43882  (10012908)              482585.94
3668612.38      977.02414  (12111908)
        482605.94   3668612.38      935.02318  (12111908)              482625.94
3668612.38      852.43239  (12111908)
        482645.94   3668612.38      742.55790  (12111908)              482665.94
3668612.38      619.05156  (12111908)
        482685.94   3668612.38      493.63726  (12111908)              482705.94
3668612.38      392.42631  (11112317)
        482725.94   3668612.38      375.12866  (12011617)              482745.94
3668612.38      393.50579  (12011617)
        482765.94   3668612.38      376.00514  (12011617)              482785.94
3668612.38      354.96342  (12011617)
        482805.94   3668612.38      331.39361  (12011617)              482825.94
3668612.38      309.76816  (10110308)
        482845.94   3668612.38      304.83762  (10110308)              482865.94
3668612.38      312.76855  (12011909)
        482885.94   3668612.38      325.27534  (12011909)              482905.94
3668612.38      333.56864  (12011909)
        482925.94   3668612.38      337.19179  (12011909)              482945.94
3668612.38      336.99106  (12011909)
        481085.94   3668632.38     2032.92233  (10122708)              481105.94
3668632.38     2083.10372  (10122708)
        481125.94   3668632.38     2116.33378  (10122708)              481145.94
3668632.38     2131.25515  (10122708)
        481165.94   3668632.38     2126.91816  (10122708)              481185.94
3668632.38     2102.86677  (10122708)
        481205.94   3668632.38     2059.15210  (10122708)              481225.94
3668632.38     1996.34753  (10122708)
        481245.94   3668632.38     1915.57406  (10122708)              481265.94
3668632.38     1818.44494  (10122708)
        481285.94   3668632.38     1783.29748  (11123008)              481305.94
3668632.38     1770.15799  (11123008)
        481325.94   3668632.38     1736.70488  (11123008)              481345.94
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3668632.38   1683.46201 (11123008)
        481365.94   3668632.38   1613.65380 (11123008)   481385.94
3668632.38   1524.67976 (11123008)
        481405.94   3668632.38   1418.13986 (11123008)   481425.94
3668632.38   1301.78170 (11123008)
        481445.94   3668632.38   1176.85243 (11123008)   481465.94
3668632.38   1046.65756 (11123008)
        481485.94   3668632.38   914.86854 (11123008)   481925.94
3668632.38   217.45363 (11022508)
        481945.94   3668632.38   210.25074 (11022508)   481965.94
3668632.38   198.20536 (11022508)

 *** MODELOPTs: RegDFAULT CONC ELEV RURAL SigA Data

                              *** THE   1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL   ***
                                  INCLUDING SOURCE(S):   L0000001   , L0000002 , L0000003   , L0000004   , L0000005   ,
                 L0000006   , L0000007   , L0000008   , L0000009   , L0000010 , L0000011   , L0000012   , L0000013   ,
                 L0000014   , L0000015   , L0000016   , L0000017   , L0000018 , L0000019   , L0000020   , L0000021   ,
                 L0000022   , L0000023   , L0000024   , L0000025   , L0000026 , L0000027   , L0000028   , . . .   ,

                                                 *** DISCRETE CARTESIAN RECEPTOR POINTS ***

                                          ** CONC OF PM_10   IN MICROGRAMS/M**3
                  **

      X-COORD (M) Y-COORD (M)   CONC   (YYMMDDHH)   X-COORD (M) Y-COORD (M)   CONC   (YYMMDDHH)
 -
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3668632.38   154.34180 (11022508)
        482105.94   3668632.38   277.36959 (12111208)   482125.94
3668632.38   264.93302 (12111208)
        482145.94   3668632.38   255.57198 (10112508)   482165.94
3668632.38   337.46117 (10112508)
        482185.94   3668632.38   430.20775 (10112508)   482205.94
3668632.38   525.66717 (10112508)
        482225.94   3668632.38   670.91464 (10112508)   482245.94
3668632.38   725.54352 (10112508)

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        482265.94   3668632.38      735.21473  (10112508)              482285.94
3668632.38      733.44249  (10112508)
        482305.94   3668632.38      669.48707  (10112508)              482325.94
3668632.38      370.75965  (10012617)
        482345.94   3668632.38      496.05796  (12010417)              482365.94
3668632.38      515.71622  (12010417)
        482385.94   3668632.38      669.97055  (10012908)              482405.94
3668632.38     1010.47749  (10012908)
        482425.94   3668632.38     1824.69107  (10012908)              482445.94
3668632.38     2779.50607  (10012908)
        482465.94   3668632.38     3697.64470  (10012908)              482485.94
3668632.38     4299.36256  (10012908)
        482505.94   3668632.38     4313.90158  (10012908)              482525.94
3668632.38     4104.14669  (10012908)
        482545.94   3668632.38     3442.92834  (10012908)              482565.94
3668632.38     2611.96838  (10012908)
        482585.94   3668632.38      962.51211  (12111908)              482605.94
3668632.38      943.22522  (12111908)
        482625.94   3668632.38      880.47740  (12111908)              482645.94
3668632.38      785.54963  (12111908)
        482665.94   3668632.38      670.98788  (12111908)              482685.94
3668632.38      548.33086  (12111908)
        482705.94   3668632.38      464.14651  (11112317)              482725.94
3668632.38      421.65757  (11112317)
        482745.94   3668632.38      376.07937  (12011617)              482765.94
3668632.38      374.00767  (12011617)
        482785.94   3668632.38      359.73451  (12011617)              482805.94
3668632.38      306.47345  (10110308)
        481085.94   3668652.38     2048.17171  (10122708)              481105.94
3668652.38     2066.09304  (10122708)
        481125.94   3668652.38     2065.94964  (10122708)              481145.94
3668652.38     2047.20289  (10122708)
        481165.94   3668652.38     2009.78004  (10122708)              481185.94
3668652.38     1954.10368  (10122708)
        481205.94   3668652.38     1881.09299  (10122708)              481225.94
3668652.38     1792.14056  (10122708)
        481245.94   3668652.38     1727.28552  (11123008)              481265.94
3668652.38     1722.98793  (11123008)
        481285.94   3668652.38     1699.29674  (11123008)              481305.94
3668652.38     1656.57683  (11123008)
        481325.94   3668652.38     1595.42480  (11123008)              481345.94
3668652.38     1517.33284  (11123008)
        481365.94   3668652.38     1424.13249  (11123008)              481385.94
3668652.38     1318.23130  (11123008)
        481405.94   3668652.38     1202.54426  (11123008)              481425.94
3668652.38     1080.23498  (11123008)
        481445.94   3668652.38      954.71422  (11123008)              481465.94
3668652.38      829.31367  (11123008)
        481485.94   3668652.38      707.30870  (11123008)              481925.94
3668652.38      206.42445  (11022508)
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        481945.94   3668652.38      195.44368  (11022508)               481965.94
3668652.38      179.80560  (11022508)
        481985.94   3668652.38      160.03651  (11022508)               482005.94
3668652.38      145.16758  (12111208)
        482105.94   3668652.38      271.91460  (12111208)               482125.94
3668652.38      259.84054  (12111208)
        482145.94   3668652.38      259.15461  (10112508)               482165.94
3668652.38      341.50970  (10112508)
        482185.94   3668652.38      436.86872  (10112508)               482205.94
3668652.38      526.28755  (10112508)
        482225.94   3668652.38      648.14759  (10112508)               482245.94
3668652.38      700.58640  (10112508)
        482265.94   3668652.38      703.33380  (10112508)               482285.94
3668652.38      673.04941  (10112508)
        482305.94   3668652.38      640.62771  (10112508)               482325.94
3668652.38      438.83442  (10122008)
        482345.94   3668652.38      473.39029  (12010417)               482365.94
3668652.38      480.18516  (12010417)
        482385.94   3668652.38      580.60184  (10012908)               482405.94
3668652.38      797.67642  (10012908)
 *** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
Vista\Gran Vista\Gran Vista.i ***        04/27/22
 *** AERMET - VERSION  19191 ***   ***
                       ***        08:26:34

                                  PAGE 293
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL  SigA Data

                              *** THE   1ST HIGHEST  1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP:  ALL      ***
                                  INCLUDING SOURCE(S):     L0000001    , L0000002
, L0000003    , L0000004    , L0000005    ,
                  L0000006    , L0000007    , L0000008    , L0000009    , L0000010
, L0000011    , L0000012    , L0000013    ,
                  L0000014    , L0000015    , L0000016    , L0000017    , L0000018
, L0000019    , L0000020    , L0000021    ,
                  L0000022    , L0000023    , L0000024    , L0000025    , L0000026
, L0000027    , L0000028    ,  . . .      ,

                                                *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                             ** CONC OF PM_10    IN MICROGRAMS/M**3
                  **

      X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)              X-COORD (M)
Y-COORD (M)        CONC     (YYMMDDHH)
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - -
        482425.94   3668652.38     1407.94777  (10012908)               482445.94
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3668652.38     2167.45471  (10012908)
        482465.94   3668652.38     2966.56418  (10012908)                482485.94
3668652.38     3666.42183  (10012908)
        482505.94   3668652.38     3898.64435  (10012908)                482525.94
3668652.38     3979.52129  (10012908)
        482545.94   3668652.38     3484.45944  (10012908)                482565.94
3668652.38     2738.08477  (10012908)
        482585.94   3668652.38      947.26779  (10012908)                482605.94
3668652.38      941.18917  (12111908)
        482625.94   3668652.38      898.84790  (12111908)                482645.94
3668652.38      820.78227  (12111908)
        482665.94   3668652.38      717.84459  (12111908)                482685.94
3668652.38      602.16058  (12111908)
        482705.94   3668652.38      491.06899  (11112317)                482725.94
3668652.38      411.41016  (11112317)
        482745.94   3668652.38      364.58194  (11112317)                482765.94
3668652.38      350.03566  (12011617)
        482785.94   3668652.38      321.16947  (10032208)                481105.94
3668672.38     1992.85581  (10122708)
        481125.94   3668672.38     1961.17963  (10122708)                481145.94
3668672.38     1912.07149  (10122708)
        481165.94   3668672.38     1846.27655  (10122708)                481185.94
3668672.38     1764.98902  (10122708)
        481205.94   3668672.38     1671.22051  (11123008)                481225.94
3668672.38     1674.42821  (11123008)
        481245.94   3668672.38     1659.55890  (11123008)                481265.94
3668672.38     1626.55626  (11123008)
        481285.94   3668672.38     1575.74723  (11123008)                481305.94
3668672.38     1508.18298  (11123008)
        481325.94   3668672.38     1425.42983  (11123008)                481345.94
3668672.38     1329.56963  (11123008)
        481365.94   3668672.38     1223.11534  (11123008)                481385.94
3668672.38     1108.90721  (11123008)
        481405.94   3668672.38      990.07064  (11123008)                481425.94
3668672.38      869.81278  (11123008)
        481445.94   3668672.38      751.05560  (11123008)                481465.94
3668672.38      636.85002  (11123008)
        481485.94   3668672.38      529.81809  (11123008)                481505.94
3668672.38      459.75864  (12011608)
        481945.94   3668672.38      178.87457  (11022508)                481965.94
3668672.38      161.82800  (11022508)
        481985.94   3668672.38      141.42734  (11022508)                482005.94
3668672.38      155.40506  (12111208)
        482105.94   3668672.38      264.57423  (12111208)                482125.94
3668672.38      251.25549  (12111208)
        482145.94   3668672.38      256.11529  (10112508)                482165.94
3668672.38      347.92573  (10112508)
        482185.94   3668672.38      443.58382  (10112508)                482205.94
3668672.38      530.10399  (10112508)
        482225.94   3668672.38      619.64950  (10112508)                482245.94
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3668672.38      688.30435  (10112508)
        482265.94   3668672.38      666.52857  (10112508)                482285.94
3668672.38      607.00906  (10112508)
        482305.94   3668672.38      595.96006  (10112508)                482325.94
3668672.38      437.14518  (10122008)
        482345.94   3668672.38      438.58459  (12010417)                482365.94
3668672.38      438.56891  (12010417)
        482385.94   3668672.38      567.01032  (10012908)                482405.94
3668672.38      767.78536  (10012908)
        482425.94   3668672.38     1305.53213  (10012908)                482445.94
3668672.38     2035.30486  (10012908)
        482465.94   3668672.38     2875.85881  (10012908)                482485.94
3668672.38     3625.48053  (10012908)
        482505.94   3668672.38     3994.77881  (10012908)                482525.94
3668672.38     3990.23622  (10012908)
        482545.94   3668672.38     3544.30336  (10012908)                482565.94
3668672.38     2872.39436  (10012908)
        482585.94   3668672.38     1102.49635  (10012908)                482605.94
3668672.38      929.79867  (12111908)
        482625.94   3668672.38      907.63227  (12111908)                482645.94
3668672.38      847.48494  (12111908)
        482665.94   3668672.38      757.80979  (12111908)                482685.94
3668672.38      650.20898  (12111908)
        482705.94   3668672.38      536.34353  (12111908)                482725.94
3668672.38      425.67953  (12111908)
        482745.94   3668672.38      388.66026  (11112317)                481105.94
3668692.38     1870.35850  (10122708)
        481125.94   3668692.38     1811.25827  (10122708)                481145.94
3668692.38     1737.13818  (10122708)
 *** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
Vista\Gran Vista\Gran Vista.i ***        04/27/22
 *** AERMET - VERSION  19191 ***   ***
                       ***        08:26:34

                                  PAGE 294
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL  SigA Data

                               *** THE   1ST HIGHEST  1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP:  ALL      ***
                                  INCLUDING SOURCE(S):     L0000001    , L0000002
, L0000003    , L0000004    , L0000005    ,
                  L0000006    , L0000007    , L0000008    , L0000009    , L0000010
, L0000011    , L0000012    , L0000013    ,
                  L0000014    , L0000015    , L0000016    , L0000017    , L0000018
, L0000019    , L0000020    , L0000021    ,
                  L0000022    , L0000023    , L0000024    , L0000025    , L0000026
, L0000027    , L0000028    ,  . . .      ,

                                                *** DISCRETE CARTESIAN RECEPTOR POINTS
***
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** CONC OF PM_10 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
481165.94	3668692.38	1649.41743	(10122708)	481185.94	3668692.38	1625.17204	(11123008)
481205.94	3668692.38	1618.18334	(11123008)	481225.94	3668692.38	1593.96438	(11123008)
481245.94	3668692.38	1552.67199	(11123008)	481265.94	3668692.38	1495.03775	(11123008)
481285.94	3668692.38	1422.28484	(11123008)	481365.94	3668692.38	1020.93118	(11123008)
481385.94	3668692.38	906.25304	(11123008)	481405.94	3668692.38	791.51373	(11123008)
481425.94	3668692.38	679.58739	(11123008)	481445.94	3668692.38	573.14575	(11123008)
481465.94	3668692.38	475.77751	(12011608)	481485.94	3668692.38	424.33312	(12011608)
481505.94	3668692.38	379.27737	(12011608)	481945.94	3668692.38	162.55056	(11022508)
481965.94	3668692.38	144.53115	(11022508)	481985.94	3668692.38	130.59244	(12111208)
482005.94	3668692.38	165.08651	(12111208)	482105.94	3668692.38	255.31625	(12111208)
482125.94	3668692.38	239.76385	(12111208)	482145.94	3668692.38	248.03046	(10112508)
482165.94	3668692.38	354.16674	(10112508)	482185.94	3668692.38	446.03237	(10112508)
482205.94	3668692.38	534.16806	(10112508)	482225.94	3668692.38	609.23643	(10112508)
482245.94	3668692.38	691.76127	(10112508)	482265.94	3668692.38	617.06161	(10112508)
482285.94	3668692.38	544.87997	(10112508)	482305.94	3668692.38	528.01690	(10112508)
482325.94	3668692.38	461.50590	(10112508)	482345.94	3668692.38	383.41474	(12010417)
482365.94	3668692.38	406.14233	(12010417)	482385.94	3668692.38	466.65830	(10012908)
482405.94	3668692.38	614.63492	(10012908)	482425.94	3668692.38	1085.65363	(10012908)
482445.94	3668692.38	1750.41208	(10012908)	482465.94	3668692.38	2533.97153	(10012908)
482485.94	3668692.38	3263.49463	(10012908)	482505.94	3668692.38	3752.72714	(10012908)
482525.94	3668692.38	3797.70499	(10012908)	482545.94	3668692.38	3552.25976	(10012908)

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        482565.94   3668692.38     2832.12304  (10012908)               482585.94
3668692.38     1333.77109  (10012908)
        482605.94   3668692.38      909.81911  (12111908)               482625.94
3668692.38      907.26391  (12111908)
        482645.94   3668692.38      865.63649  (12111908)               482665.94
3668692.38      791.11752  (12111908)
        482685.94   3668692.38      693.83951  (12111908)               482705.94
3668692.38      585.51018  (12111908)
        482725.94   3668692.38      475.76235  (12111908)               481125.94
3668712.38     1628.00970  (10122708)
        481145.94   3668712.38     1575.47816  (11123008)               481165.94
3668712.38     1575.50654  (11123008)
        481185.94   3668712.38     1559.29508  (11123008)               481205.94
3668712.38     1526.76072  (11123008)
        481225.94   3668712.38     1478.37930  (11123008)               481245.94
3668712.38     1415.08233  (11123008)
        481365.94   3668712.38      828.35810  (11123008)               481385.94
3668712.38      719.56794  (11123008)
        481405.94   3668712.38      614.52510  (11123008)               481425.94
3668712.38      515.61926  (11123008)
        481445.94   3668712.38      439.27562  (12011608)               481465.94
3668712.38      392.40508  (12011608)
        481485.94   3668712.38      351.66798  (12011608)               481505.94
3668712.38      317.18932  (12011608)
        481525.94   3668712.38      289.00854  (12011608)               481945.94
3668712.38      149.49486  (11022508)
        481965.94   3668712.38      129.22608  (11022508)               481985.94
3668712.38      140.22695  (12111208)
        482005.94   3668712.38      173.91510  (12111208)               482025.94
3668712.38      206.49194  (12111208)
        482125.94   3668712.38      226.45179  (12111208)               482145.94
3668712.38      241.94513  (10112508)
        482165.94   3668712.38      360.44505  (10112508)               482185.94
3668712.38      447.94536  (10112508)
        482205.94   3668712.38      538.54827  (10112508)               482225.94
3668712.38      608.58169  (10112508)
        482245.94   3668712.38      685.45629  (10112508)               482265.94
3668712.38      569.81792  (10112508)
 *** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
Vista\Gran Vista\Gran Vista.i ***        04/27/22
 *** AERMET - VERSION  19191 ***   ***
                      ***        08:26:34

                                 PAGE 295
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL  SigA Data

                             *** THE   1ST HIGHEST  1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP:  ALL      ***
                                 INCLUDING SOURCE(S):     L0000001    , L0000002
, L0000003    , L0000004    , L0000005    ,
```

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                 L0000006    , L0000007    , L0000008    , L0000009    , L0000010
, L0000011    , L0000012    , L0000013    ,
                 L0000014    , L0000015    , L0000016    , L0000017    , L0000018
, L0000019    , L0000020    , L0000021    ,
                 L0000022    , L0000023    , L0000024    , L0000025    , L0000026
, L0000027    , L0000028    ,  . . .      ,

                                          *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                      ** CONC OF PM_10    IN MICROGRAMS/M**3
                  **

      X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)              X-COORD (M)
Y-COORD (M)        CONC     (YYMMDDHH)
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        482285.94   3668712.38      511.12252  (10112508)               482305.94
3668712.38      469.60973  (10122008)
        482325.94   3668712.38      416.08380  (10122008)               482345.94
3668712.38      301.14212  (10012617)
        482365.94   3668712.38      372.99816  (12010417)               482385.94
3668712.38      406.62364  (12010417)
        482405.94   3668712.38      485.19119  (10012908)               482425.94
3668712.38      864.72721  (10012908)
        482445.94   3668712.38     1427.88688  (10012908)               482465.94
3668712.38     2136.14533  (10012908)
        482485.94   3668712.38     2843.00936  (10012908)               482505.94
3668712.38     3400.67125  (10012908)
        482525.94   3668712.38     3627.00047  (10012908)               482545.94
3668712.38     3462.17796  (10012908)
        482565.94   3668712.38     2627.43355  (10012908)               482585.94
3668712.38     1673.21657  (10012908)
        482605.94   3668712.38     1140.28844  (10012908)               482625.94
3668712.38      898.36759  (12111908)
        482645.94   3668712.38      874.96970  (12111908)               482665.94
3668712.38      816.87411  (12111908)
        482685.94   3668712.38      732.23366  (12111908)               482705.94
3668712.38      631.33287  (12111908)
        482725.94   3668712.38      524.50366  (12111908)               481125.94
3668732.38     1531.93871  (11123008)
        481145.94   3668732.38     1522.91507  (11123008)               481165.94
3668732.38     1498.40394  (11123008)
        481185.94   3668732.38     1458.62303  (11123008)               481205.94
3668732.38     1404.23395  (11123008)
        481385.94   3668732.38      555.43570  (11123008)               481405.94
3668732.38      463.82360  (11123008)
        481425.94   3668732.38      406.25258  (12011608)               481445.94
3668732.38      363.61240  (12011608)
        481465.94   3668732.38      326.82070  (12011608)               481485.94
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3668732.38      295.90338  (12011608)
        481505.94   3668732.38      270.68178  (12011608)                481965.94
3668732.38      117.78227  (12111208)
        481985.94   3668732.38      149.38947  (12111208)                482005.94
3668732.38      181.93754  (12111208)
        482025.94   3668732.38      212.28350  (12111208)                482125.94
3668732.38      211.99639  (12111208)
        482145.94   3668732.38      242.85023  (10112508)                482165.94
3668732.38      356.80103  (10112508)
        482185.94   3668732.38      453.09969  (10112508)                482205.94
3668732.38      542.83588  (10112508)
        482225.94   3668732.38      608.92689  (10112508)                482245.94
3668732.38      665.62836  (10112508)
        482265.94   3668732.38      571.66858  (10112508)                482285.94
3668732.38      496.56957  (10122008)
        482305.94   3668732.38      459.46698  (10122008)                482325.94
3668732.38      411.21966  (10122008)
        482345.94   3668732.38      349.84302  (10122008)                482365.94
3668732.38      350.60978  (12010417)
        482385.94   3668732.38      370.57085  (12010417)                482405.94
3668732.38      338.64237  (10012908)
        482425.94   3668732.38      539.66765  (10012908)                482445.94
3668732.38      976.66328  (10012908)
        482465.94   3668732.38     1585.78845  (10012908)                482485.94
3668732.38     2192.44729  (10012908)
        482505.94   3668732.38     2767.40205  (10012908)                482525.94
3668732.38     3079.57166  (10012908)
        482545.94   3668732.38     3296.87894  (10012908)                482565.94
3668732.38     2598.31925  (10012908)
        482585.94   3668732.38     1959.43781  (10012908)                482605.94
3668732.38     1369.90861  (10012908)
        482625.94   3668732.38      888.83489  (10012908)                482645.94
3668732.38      876.03246  (12111908)
        482665.94   3668732.38      834.65574  (12111908)                482685.94
3668732.38      763.78250  (12111908)
        482705.94   3668732.38      672.32492  (12111908)                482725.94
3668732.38      570.31404  (12111908)
        482745.94   3668732.38      467.00571  (12111908)                481145.94
3668752.38     1436.17346  (11123008)
        481165.94   3668752.38     1390.13422  (11123008)                481405.94
3668752.38      376.36958  (12011608)
        481425.94   3668752.38      337.62723  (12011608)                481445.94
3668752.38      304.43077  (12011608)
        481465.94   3668752.38      276.72458  (12011608)                481485.94
3668752.38      254.27731  (12011608)
        481505.94   3668752.38      239.29884  (10120708)                481965.94
3668752.38      126.85097  (12111208)
 *** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
Vista\Gran Vista\Gran Vista.i ***        04/27/22
 *** AERMET - VERSION  19191 ***   ***
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*** MODELOPTs: RegDFAULT CONC ELEV RURAL SigA Data

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 , L0000005 , L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 , L0000013 , L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 , L0000021 , L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
481985.94	3668752.38	158.04864	(12111208)	482005.94	3668752.38	189.08616	(12111208)
482025.94	3668752.38	216.89797	(12111208)	482125.94	3668752.38	197.57162	(10112508)
482145.94	3668752.38	256.90397	(10112508)	482165.94	3668752.38	345.12072	(10112508)
482185.94	3668752.38	460.13124	(10112508)	482205.94	3668752.38	545.18810	(10112508)
482225.94	3668752.38	611.48254	(10112508)	482245.94	3668752.38	656.35053	(10112508)
482265.94	3668752.38	605.44051	(10112508)	482285.94	3668752.38	485.53437	(10122008)
482305.94	3668752.38	444.06018	(10122008)	482325.94	3668752.38	400.87974	(10122008)
482345.94	3668752.38	349.99032	(10122008)	482365.94	3668752.38	332.33172	(10012617)
482385.94	3668752.38	329.94361	(10012617)	482405.94	3668752.38	343.83471	(10012908)
482425.94	3668752.38	491.98509	(10012908)	482445.94	3668752.38	887.55086	(10012908)
482465.94	3668752.38	1464.17320	(10012908)	482485.94	3668752.38	2115.59730	(10012908)
482505.94	3668752.38	2703.57466	(10012908)	482525.94	3668752.38	3116.79510	(10012908)

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        482545.94   3668752.38     3358.62371  (10012908)              482565.94
3668752.38     3050.89465  (10012908)
        482585.94   3668752.38     2280.62229  (10012908)              482605.94
3668752.38     1536.44154  (10012908)
        482625.94   3668752.38      931.90390  (10012908)              482645.94
3668752.38      869.68197  (12111908)
        482665.94   3668752.38      844.77950  (12111908)              482685.94
3668752.38      788.43917  (12111908)
        482705.94   3668752.38      708.09361  (12111908)              482725.94
3668752.38      612.91030  (12111908)
        482745.94   3668752.38      512.02836  (12111908)              482765.94
3668752.38      413.60591  (12111908)
        481405.94   3668772.38      314.15570  (12011608)              481425.94
3668772.38      284.22604  (12011608)
        481445.94   3668772.38      259.41157  (12011608)              481465.94
3668772.38      239.44175  (12011608)
        481485.94   3668772.38      230.58783  (10120708)              481965.94
3668772.38      135.60657  (12111208)
        481985.94   3668772.38      166.07821  (12111208)              482005.94
3668772.38      195.29309  (12111208)
        482025.94   3668772.38      220.27874  (12111208)              482125.94
3668772.38      213.07139  (10112508)
        482145.94   3668772.38      275.88703  (10112508)              482165.94
3668772.38      344.99383  (10112508)
        482185.94   3668772.38      466.27201  (10112508)              482205.94
3668772.38      545.41367  (10112508)
        482225.94   3668772.38      607.95692  (10112508)              482245.94
3668772.38      647.39334  (10112508)
        482265.94   3668772.38      627.53848  (10112508)              482285.94
3668772.38      474.60546  (10122008)
        482305.94   3668772.38      433.11916  (10122008)              482325.94
3668772.38      373.59839  (10122008)
        482345.94   3668772.38      274.58050  (10012617)              482365.94
3668772.38      315.77235  (10012617)
        482385.94   3668772.38      310.58204  (10012617)              482405.94
3668772.38      316.35029  (10012617)
        482425.94   3668772.38      405.49379  (10012908)              482445.94
3668772.38      761.12372  (10012908)
        482465.94   3668772.38     1322.03382  (10012908)              482485.94
3668772.38     1907.98740  (10012908)
        482505.94   3668772.38     2490.62866  (10012908)              482525.94
3668772.38     2962.13550  (10012908)
        482545.94   3668772.38     3062.27023  (10012908)              482565.94
3668772.38     2809.55246  (10012908)
        482585.94   3668772.38     2274.31150  (10012908)              482605.94
3668772.38     1583.07351  (10012908)
        482625.94   3668772.38     1000.55125  (10012908)              482645.94
3668772.38      856.34883  (12111908)
        482665.94   3668772.38      847.58913  (12111908)              482685.94
3668772.38      806.17276  (12111908)
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*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 , L0000005 ,
L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 , L0000013 ,
L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 , L0000021 ,
L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
481445.94	3668792.38	225.99158	(12011608)	481465.94	3668792.38	222.77258	(10120708)
481965.94	3668792.38	143.81836	(12111208)	481985.94	3668792.38	173.40346	(12111208)
482005.94	3668792.38	200.49365	(12111208)	482025.94	3668792.38	222.47362	(12111208)
482045.94	3668792.38	235.94884	(12111208)	482145.94	3668792.38	291.33981	(10112508)
482165.94	3668792.38	365.45360	(10112508)	482185.94	3668792.38	463.65563	(10112508)
482205.94	3668792.38	541.56294	(10112508)	482225.94	3668792.38	596.94439	(10112508)
482245.94	3668792.38	615.81766	(10112508)	482265.94	3668792.38	568.84752	(10112508)
482285.94	3668792.38	465.47766	(10122008)	482305.94			

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3668792.38      427.91575  (10122008)
        482325.94   3668792.38      373.19435  (10122008)              482345.94
3668792.38      299.31986  (10122008)
        482365.94   3668792.38      274.43877  (10012617)              482385.94
3668792.38      291.56030  (10012617)
        482405.94   3668792.38      321.73694  (12010417)              482425.94
3668792.38      292.69464  (10012908)
        482445.94   3668792.38      589.08480  (10012908)              482465.94
3668792.38     1089.12364  (10012908)
        482485.94   3668792.38     1586.10235  (10012908)              482505.94
3668792.38     2135.94527  (10012908)
        482525.94   3668792.38     2623.53046  (10012908)              482545.94
3668792.38     2909.59648  (10012908)
        482565.94   3668792.38     2525.21925  (10012908)              482585.94
3668792.38     2006.26061  (10012908)
        482605.94   3668792.38     1253.18612  (10012908)              482625.94
3668792.38      797.19927  (12111908)
        482645.94   3668792.38      836.82899  (12111908)              482665.94
3668792.38      843.22245  (12111908)
        482685.94   3668792.38      816.81393  (12111908)              482705.94
3668792.38      761.93539  (12111908)
        482725.94   3668792.38      685.14884  (12111908)              482745.94
3668792.38      595.18171  (12111908)
        482765.94   3668792.38      520.92245  (12111908)              482785.94
3668792.38      406.22540  (12111908)
        482805.94   3668792.38      326.08566  (10032208)              481445.94
3668812.38      217.94917  (10122108)
        481465.94   3668812.38      220.19688  (10120708)              481985.94
3668812.38      179.90371  (12111208)
        482005.94   3668812.38      204.68273  (12111208)              482025.94
3668812.38      223.51477  (12111208)
        482045.94   3668812.38      233.64823  (12111208)              482145.94
3668812.38      294.66677  (10112508)
        482165.94   3668812.38      373.47697  (10112508)              482185.94
3668812.38      456.01287  (10112508)
        482205.94   3668812.38      525.39953  (10112508)              482225.94
3668812.38      590.23645  (10112508)
        482245.94   3668812.38      618.21047  (10112508)              482265.94
3668812.38      595.90741  (10112508)
        482285.94   3668812.38      492.18782  (10112508)              482305.94
3668812.38      422.64387  (10122008)
        482325.94   3668812.38      375.70368  (10122008)              482345.94
3668812.38      324.41519  (10122008)
        482365.94   3668812.38      255.61793  (10122008)              482385.94
3668812.38      276.21466  (10012617)
        482405.94   3668812.38      294.97697  (10012617)              482425.94
3668812.38      250.89436  (10122908)
        482445.94   3668812.38      489.77800  (10012908)              482465.94
3668812.38      920.84944  (10012908)
        482485.94   3668812.38     1372.55208  (10012908)              482505.94
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3668812.38   1723.01417 (10012908)
        482525.94   3668812.38   1950.91838 (10012908)   482545.94
3668812.38   2024.41132 (10012908)
        482565.94   3668812.38   1875.63334 (10012908)   482585.94
3668812.38   1609.75421 (10012908)
        482605.94   3668812.38   1321.16236 (10012908)   482625.94
3668812.38   899.97134 (10012908)
        482645.94   3668812.38   811.32657 (12111908)   482665.94
3668812.38   831.81294 (12111908)
        482685.94   3668812.38   820.41095 (12111908)   482705.94
3668812.38   779.43608 (12111908)
        482725.94   3668812.38   725.93456 (12111908)   482745.94
3668812.38   639.06809 (12111908)
        482765.94   3668812.38   609.14527 (12111908)   482785.94
3668812.38   447.86859 (12111908)

                              *** THE   1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL   ***
                                 INCLUDING SOURCE(S):   L0000001   , L0000002 , L0000003   , L0000004   , L0000005   ,
                 L0000006   , L0000007   , L0000008   , L0000009   , L0000010 , L0000011   , L0000012   , L0000013   ,
                 L0000014   , L0000015   , L0000016   , L0000017   , L0000018 , L0000019   , L0000020   , L0000021   ,
                 L0000022   , L0000023   , L0000024   , L0000025   , L0000026 , L0000027   , L0000028   , . . .   ,

                                                *** DISCRETE CARTESIAN RECEPTOR POINTS ***

                                          ** CONC OF PM_10   IN MICROGRAMS/M**3
                  **

      X-COORD (M) Y-COORD (M)   CONC   (YYMMDDHH)   X-COORD (M) Y-COORD (M)   CONC   (YYMMDDHH)
 -
        482805.94   3668812.38   359.74435 (12111908)   482825.94
3668812.38   319.84373 (10032208)
        481445.94   3668832.38   275.28780 (10120708)   481985.94
3668832.38   185.52659 (12111208)
        482005.94   3668832.38   207.69889 (12111208)   482025.94
3668832.38   223.33194 (12111208)

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        482045.94   3668832.38      230.14167  (12111208)              482145.94
3668832.38      294.15763  (10112508)
        482165.94   3668832.38      371.69447  (10112508)              482185.94
3668832.38      446.68247  (10112508)
        482205.94   3668832.38      512.23981  (10112508)              482225.94
3668832.38      581.44759  (10112508)
        482245.94   3668832.38      609.65727  (10112508)              482265.94
3668832.38      607.74991  (10112508)
        482285.94   3668832.38      555.11388  (10112508)              482305.94
3668832.38      503.19582  (10112508)
        482325.94   3668832.38      421.40313  (10112508)              482345.94
3668832.38      358.98196  (10112508)
        482365.94   3668832.38      269.76637  (10122008)              482385.94
3668832.38      261.06646  (10012617)
        482405.94   3668832.38      280.66881  (10012617)              482425.94
3668832.38      239.83359  (10122908)
        482445.94   3668832.38      408.60918  (10012908)              482465.94
3668832.38      786.75240  (10012908)
        482485.94   3668832.38     1191.57203  (10012908)              482505.94
3668832.38     1649.03615  (10012908)
        482525.94   3668832.38     1956.33957  (10012908)              482545.94
3668832.38     2012.49356  (10012908)
        482565.94   3668832.38     2006.02173  (10012908)              482585.94
3668832.38     1842.43906  (10012908)
        482605.94   3668832.38     1490.69058  (10012908)              482625.94
3668832.38     1116.46416  (10012908)
        482645.94   3668832.38      781.43162  (12111908)              482665.94
3668832.38      814.80770  (12111908)
        482685.94   3668832.38      817.46014  (12111908)              482705.94
3668832.38      790.25177  (12111908)
        482725.94   3668832.38      737.17311  (12111908)              482745.94
3668832.38      663.86932  (12111908)
        482765.94   3668832.38      578.45100  (12111908)              482785.94
3668832.38      488.40852  (12111908)
        482805.94   3668832.38      399.32574  (12111908)              482825.94
3668832.38      317.19573  (12111908)
        482845.94   3668832.38      313.18526  (10032208)              481985.94
3668852.38      190.07456  (12111208)
        482005.94   3668852.38      209.58273  (12111208)              482025.94
3668852.38      221.79476  (12111208)
        482045.94   3668852.38      225.43244  (12111208)              482145.94
3668852.38      296.50347  (10112508)
        482165.94   3668852.38      374.74264  (10112508)              482185.94
3668852.38      446.28168  (10112508)
        482205.94   3668852.38      512.98466  (10112508)              482225.94
3668852.38      569.84108  (10112508)
        482245.94   3668852.38      600.52316  (10112508)              482265.94
3668852.38      596.65858  (10112508)
        482285.94   3668852.38      555.94301  (10112508)              482305.94
3668852.38      482.90841  (10112508)
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        482325.94   3668852.38      401.94768  (10112508)                482345.94
3668852.38      346.70467  (10112508)
        482365.94   3668852.38      266.70080  (10122008)                482385.94
3668852.38      246.13951  (10012617)
        482405.94   3668852.38      262.31751  (10012617)                482425.94
3668852.38      229.70105  (10122908)
        482445.94   3668852.38      341.14192  (10012908)                482465.94
3668852.38      661.70417  (10012908)
        482485.94   3668852.38     1031.86933  (10012908)                482505.94
3668852.38     1563.02735  (10012908)
        482525.94   3668852.38     1973.60707  (10012908)                482545.94
3668852.38     2155.47364  (10012908)
        482565.94   3668852.38     2070.63670  (10012908)                482585.94
3668852.38     1731.35000  (10012908)
        482605.94   3668852.38     1498.88906  (10012908)                482625.94
3668852.38     1084.40881  (10012908)
        482645.94   3668852.38      753.76918  (10012908)                482665.94
3668852.38      792.53710  (12111908)
        482685.94   3668852.38      808.27854  (12111908)                482705.94
3668852.38      794.17571  (12111908)
        482725.94   3668852.38      753.92385  (12111908)                482745.94
3668852.38      691.68964  (12111908)
        482765.94   3668852.38      613.10255  (12111908)                482785.94
3668852.38      526.61301  (12111908)
 *** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
Vista\Gran Vista\Gran Vista.i ***        04/27/22
 *** AERMET - VERSION  19191 ***   ***
                      ***        08:26:34

                                  PAGE 299
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL  SigA Data

                              *** THE   1ST HIGHEST  1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP:  ALL      ***
                                  INCLUDING SOURCE(S):     L0000001    , L0000002
, L0000003    , L0000004    , L0000005    ,
                  L0000006    , L0000007    , L0000008    , L0000009    , L0000010
, L0000011    , L0000012    , L0000013    ,
                  L0000014    , L0000015    , L0000016    , L0000017    , L0000018
, L0000019    , L0000020    , L0000021    ,
                  L0000022    , L0000023    , L0000024    , L0000025    , L0000026
, L0000027    , L0000028    ,  . . .      ,

                                             *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                          ** CONC OF PM_10    IN MICROGRAMS/M**3
                  **

      X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)              X-COORD (M)
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Y-COORD (M)        CONC     (YYMMDDHH)
 - - -
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3668872.38   1551.78446 (10012908)
        482625.94   3668872.38   1193.59856 (10012908)   482645.94
3668872.38   939.24264 (10012908)
        482665.94   3668872.38   765.69665 (12111908)   482685.94
3668872.38   793.20504 (12111908)
        482705.94   3668872.38   792.57701 (12111908)   482725.94
3668872.38   764.88832 (12111908)
        482745.94   3668872.38   713.90203 (12111908)   482765.94
3668872.38   650.00512 (12111908)
        482785.94   3668872.38   562.81510 (12111908)   482805.94
3668872.38   477.21340 (12111908)
        482825.94   3668872.38   393.10367 (12111908)   482845.94
3668872.38   314.35698 (12111908)
        482865.94   3668872.38   305.01885 (10032208)   482885.94
3668872.38   299.21737 (10032208)
        482905.94   3668872.38   289.20240 (10032208)   482925.94
3668872.38   275.52015 (10032208)
        482945.94   3668872.38   258.87012 (10032208)   482965.94
3668872.38   244.64151 (11011209)
        482985.94   3668872.38   249.22777 (10110308)   483005.94
3668872.38   251.99446 (10110308)
        483025.94   3668872.38   252.37445 (10110308)   483045.94
3668872.38   250.16124 (10110308)
        483065.94   3668872.38   245.62341 (10110308)   483085.94
3668872.38   238.63709 (10110308)
        483105.94   3668872.38   245.46939 (12011909)   483125.94
3668872.38   253.84395 (12011909)
        483145.94   3668872.38   260.30765 (12011909)   483165.94
3668872.38   265.05487 (12011909)
        483185.94   3668872.38   267.77079 (12011909)   482005.94
3668892.38   210.27773 (12111208)
        482025.94   3668892.38   216.30467 (12111208)   482045.94
3668892.38   213.42630 (12111208)

                              *** THE   1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL   ***
                                 INCLUDING SOURCE(S):   L0000001   , L0000002 , L0000003   , L0000004   , L0000005   ,
                 L0000006   , L0000007   , L0000008   , L0000009   , L0000010 , L0000011   , L0000012   , L0000013   ,
                 L0000014   , L0000015   , L0000016   , L0000017   , L0000018 , L0000019   , L0000020   , L0000021   ,
                 L0000022   , L0000023   , L0000024   , L0000025   , L0000026

, L0000027   , L0000028   , . . .   ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_10   IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
482065.94	3668892.38	201.05003	(12111208)	482125.94	3668892.38	234.36268	(10112508)
482145.94	3668892.38	288.24681	(10112508)	482165.94	3668892.38	347.79736	(10112508)
482185.94	3668892.38	450.98254	(10112508)	482205.94	3668892.38	509.14131	(10112508)
482225.94	3668892.38	555.11887	(10112508)	482245.94	3668892.38	576.01878	(10112508)
482265.94	3668892.38	581.05068	(10112508)	482285.94	3668892.38	421.93633	(10122008)
482305.94	3668892.38	390.15756	(10122008)	482325.94	3668892.38	351.25898	(10122008)
482345.94	3668892.38	305.92437	(10122008)	482365.94	3668892.38	264.24374	(10122008)
482385.94	3668892.38	219.10565	(10012617)	482405.94	3668892.38	237.97705	(10012617)
482425.94	3668892.38	212.05623	(10122908)	482445.94	3668892.38	239.41796	(10012908)
482465.94	3668892.38	470.87138	(10012908)	482485.94	3668892.38	770.93317	(10012908)
482505.94	3668892.38	1197.05709	(10012908)	482525.94	3668892.38	1473.07421	(10012908)
482545.94	3668892.38	1710.77348	(10012908)	482565.94	3668892.38	1896.42836	(10012908)
482585.94	3668892.38	1948.26046	(10012908)	482605.94	3668892.38	1823.38519	(10012908)
482625.94	3668892.38	1248.34627	(10012908)	482645.94	3668892.38	1001.86721	(10012908)
482665.94	3668892.38	760.05422	(10012908)	482685.94	3668892.38	773.80278	(12111908)
482705.94	3668892.38	785.33304	(12111908)	482725.94	3668892.38	770.04793	(12111908)
482745.94	3668892.38	730.41619	(12111908)	482765.94	3668892.38	671.03553	(12111908)
482785.94	3668892.38	597.38094	(12111908)	482805.94	3668892.38	514.41768	(12111908)
482825.94	3668892.38	430.49417	(12111908)	482845.94	3668892.38	349.58256	(12111908)

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        482865.94   3668892.38      302.10908  (10032208)                482885.94
3668892.38      299.25361  (10032208)
        482905.94   3668892.38      292.05310  (10032208)                482925.94
3668892.38      280.94008  (10032208)
        482945.94   3668892.38      266.50532  (10032208)                482965.94
3668892.38      249.64462  (10032208)
        482985.94   3668892.38      243.09193  (10110308)                483005.94
3668892.38      247.60801  (10110308)
        483025.94   3668892.38      249.89638  (10110308)                483045.94
3668892.38      249.45758  (10110308)
        483065.94   3668892.38      246.35713  (10110308)                483085.94
3668892.38      241.04929  (10110308)
        483105.94   3668892.38      234.17137  (10110308)                483125.94
3668892.38      242.35449  (12011909)
        483145.94   3668892.38      250.36880  (12011909)                483165.94
3668892.38      256.42571  (12011909)
        483185.94   3668892.38      260.75051  (12011909)                483205.94
3668892.38      263.41323  (12011909)
        483225.94   3668892.38      264.20128  (12011909)                482005.94
3668912.38      209.03385  (12111208)
        482025.94   3668912.38      212.29026  (12111208)                482045.94
3668912.38      206.54596  (12111208)
        482125.94   3668912.38      237.15755  (10112508)                482145.94
3668912.38      288.79570  (10112508)
        482165.94   3668912.38      346.69486  (10112508)                482185.94
3668912.38      447.71425  (10112508)
        482205.94   3668912.38      502.12704  (10112508)                482225.94
3668912.38      545.85779  (10112508)
        482245.94   3668912.38      564.69324  (10112508)                482265.94
3668912.38      569.61582  (10112508)
        482285.94   3668912.38      414.19165  (10122008)                482305.94
3668912.38      382.92868  (10122008)
        482325.94   3668912.38      343.52020  (10122008)                482345.94
3668912.38      302.69367  (10122008)
        482365.94   3668912.38      260.25943  (10122008)                482385.94
3668912.38      207.78037  (10012617)
        482405.94   3668912.38      222.71670  (10012617)                482425.94
3668912.38      203.76404  (10122908)
        482445.94   3668912.38      220.65893  (10122908)                482465.94
3668912.38      352.33771  (10012908)
        482485.94   3668912.38      578.18008  (10012908)                482505.94
3668912.38      894.45524  (10012908)
 *** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
Vista\Gran Vista\Gran Vista.i ***        04/27/22
 *** AERMET - VERSION  19191 ***   ***
                       ***        08:26:34

                                  PAGE 301
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL  SigA Data
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*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 , L0000005 , L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 , L0000013 , L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 , L0000021 , L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
482525.94	3668912.38	1169.29739	(10012908)	482545.94	3668912.38	1493.45008	(10012908)
482565.94	3668912.38	1759.12245	(10012908)	482585.94	3668912.38	1855.54739	(10012908)
482605.94	3668912.38	1801.93237	(10012908)	482625.94	3668912.38	1255.68646	(10012908)
482645.94	3668912.38	1047.49448	(10012908)	482665.94	3668912.38	809.53919	(10012908)
482685.94	3668912.38	750.25197	(12111908)	482705.94	3668912.38	772.95798	(12111908)
482725.94	3668912.38	769.65714	(12111908)	482745.94	3668912.38	741.53509	(12111908)
482765.94	3668912.38	692.15086	(12111908)	482785.94	3668912.38	626.05693	(12111908)
482805.94	3668912.38	549.08012	(12111908)	482825.94	3668912.38	467.60172	(12111908)
482845.94	3668912.38	387.42025	(12111908)	482865.94	3668912.38	312.19814	(12111908)
482885.94	3668912.38	296.94771	(10032208)	482905.94	3668912.38	292.99532	(10032208)
482925.94	3668912.38	284.49111	(10032208)	482945.94	3668912.38	272.41402	(10032208)
482965.94	3668912.38	257.62076	(10032208)	482985.94	3668912.38	240.51320	(10032208)
483005.94	3668912.38	239.55169	(10110308)	483025.94	3668912.38	242.46826	(10110308)
483045.94	3668912.38	242.64881	(10110308)	483065.94	3668912.38	240.58783	(10110308)
483085.94	3668912.38	237.32797	(10110308)	483105.94			

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3668912.38      233.45101  (10110308)
        483125.94   3668912.38      228.79864  (12011909)                483145.94
3668912.38      239.08648  (12011909)
        483165.94   3668912.38      246.50707  (12011909)                483185.94
3668912.38      252.45351  (12011909)
        483205.94   3668912.38      256.75749  (12011909)                483225.94
3668912.38      259.41682  (12011909)
        482125.94   3668932.38      239.00753  (10112508)                482145.94
3668932.38      289.52490  (10112508)
        482165.94   3668932.38      345.82351  (10112508)                482185.94
3668932.38      444.26737  (10112508)
        482205.94   3668932.38      495.63484  (10112508)                482225.94
3668932.38      537.00927  (10112508)
        482245.94   3668932.38      553.63415  (10112508)                482265.94
3668932.38      558.35207  (10112508)
        482285.94   3668932.38      406.54409  (10122008)                482305.94
3668932.38      375.21257  (10122008)
        482325.94   3668932.38      336.90451  (10122008)                482345.94
3668932.38      297.59731  (10122008)
        482365.94   3668932.38      256.75311  (10122008)                482385.94
3668932.38      201.95791  (10122008)
        482405.94   3668932.38      213.04318  (10012617)                482425.94
3668932.38      194.62228  (12020808)
        482445.94   3668932.38      215.64112  (10122908)                482465.94
3668932.38      276.84946  (10012908)
        482485.94   3668932.38      470.97335  (10012908)                482505.94
3668932.38      731.05493  (10012908)
        482525.94   3668932.38     1011.65016  (10012908)                482545.94
3668932.38     1343.68199  (10012908)
        482565.94   3668932.38     1609.49943  (10012908)                482585.94
3668932.38     1766.64082  (10012908)
        482605.94   3668932.38     1770.66832  (10012908)                482625.94
3668932.38     1246.55744  (10012908)
        482645.94   3668932.38     1078.06807  (10012908)                482665.94
3668932.38      862.03421  (10012908)
        482685.94   3668932.38      723.24918  (12111908)                482705.94
3668932.38      756.01008  (12111908)
        482725.94   3668932.38      764.01456  (12111908)                482745.94
3668932.38      747.35074  (12111908)
        482765.94   3668932.38      708.35538  (12111908)                482785.94
3668932.38      660.54199  (12111908)
        482805.94   3668932.38      580.65305  (12111908)                482825.94
3668932.38      506.09806  (12111908)
        482845.94   3668932.38      423.15420  (12111908)                482865.94
3668932.38      347.18194  (12111908)
        482885.94   3668932.38      292.63713  (10032208)                482905.94
3668932.38      291.88861  (10032208)
        482925.94   3668932.38      286.10761  (10032208)                482945.94
3668932.38      276.56770  (10032208)
        482965.94   3668932.38      263.98439  (10032208)                482985.94
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*** THE   1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL   ***
INCLUDING SOURCE(S):   L0000001   , L0000002 , L0000003   , L0000004   , L0000005   ,
L0000006   , L0000007   , L0000008   , L0000009   , L0000010 , L0000011   , L0000012   , L0000013   ,
L0000014   , L0000015   , L0000016   , L0000017   , L0000018 , L0000019   , L0000020   , L0000021   ,
L0000022   , L0000023   , L0000024   , L0000025   , L0000026 , L0000027   , L0000028   , . . .   ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_10   IN MICROGRAMS/M**3
**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
483005.94	3668932.38	235.77637	(10110308)	483025.94	3668932.38	234.49131	(10110308)
483045.94	3668932.38	237.23359	(10110308)	483065.94	3668932.38	237.92180	(10110308)
483085.94	3668932.38	236.58953	(10110308)	483105.94	3668932.38	233.20258	(10110308)
483125.94	3668932.38	228.09777	(10110308)	483145.94	3668932.38	226.08660	(12011909)
483165.94	3668932.38	235.30117	(12011909)	483185.94	3668932.38	242.60886	(12011909)
483205.94	3668932.38	248.81488	(12011909)	482125.94	3668952.38	240.01715	(10112508)
482145.94	3668952.38	289.29299	(10112508)	482165.94	3668952.38	346.54369	(10112508)
482185.94	3668952.38	439.39774	(10112508)	482205.94	3668952.38	489.03450	(10112508)
482225.94	3668952.38	528.20911	(10112508)	482245.94	3668952.38	542.38834	(10112508)
482265.94	3668952.38	547.56656	(10112508)	482285.94	3668952.38	399.09268	(10122008)

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        482305.94   3668952.38      368.69633  (10122008)              482325.94
3668952.38      331.54405  (10122008)
        482345.94   3668952.38      292.20665  (10122008)              482365.94
3668952.38      252.73825  (10122008)
        482385.94   3668952.38      203.03693  (10122008)              482405.94
3668952.38      201.09614  (10012617)
        482425.94   3668952.38      187.50509  (10122908)              482445.94
3668952.38      208.21302  (10122908)
        482465.94   3668952.38      230.16124  (10012908)              482485.94
3668952.38      395.00279  (10012908)
        482505.94   3668952.38      638.18268  (10012908)              482525.94
3668952.38      886.11163  (10012908)
        482545.94   3668952.38     1188.26900  (10012908)              482565.94
3668952.38     1464.22043  (10012908)
        482585.94   3668952.38     1648.92730  (10012908)              482605.94
3668952.38     1706.83292  (10012908)
        482625.94   3668952.38     1215.66094  (10012908)              482645.94
3668952.38     1046.17361  (10012908)
        482665.94   3668952.38      877.91159  (10012908)              482685.94
3668952.38      695.02389  (10012908)
        482705.94   3668952.38      735.09052  (12111908)              482725.94
3668952.38      753.58224  (12111908)
        482745.94   3668952.38      747.99886  (12111908)              482765.94
3668952.38      719.73586  (12111908)
        482785.94   3668952.38      671.74404  (12111908)              482805.94
3668952.38      615.75828  (12111908)
        482825.94   3668952.38      539.40811  (12111908)              482845.94
3668952.38      457.91293  (12111908)
        482865.94   3668952.38      382.07633  (12111908)              482885.94
3668952.38      310.25935  (12111908)
        482905.94   3668952.38      289.19591  (10032208)              482925.94
3668952.38      285.86269  (10032208)
        482945.94   3668952.38      278.96121  (10032208)              482965.94
3668952.38      268.75368  (10032208)
        482985.94   3668952.38      255.64820  (10032208)              483005.94
3668952.38      240.14802  (10032208)
        483025.94   3668952.38      232.18947  (12011617)              483045.94
3668952.38      231.80166  (10110308)
        483065.94   3668952.38      234.04717  (10110308)              483085.94
3668952.38      234.41509  (10110308)
        483105.94   3668952.38      232.78281  (10110308)              483125.94
3668952.38      231.32179  (10110308)
        483145.94   3668952.38      225.81173  (10110308)              483165.94
3668952.38      222.82802  (12011909)
        483185.94   3668952.38      232.12107  (12011909)              482125.94
3668972.38      241.05044  (10112508)
        482145.94   3668972.38      289.76101  (10112508)              482165.94
3668972.38      350.41752  (10112508)
        482185.94   3668972.38      435.05912  (10112508)              482205.94
3668972.38      482.84171  (10112508)
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        482225.94   3668972.38      519.18142  (10112508)                482245.94
3668972.38      538.49646  (10112508)
        482265.94   3668972.38      537.02474  (10112508)                482285.94
3668972.38      391.87641  (10122008)
        482305.94   3668972.38      362.14717  (10122008)                482325.94
3668972.38      326.28352  (10122008)
        482345.94   3668972.38      287.23044  (10122008)                482365.94
3668972.38      248.18643  (10122008)
        482385.94   3668972.38      203.34741  (10122008)                482405.94
3668972.38      190.98177  (10012617)
 *** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
Vista\Gran Vista\Gran Vista.i ***        04/27/22
 *** AERMET - VERSION  19191 ***   ***
                       ***        08:26:34

                                   PAGE 303
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL  SigA Data

                               *** THE   1ST HIGHEST  1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP:  ALL      ***
                                   INCLUDING SOURCE(S):     L0000001    , L0000002
, L0000003    , L0000004    , L0000005    ,
                  L0000006    , L0000007    , L0000008    , L0000009    , L0000010
, L0000011    , L0000012    , L0000013    ,
                  L0000014    , L0000015    , L0000016    , L0000017    , L0000018
, L0000019    , L0000020    , L0000021    ,
                  L0000022    , L0000023    , L0000024    , L0000025    , L0000026
, L0000027    , L0000028    ,  . . .      ,

                                              *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                         ** CONC OF PM_10    IN MICROGRAMS/M**3
                  **

      X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)              X-COORD (M)
Y-COORD (M)        CONC     (YYMMDDHH)
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - -
        482425.94   3668972.38      180.99167  (10122908)                482445.94
3668972.38      201.30531  (10122908)
        482465.94   3668972.38      218.89920  (10122908)                482485.94
3668972.38      330.47017  (10012908)
        482505.94   3668972.38      535.25496  (10012908)                482525.94
3668972.38      769.92602  (10012908)
        482545.94   3668972.38     1059.79072  (10012908)                482565.94
3668972.38     1323.47529  (10012908)
        482585.94   3668972.38     1527.39930  (10012908)                482605.94
3668972.38     1630.98076  (10012908)
        482625.94   3668972.38     1155.07151  (10012908)                482645.94
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        482705.94   3668972.38      710.76162  (12111908)                482725.94
3668972.38      738.77311  (12111908)
        482745.94   3668972.38      743.72195  (12111908)                482765.94
3668972.38      726.08362  (12111908)
        482785.94   3668972.38      687.72488  (12111908)                482805.94
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        482825.94   3668972.38      564.92863  (12111908)                482845.94
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3668972.38      271.84851  (10032208)
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3668972.38      231.64616  (10110308)
        483105.94   3668972.38      231.32913  (10110308)                483125.94
3668972.38      229.99070  (10110308)
        483145.94   3668972.38      226.02342  (10110308)                483165.94
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        482165.94   3668992.38      355.28368  (10112508)                482185.94
3668992.38      430.36170  (10112508)
        482205.94   3668992.38      476.34774  (10112508)                482225.94
3668992.38      509.61879  (10112508)
        482245.94   3668992.38      527.78368  (10112508)                482265.94
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        482285.94   3668992.38      384.86291  (10122008)                482305.94
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        482325.94   3668992.38      320.89222  (10122008)                482345.94
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        482365.94   3668992.38      244.83691  (10122008)                482385.94
3668992.38      203.12072  (10122008)
        482405.94   3668992.38      181.45683  (12020808)                482425.94
3668992.38      174.85856  (10122908)
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        482525.94   3668992.38      639.27018  (10012908)                482545.94
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        482565.94   3668992.38     1192.49396  (10012908)                482585.94
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3668992.38   1067.32271 (10012908)
        482645.94   3668992.38   989.80938 (10012908)   482665.94
3668992.38   897.38524 (10012908)
        482685.94   3668992.38   772.13460 (10012908)   482705.94
3668992.38   683.65819 (12111908)
        482725.94   3668992.38   720.14418 (12111908)   482745.94
3668992.38   734.88282 (12111908)
        482765.94   3668992.38   727.57968 (12111908)   482785.94
3668992.38   698.99370 (12111908)
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3668992.38   591.69282 (12111908)
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3668992.38   452.10227 (12111908)
        482885.94   3668992.38   376.29768 (12111908)   482905.94
3668992.38   306.94429 (12111908)
        482925.94   3668992.38   280.65118 (10032208)   482945.94
3668992.38   278.84579 (10032208)

                              *** THE   1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL   ***
                                  INCLUDING SOURCE(S):   L0000001   , L0000002 , L0000003   , L0000004   , L0000005   ,
                 L0000006   , L0000007   , L0000008   , L0000009   , L0000010 , L0000011   , L0000012   , L0000013   ,
                 L0000014   , L0000015   , L0000016   , L0000017   , L0000018 , L0000019   , L0000020   , L0000021   ,
                 L0000022   , L0000023   , L0000024   , L0000025   , L0000026 , L0000027   , L0000028   , . . .   ,

                                                 *** DISCRETE CARTESIAN RECEPTOR POINTS ***

                                          ** CONC OF PM_10   IN MICROGRAMS/M**3
                  **

      X-COORD (M) Y-COORD (M)   CONC   (YYMMDDHH)   X-COORD (M) Y-COORD (M)   CONC   (YYMMDDHH)
 -
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3668992.38   264.88857 (10032208)

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3668992.38      223.69464  (10110308)
        483085.94   3668992.38      226.70601  (10110308)              483105.94
3668992.38      228.25291  (10110308)
        483125.94   3668992.38      227.29980  (10110308)              483145.94
3668992.38      225.71193  (10110308)
        482125.94   3669012.38      243.07758  (10112508)              482145.94
3669012.38      296.08136  (10112508)
        482165.94   3669012.38      358.18487  (10112508)              482185.94
3669012.38      425.47545  (10112508)
        482205.94   3669012.38      469.98687  (10112508)              482225.94
3669012.38      505.74121  (10112508)
        482245.94   3669012.38      517.04175  (10112508)              482265.94
3669012.38      516.70331  (10112508)
        482285.94   3669012.38      377.89825  (10122008)              482305.94
3669012.38      349.36077  (10122008)
        482325.94   3669012.38      315.59576  (10122008)              482345.94
3669012.38      276.86076  (10122008)
        482365.94   3669012.38      240.96110  (10122008)              482385.94
3669012.38      202.01862  (10122008)
        482405.94   3669012.38      172.16763  (12020808)              482425.94
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        482445.94   3669012.38      187.27786  (10122908)              482465.94
3669012.38      204.81223  (10122908)
        482485.94   3669012.38      224.76969  (10122908)              482505.94
3669012.38      347.03602  (10012908)
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3669012.38      847.03910  (10012908)
        482565.94   3669012.38     1085.61052  (10012908)              482585.94
3669012.38     1320.35993  (10012908)
        482605.94   3669012.38     1469.40244  (10012908)              482625.94
3669012.38     1044.45738  (10012908)
        482645.94   3669012.38     1038.17670  (10012908)              482665.94
3669012.38      933.94392  (10012908)
        482685.94   3669012.38      812.07976  (10012908)              482705.94
3669012.38      664.01726  (10012908)
        482725.94   3669012.38      698.25542  (12111908)              482745.94
3669012.38      721.96630  (12111908)
        482765.94   3669012.38      724.48297  (12111908)              482785.94
3669012.38      705.70877  (12111908)
        482805.94   3669012.38      668.06426  (12111908)              482825.94
3669012.38      614.94956  (12111908)
        482845.94   3669012.38      558.97759  (12111908)              482865.94
3669012.38      504.64334  (12111908)
        482885.94   3669012.38      408.74407  (12111908)              482905.94
3669012.38      338.87350  (12111908)
        482925.94   3669012.38      276.09730  (10032208)              482945.94
3669012.38      276.50803  (10032208)
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3669012.38      267.26741  (10032208)
        483005.94   3669012.38      257.58823  (10032208)                483025.94
3669012.38      245.62385  (10032208)
        483045.94   3669012.38      231.53302  (10032208)                483065.94
3669012.38      226.52852  (12011617)
        483085.94   3669012.38      222.21134  (12011617)                483105.94
3669012.38      223.18520  (10110308)
        483125.94   3669012.38      224.71637  (10110308)                482125.94
3669032.38      243.62558  (10112508)
        482145.94   3669032.38      295.93303  (10112508)                482165.94
3669032.38      360.78030  (10112508)
        482185.94   3669032.38      420.75450  (10112508)                482205.94
3669032.38      463.43924  (10112508)
        482225.94   3669032.38      496.44903  (10112508)                482245.94
3669032.38      506.67771  (10112508)
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3669032.38      371.07640  (10122008)
        482305.94   3669032.38      343.02254  (10122008)                482325.94
3669032.38      310.34353  (10122008)
        482345.94   3669032.38      271.64661  (10122008)                482365.94
3669032.38      236.70012  (10122008)
        482385.94   3669032.38      200.20863  (10122008)                482405.94
3669032.38      167.32573  (10122008)
        482425.94   3669032.38      162.07786  (10122908)                482445.94
3669032.38      180.44011  (10122908)
        482465.94   3669032.38      197.65525  (10122908)                482485.94
3669032.38      216.93795  (10122908)
 *** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
Vista\Gran Vista\Gran Vista.i ***        04/27/22
 *** AERMET - VERSION  19191 ***   ***
                       ***        08:26:34

                                   PAGE 305
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL  SigA Data

                              *** THE   1ST HIGHEST  1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP:  ALL      ***
                                   INCLUDING SOURCE(S):     L0000001    , L0000002
, L0000003    , L0000004    , L0000005    ,
                  L0000006    , L0000007    , L0000008    , L0000009    , L0000010
, L0000011    , L0000012    , L0000013    ,
                  L0000014    , L0000015    , L0000016    , L0000017    , L0000018
, L0000019    , L0000020    , L0000021    ,
                  L0000022    , L0000023    , L0000024    , L0000025    , L0000026
, L0000027    , L0000028    ,  . . .      ,

                                                *** DISCRETE CARTESIAN RECEPTOR POINTS
***
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** CONC OF PM_10 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
482505.94	3669032.38	304.82861	(10012908)	482525.94	3669032.38	490.14253	(10012908)
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482585.94	3669032.38	1208.29086	(10012908)	482605.94	3669032.38	1366.59185	(10012908)
482625.94	3669032.38	1039.14941	(10012908)	482645.94	3669032.38	1064.29622	(10012908)
482665.94	3669032.38	1037.80462	(10012908)	482685.94	3669032.38	905.73311	(10012908)
482705.94	3669032.38	736.02038	(10012908)	482725.94	3669032.38	673.59911	(12111908)
482745.94	3669032.38	705.48701	(12111908)	482765.94	3669032.38	717.13894	(12111908)
482785.94	3669032.38	707.96548	(12111908)	482805.94	3669032.38	679.38353	(12111908)
482825.94	3669032.38	644.69429	(12111908)	482845.94	3669032.38	576.36221	(12111908)
482865.94	3669032.38	520.48982	(12111908)	482885.94	3669032.38	440.30951	(12111908)
482905.94	3669032.38	373.92520	(12111908)	482925.94	3669032.38	305.23795	(12111908)
482945.94	3669032.38	273.48531	(11112317)	482965.94	3669032.38	272.36915	(10032208)
482985.94	3669032.38	268.17391	(10032208)	483005.94	3669032.38	260.59564	(10032208)
483025.94	3669032.38	250.58919	(10032208)	483045.94	3669032.38	238.14593	(10032208)
483065.94	3669032.38	226.86241	(12011617)	483085.94	3669032.38	228.06369	(12011617)
483105.94	3669032.38	218.72619	(10110308)	482125.94	3669052.38	243.51295	(10112508)
482145.94	3669052.38	293.85143	(10112508)	482165.94	3669052.38	361.35341	(10112508)
482185.94	3669052.38	415.75046	(10112508)	482205.94	3669052.38	456.70378	(10112508)
482225.94	3669052.38	487.97068	(10112508)	482245.94	3669052.38	497.00729	(10112508)
482265.94	3669052.38	497.88594	(10112508)	482285.94	3669052.38	364.53032	(10122008)
482305.94	3669052.38	336.97540	(10122008)	482325.94	3669052.38	305.12646	(10122008)
482345.94	3669052.38	267.20111	(10122008)	482365.94			

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        482425.94   3669052.38      155.89977  (10122908)                482445.94
3669052.38      173.85344  (10122908)
        482465.94   3669052.38      190.60483  (10122908)                482485.94
3669052.38      207.49730  (10122908)
        482505.94   3669052.38      276.23587  (10012908)                482525.94
3669052.38      437.39510  (10012908)
        482545.94   3669052.38      643.56788  (10012908)                482565.94
3669052.38      858.09225  (10012908)
        482585.94   3669052.38     1088.33023  (10012908)                482605.94
3669052.38     1254.93776  (10012908)
        482625.94   3669052.38     1022.28599  (10012908)                482645.94
3669052.38     1080.97444  (10012908)
        482665.94   3669052.38     1014.72022  (10012908)                482685.94
3669052.38      904.47421  (10012908)
        482705.94   3669052.38      755.95492  (10012908)                482725.94
3669052.38      646.80583  (12111908)
        482745.94   3669052.38      685.90976  (12111908)                482765.94
3669052.38      705.92602  (12111908)
        482785.94   3669052.38      705.96037  (12111908)                482805.94
3669052.38      686.43371  (12111908)
        482825.94   3669052.38      649.63852  (12111908)                482845.94
3669052.38      598.53082  (12111908)
        482865.94   3669052.38      537.34049  (12111908)                482885.94
3669052.38      475.87766  (12111908)
        482905.94   3669052.38      401.38217  (12111908)                482925.94
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3669052.38      269.63623  (10032208)
        482985.94   3669052.38      267.58554  (10032208)                483005.94
3669052.38      262.21247  (10032208)
        483025.94   3669052.38      254.09744  (10032208)                483045.94
3669052.38      243.57531  (10032208)
        483065.94   3669052.38      230.87210  (10032208)                483085.94
3669052.38      222.37302  (12011617)
 *** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
Vista\Gran Vista\Gran Vista.i ***        04/27/22
 *** AERMET - VERSION  19191 ***   ***
                      ***        08:26:34

                                  PAGE 306
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL  SigA Data

                             *** THE   1ST HIGHEST  1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP:  ALL      ***
                                  INCLUDING SOURCE(S):     L0000001    , L0000002
, L0000003    , L0000004    , L0000005    ,
                L0000006    , L0000007    , L0000008    , L0000009    , L0000010
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, L0000011    , L0000012    , L0000013    ,
                L0000014    , L0000015    , L0000016    , L0000017    , L0000018
, L0000019    , L0000020    , L0000021    ,
                L0000022    , L0000023    , L0000024    , L0000025    , L0000026
, L0000027    , L0000028    ,  . . .      ,

                                                *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                           ** CONC OF PM_10    IN MICROGRAMS/M**3
                  **

      X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)             X-COORD (M)
Y-COORD (M)        CONC     (YYMMDDHH)
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        482125.94   3669072.38      245.17481  (10112508)               482145.94
3669072.38      290.33289  (10112508)
        482165.94   3669072.38      363.48688  (10112508)               482185.94
3669072.38      410.63413  (10112508)
        482205.94   3669072.38      450.57054  (10112508)               482225.94
3669072.38      473.62358  (10112508)
        482245.94   3669072.38      488.16117  (10112508)               482265.94
3669072.38      488.64576  (10112508)
        482285.94   3669072.38      357.97436  (10122008)               482305.94
3669072.38      330.52375  (10122008)
        482325.94   3669072.38      299.93622  (10122008)               482345.94
3669072.38      266.16481  (10112508)
        482365.94   3669072.38      229.57675  (10122008)               482385.94
3669072.38      196.84184  (10122008)
        482405.94   3669072.38      165.03638  (10122008)               482425.94
3669072.38      150.02864  (10122908)
        482445.94   3669072.38      167.35509  (10122908)               482465.94
3669072.38      184.04122  (10122908)
        482485.94   3669072.38      200.72517  (10122908)               482505.94
3669072.38      230.70200  (10012908)
        482525.94   3669072.38      369.53797  (10012908)               482545.94
3669072.38      553.67957  (10012908)
        482565.94   3669072.38      754.46876  (10012908)               482585.94
3669072.38      937.02678  (10012908)
        482605.94   3669072.38     1147.59064  (10012908)               482625.94
3669072.38      946.90716  (10012908)
        482645.94   3669072.38     1011.84757  (10012908)               482665.94
3669072.38     1006.55700  (10012908)
        482685.94   3669072.38      913.25923  (10012908)               482705.94
3669072.38      781.86263  (10012908)
        482725.94   3669072.38      645.15259  (10012908)               482745.94
3669072.38      663.45107  (12111908)
        482765.94   3669072.38      691.23594  (12111908)               482785.94
3669072.38      700.08583  (12111908)
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        482805.94   3669072.38      689.48712  (12111908)                482825.94
3669072.38      660.90635  (12111908)
        482845.94   3669072.38      617.14006  (12111908)                482865.94
3669072.38      561.63742  (12111908)
        482885.94   3669072.38      498.54742  (12111908)                482905.94
3669072.38      440.51915  (12111908)
        482925.94   3669072.38      365.63696  (12111908)                482945.94
3669072.38      302.47654  (12111908)
        482965.94   3669072.38      269.19897  (11112317)                482985.94
3669072.38      265.78898  (10032208)
        483005.94   3669072.38      262.66469  (10032208)                483025.94
3669072.38      256.53350  (10032208)
        483045.94   3669072.38      247.74877  (10032208)                483065.94
3669072.38      236.65881  (10032208)
        482125.94   3669092.38      241.11920  (10112508)                482145.94
3669092.38      285.42877  (10112508)
        482165.94   3669092.38      359.89386  (10112508)                482185.94
3669092.38      406.66570  (10112508)
        482205.94   3669092.38      441.10334  (10112508)                482225.94
3669092.38      463.97310  (10112508)
        482245.94   3669092.38      480.22415  (10112508)                482265.94
3669092.38      472.43135  (10112508)
        482285.94   3669092.38      355.12354  (10112508)                482305.94
3669092.38      325.36887  (10122008)
        482325.94   3669092.38      294.73632  (10122008)                482345.94
3669092.38      269.23192  (10112508)
        482365.94   3669092.38      225.60326  (10122008)                482385.94
3669092.38      195.04158  (10122008)
        482405.94   3669092.38      163.64067  (10122008)                482425.94
3669092.38      144.44490  (10122908)
        482445.94   3669092.38      161.14561  (10122908)                482465.94
3669092.38      177.31027  (10122908)
        482485.94   3669092.38      193.22649  (10122908)                482505.94
3669092.38      208.66550  (10122908)
        482525.94   3669092.38      318.62522  (10012908)                482545.94
3669092.38      476.37631  (10012908)
        482565.94   3669092.38      660.09291  (10012908)                482585.94
3669092.38      849.70370  (10012908)
        482605.94   3669092.38     1040.66868  (10012908)                482625.94
3669092.38      899.90555  (10012908)
        482645.94   3669092.38      953.39769  (10012908)                482665.94
3669092.38     1005.12948  (10012908)
        482685.94   3669092.38      926.25537  (10012908)                482705.94
3669092.38      808.00713  (10012908)
        482725.94   3669092.38      663.33300  (10012908)                482745.94
3669092.38      638.87928  (12111908)
 *** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
Vista\Gran Vista\Gran Vista.i ***        04/27/22
 *** AERMET - VERSION  19191 ***   ***
                      ***        08:26:34
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*** MODELOPTs: RegDFAULT CONC ELEV RURAL SigA Data

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 , L0000005 ,
L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 , L0000013 ,
L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 , L0000021 ,
L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
482765.94	3669092.38	673.47613	(12111908)	482785.94	3669092.38	690.64396	(12111908)
482805.94	3669092.38	688.69746	(12111908)	482825.94	3669092.38	668.47313	(12111908)
482845.94	3669092.38	649.73882	(12111908)	482865.94	3669092.38	591.18512	(12111908)
482885.94	3669092.38	534.46530	(12111908)	482905.94	3669092.38	460.17736	(12111908)
482925.94	3669092.38	394.61706	(12111908)	482945.94	3669092.38	330.74999	(12111908)
482965.94	3669092.38	271.22512	(12111908)	482985.94	3669092.38	262.96585	(10032208)
483005.94	3669092.38	261.78110	(10032208)	483025.94	3669092.38	257.42507	(10032208)
483045.94	3669092.38	250.43379	(10032208)	482125.94	3669112.38	240.62838	(10112508)
482145.94	3669112.38	285.18174	(10112508)	482165.94	3669112.38	341.90861	(10112508)
482185.94	3669112.38	391.62352	(10112508)	482205.94	3669112.38	429.15876	(10112508)
482225.94	3669112.38	456.07564	(10112508)	482245.94	3669112.38	471.18959	(10112508)
482265.94	3669112.38	466.61552	(10112508)	482285.94	3669112.38	416.67332	(10112508)
482305.94	3669112.38	361.21237	(10112508)	482325.94			

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3669112.38      297.83231  (10112508)
        482345.94   3669112.38      255.79715  (10122008)              482365.94
3669112.38      225.08053  (10122008)
        482385.94   3669112.38      193.06281  (10122008)              482405.94
3669112.38      164.28854  (10122008)
        482425.94   3669112.38      139.27347  (10122908)              482445.94
3669112.38      155.97077  (10122908)
        482465.94   3669112.38      172.07718  (10122908)              482485.94
3669112.38      187.44696  (10122908)
        482505.94   3669112.38      201.08829  (10122908)              482525.94
3669112.38      283.46057  (10012908)
        482545.94   3669112.38      429.50366  (10012908)              482565.94
3669112.38      606.17017  (10012908)
        482585.94   3669112.38      797.06549  (10012908)              482605.94
3669112.38      971.14019  (10012908)
        482625.94   3669112.38     1054.81692  (10012908)              482645.94
3669112.38     1131.09432  (10012908)
        482665.94   3669112.38     1134.66684  (10012908)              482685.94
3669112.38     1097.48622  (10012908)
        482705.94   3669112.38      981.44919  (10012908)              482725.94
3669112.38      843.08174  (10012908)
        482745.94   3669112.38      656.28917  (10012908)              482765.94
3669112.38      653.06365  (12111908)
        482785.94   3669112.38      677.37591  (12111908)              482805.94
3669112.38      683.68284  (12111908)
        482105.94   3669132.38      198.73522  (10112508)              482216.96
3667990.58     6960.06342  (10010708)
        482229.50   3668011.75     7009.85869  (12011608)              482236.55
3668031.34     6842.62070  (12011608)
        482242.04   3668047.80     6611.19454  (12011608)              482250.66
3668068.19     6087.87238  (12011608)
        482258.50   3668087.00     5275.21068  (12011608)              482269.48
3668107.38     4297.32921  (12011608)
        482274.96   3668126.19     3825.33400  (12021008)              482282.02
3668145.79     3377.13871  (12021008)
        482285.15   3668166.17     3050.69550  (10012908)              482279.67
3668186.55     2690.80135  (12010417)
        482184.29   3668008.02     6784.75394  (10122708)              482281.36
3668219.30     2279.30897  (12010417)
        482169.53   3668350.14     1440.18910  (12010908)              482099.08
3668346.78     1443.78675  (10121508)
        482075.60   3668387.88      616.83090  (10121508)              482092.37
3668418.91      445.53700  (10011808)
        482069.73   3668475.10      317.81819  (10011808)              481993.41
3668559.81      245.52634  (11022508)
        482077.28   3668908.69      182.89067  (12111208)              481998.44
3668921.27      205.08892  (12111208)
        481850.00   3668378.65     1014.33154  (10011208)              481874.32
3668300.66     2805.32597  (12011608)
        481931.35   3668239.43     4549.13107  (12011608)              482130.95
```

3668050.73   6718.87110 (10122708)
        482373.28   3668115.58   6393.03660 (10012908)   482494.05
3667985.37   3963.90201 (11121508)
        482458.20   3667913.66   4299.39298 (11122308)   482582.74
3667817.43   1788.71593 (10012708)

 *** MODELOPTs: RegDFAULT CONC ELEV RURAL SigA Data

                               *** THE   1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL   ***
                                   INCLUDING SOURCE(S):   L0000001   , L0000002 , L0000003   , L0000004   , L0000005   ,
                 L0000006   , L0000007   , L0000008   , L0000009   , L0000010 , L0000011   , L0000012   , L0000013   ,
                 L0000014   , L0000015   , L0000016   , L0000017   , L0000018 , L0000019   , L0000020   , L0000021   ,
                 L0000022   , L0000023   , L0000024   , L0000025   , L0000026 , L0000027   , L0000028   , . . .   ,

                                                *** DISCRETE CARTESIAN RECEPTOR POINTS ***

                                             ** CONC OF PM_10   IN MICROGRAMS/M**3
                  **

      X-COORD (M) Y-COORD (M)   CONC   (YYMMDDHH)   X-COORD (M) Y-COORD (M)   CONC   (YYMMDDHH)
 -
        482756.35   3667981.60   5731.02284 (11121508)   482507.26
3668238.23   1521.18168 (12010417)
        482301.58   3668296.73   1681.38182 (10012908)   482254.40
3668321.26   2823.40217 (12010908)
        482067.59   3668560.91   227.39093 (10011808)   482129.86
3668802.45   234.72435 (10112508)
        482105.33   3669132.68   197.47539 (10112508)   483039.40
3669106.26   254.27732 (11112317)
        483256.41   3668898.69   263.37083 (12011909)   483120.55
3668832.65   272.61125 (12011909)
        482863.91   3668834.53   306.90673 (10032208)   482724.27
3668704.33   514.20553 (12111908)
        482814.85   3668632.62   308.38592 (10110308)   482945.05
3668615.64   336.60393 (12011909)
        482979.02   3668566.57   321.59689 (12011909)   482916.75
3668496.75   338.70339 (10012509)

```
        482694.08   3668589.22      425.35758  (11112317)                482711.06
3668513.74      517.33365  (12011617)
        482775.22   3668417.50      429.31448  (11121917)                482886.56
3668459.01      360.86244  (10012509)
        482945.05   3668364.66      546.06558  (11123009)                482860.14
3668294.84      648.01253  (11123009)
        481786.42   3668055.19     4408.72968  (11122608)                481722.26
3667900.46     5214.64945  (11011008)
        481922.29   3667809.88     5653.09272  (12011008)                481984.56
3667962.73     6455.68595  (12010608)
        481582.62   3668149.54     1087.93040  (10123108)                481676.97
3668398.63     3531.66816  (11123008)
        481614.70   3668496.75     1869.82625  (11123008)                481473.17
3668604.32     1328.80599  (11123008)
        481529.78   3668715.65      278.87888  (12011608)                481454.30
3668845.85      227.77577  (10122108)
        481337.31   3668670.36     1391.39394  (11123008)                481137.28
3668776.03     1323.63938  (11123008)
        481016.51   3668502.42     1471.17265  (12121108)                481208.99
3668317.49     1758.33037  (12121108)
 *** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
Vista\Gran Vista\Gran Vista.i ***        04/27/22
 *** AERMET - VERSION  19191 ***   ***
                       ***        08:26:34

                                  PAGE 309
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL  SigA Data

                                       *** THE SUMMARY OF MAXIMUM PERIOD ( 26304
HRS) RESULTS ***


                                    ** CONC OF PM_10    IN MICROGRAMS/M**3
             **


                      NETWORK
GROUP ID                      AVERAGE CONC                RECEPTOR  (XR, YR, ZELEV,
ZHILL, ZFLAG)  OF TYPE  GRID-ID
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - -

ALL       1ST HIGHEST VALUE IS     124.81276 AT (  482229.50,  3668011.75,   173.30,
  365.78,    0.00)  DC
          2ND HIGHEST VALUE IS     119.77299 AT (  482236.55,  3668031.34,   173.56,
  365.78,    0.00)  DC
          3RD HIGHEST VALUE IS     114.80735 AT (  482216.96,  3667990.58,   173.08,
  365.78,    0.00)  DC
          4TH HIGHEST VALUE IS     112.69261 AT (  482242.04,  3668047.80,   173.77,
  365.78,    0.00)  DC
```

```
         5TH HIGHEST VALUE IS     105.18266 AT (  482250.66,  3668068.19,   173.96,
  365.78,    0.00)  DC
         6TH HIGHEST VALUE IS      95.77702 AT (  482258.50,  3668087.00,   174.26,
  365.78,    0.00)  DC
         7TH HIGHEST VALUE IS      87.50961 AT (  482425.94,  3668072.38,   175.85,
  365.78,    0.00)  DC
         8TH HIGHEST VALUE IS      87.03627 AT (  482405.94,  3668092.38,   175.42,
  365.78,    0.00)  DC
         9TH HIGHEST VALUE IS      86.63083 AT (  482373.28,  3668115.58,   175.33,
  365.78,    0.00)  DC
        10TH HIGHEST VALUE IS      85.91499 AT (  482269.48,  3668107.38,   174.58,
  365.78,    0.00)  DC


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
↑ *** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
Vista\Gran Vista\Gran Vista.i ***        04/27/22
 *** AERMET - VERSION  19191 ***   ***
                       ***        08:26:34

                                  PAGE 310
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL  SigA Data

                                                *** THE SUMMARY OF HIGHEST  1-HR
RESULTS ***


                                    ** CONC OF PM_10    IN MICROGRAMS/M**3
              **

                                                      DATE
                                           NETWORK
GROUP ID                              AVERAGE CONC     (YYMMDDHH)             RECEPTOR
(XR, YR, ZELEV, ZHILL, ZFLAG)    OF TYPE  GRID-ID
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - -

ALL      HIGH   1ST HIGH VALUE IS    7161.60920  ON 10122708: AT (  482065.94,
3668112.38,   175.38,   175.38,    0.00)  DC


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
↑ *** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
Vista\Gran Vista\Gran Vista.i ***        04/27/22
```

*** MODELOPTs: RegDFAULT CONC ELEV RURAL SigA Data

*** Message Summary : AERMOD Model Execution ***

 --------- Summary of Total Messages --------

A Total of   0 Fatal Error Message(s)
A Total of   38 Warning Message(s)
A Total of   793 Informational Message(s)

A Total of   26304 Hours Were Processed

A Total of   353 Calm Hours Identified

A Total of   440 Missing Hours Identified (1.67 Percent)

   ******** FATAL ERROR MESSAGES ********
              *** NONE ***

   ********   WARNING MESSAGES   ********
ME W186   2737   MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used
    0.50
MX W403   2737   PFLCNV: Turbulence data is being used w/o ADJ_U* option
SigA Data
MX W441   14167   METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=
11081407
MX W441   14168   METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=
11081408
MX W441   14169   METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=
11081409
MX W441   14170   METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=
11081410
MX W441   14171   METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=
11081411
MX W441   14172   METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=
11081412
MX W441   14173   METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=
11081413
MX W441   14174   METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=
11081414
MX W441   14175   METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=
11081415
MX W441   14176   METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=
11081416

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MX W441   14177        METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=
11081417
MX W441   14178        METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=
11081418
MX W441   14191        METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=
11081507
MX W441   14192        METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=
11081508
MX W441   14193        METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=
11081509
MX W441   14194        METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=
11081510
MX W441   14195        METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=
11081511
MX W441   14196        METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=
11081512
MX W441   14197        METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=
11081513
MX W441   14198        METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=
11081514
MX W441   14199        METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=
11081515
MX W441   14200        METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=
11081516
MX W441   14201        METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=
11081517
MX W441   14202        METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=
11081518
MX W441   14215        METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=
11081607
MX W441   14216        METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=
11081608
MX W441   14217        METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=
11081609
MX W441   14218        METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=
11081610
MX W441   14219        METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=
11081611
MX W441   14220        METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=
11081612
MX W441   14221        METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=
11081613
MX W441   14222        METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=
11081614
MX W441   14223        METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=
11081615
MX W441   14224        METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=
11081616
MX W441   14225        METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=
11081617
```

MX W441   14226   METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=
11081618

   ****
   *** AERMOD Finishes Successfully ***
   ****

 *** MODELOPTs: RegDFAULT CONC ELEV RURAL SigA Data

                                          ***   MODEL SETUP OPTIONS SUMMARY
 ***
 - - -

```
                and:      0 OPENPIT source(s)
                and:      0 BUOYANT LINE source(s) with      0 line(s)


 **Model Set To Continue RUNning After the Setup Testing.

 **The AERMET Input Meteorological Data Version Date:  19191

 **Output Options Selected:
          Model Outputs Tables of PERIOD Averages by Receptor
          Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE
Keyword)
          Model Outputs External File(s) of High Values for Plotting (PLOTFILE
Keyword)
          Model Outputs Separate Summary File of High Ranked Values (SUMMFILE
Keyword)

 **NOTE:  The Following Flags May Appear Following CONC Values:  c for Calm Hours
                                                                 m for Missing Hours
                                                                 b for Both Calm and
Missing Hours

 **Misc. Inputs:  Base Elev. for Pot. Temp. Profile (m MSL) =    60.96 ;  Decay
Coef. =    0.000     ;  Rot. Angle =     0.0
                 Emission Units = GRAMS/SEC                                 ;
Emission Rate Unit Factor =   0.10000E+07
                 Output Units   = MICROGRAMS/M**3

 **Approximate Storage Requirements of Model =      4.0 MB of RAM.

 **Input Runstream File:          aermod.inp

 **Output Print File:             aermod.out


 **Detailed Error/Message File:   Gran Vista.err

 **File for Summary of Results:   Gran Vista.sum

 *** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
Vista\Gran Vista\Gran Vista.i ***        04/27/22
 *** AERMET - VERSION  19191 ***   ***
                       ***        08:26:34

                                  PAGE   2
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL  SigA Data

                                          *** METEOROLOGICAL DAYS SELECTED FOR
PROCESSING ***
                                                              (1=YES; 0=NO)
```

```
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
```

NOTE: METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON WHAT IS INCLUDED IN THE DATA FILE.

*** UPPER BOUND OF FIRST THROUGH FIFTH WIND SPEED CATEGORIES ***

(METERS/SEC)

1.54, 3.09, 5.14, 8.23, 10.80,

*** MODELOPTs: RegDFAULT CONC ELEV RURAL SigA Data

*** UP TO THE FIRST 24 HOURS OF METEOROLOGICAL DATA ***

Surface file: ..\ESC_2010_2012_sigma_v19191.SFC
Met Version: 19191
Profile file: ..\ESC_2010_2012_sigma_v19191.PFL

Surface format: FREE

Profile format: FREE

Surface station no.: 53120 Upper air station no.: 3190
Name: UNKNOWN Name: UNKNOWN

Year: 2010 Year: 2010

First 24 hours of scalar data

YR	MO	DY	JDY	HR	H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O LEN	Z0	BOWEN	ALBEDO	REF WS	WD	HT	REF TA	HT
10	01	01	1	01	-0.4	0.021	-9.000	-9.000	-999.	7.	2.1	0.16	1.02	1.00	0.44	104.	10.0	280.4	10.0
10	01	01	1	02	-0.4	0.021	-9.000	-9.000	-999.	7.	2.1	0.16	1.02	1.00	0.44	91.	10.0	280.4	10.0
10	01	01	1	03	-0.4	0.021	-9.000	-9.000	-999.	7.	2.1	0.16	1.02	1.00	0.44	110.	10.0	279.8	10.0
10	01	01	1	04	-0.4	0.021	-9.000	-9.000	-999.	7.	2.1	0.16	1.02	1.00	0.44	93.	10.0	279.2	10.0
10	01	01	1	05	-0.4	0.021	-9.000	-9.000	-999.	7.	2.0	0.15	1.02	1.00	0.44	275.	10.0	278.6	10.0
10	01	01	1	06	-1.7	0.043	-9.000	-9.000	-999.	21.	4.2	0.16	1.02	1.00	0.89	107.	10.0	278.1	10.0
10	01	01	1	07	-0.4	0.021	-9.000	-9.000	-999.	8.	2.1	0.16	1.02	1.00	0.44	182.	10.0	278.1	10.0
10	01	01	1	08	-0.3	0.021	-9.000	-9.000	-999.	7.	2.5	0.16	1.02	0.50	0.44	104.	10.0	278.6	10.0
10	01	01	1	09	31.3	0.080	0.377	0.014	61.	54.	-1.5	0.15	1.02	0.30	0.44	277.	10.0	282.5	10.0
10	01	01	1	10	80.9	0.140	0.712	0.009	159.	125.	-3.0	0.15	1.02	0.23	0.89	279.	10.0	286.4	10.0
10	01	01	1	11	115.7	0.269	1.068	0.008	375.	336.	-15.1	0.15	1.02	0.21	2.23	273.	10.0	290.9	10.0
10	01	01	1	12	132.1	0.273	1.247	0.008	523.	343.	-13.7	0.15	1.02	0.20	2.23	281.	10.0	292.5	10.0
10	01	01	1	13	130.1	0.189	1.325	0.008	636.	200.	-4.6	0.14	1.02	0.20	1.34	269.	10.0	293.6	10.0
10	01	01	1	14	110.4	0.189	1.308	0.007	720.	197.	-5.4	0.15	1.02	0.21	1.34	274.	10.0	295.4	10.0
10	01	01	1	15	71.8	0.259	1.160	0.007	772.	316.	-21.4	0.15	1.02	0.24	2.23	290.	10.0	293.6	10.0
10	01	01	1	16	19.2	0.196	0.751	0.007	783.	210.	-35.1	0.15	1.02	0.34	1.78	280.	10.0	291.4	10.0
10	01	01	1	17	-1.5	0.043	-9.000	-9.000	-999.	65.	4.4	0.15	1.02	0.61	0.89	282.	10.0	290.4	10.0
10	01	01	1	18	-0.4	0.021	-9.000	-9.000	-999.	13.	2.0	0.14	1.02	1.00	0.44	134.	10.0	289.8	10.0
10	01	01	1	19	-0.4	0.020	-9.000	-9.000	-999.	7.	1.9	0.13	1.02	1.00	0.44	309.	10.0	288.6	10.0
10	01	01	1	20	-0.4	0.020	-9.000	-9.000	-999.	7.	1.9	0.13	1.02	1.00	0.44	323.	10.0	287.5	10.0
10	01	01	1	21	-0.4	0.020	-9.000	-9.000	-999.	7.	1.9	0.12	1.02	1.00	0.44	12.	10.0	285.9	10.0
10	01	01	1	22	-1.7	0.043	-9.000	-9.000	-999.	21.	4.3	0.16	1.02

```
1.00    0.89  101.   10.0  285.4   10.0
 10 01 01   1 23   -1.6  0.042 -9.000 -9.000 -999.   20.      4.0  0.14   1.02
1.00    0.89  263.   10.0  284.2   10.0
 10 01 01   1 24   -1.7  0.043 -9.000 -9.000 -999.   21.      4.2  0.16   1.02
1.00    0.89  117.   10.0  283.1   10.0


 First hour of profile data
 YR MO DY HR HEIGHT F  WDIR    WSPD AMB_TMP sigmaA  sigmaW  sigmaV
 10 01 01 01   10.0 1  104.    0.44   280.4   18.0  -99.00    0.20

 F indicates top of profile (=1) or below (=0)
 *** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
Vista\Gran Vista\Gran Vista.i ***        04/27/22
 *** AERMET - VERSION  19191 ***   ***
                       ***        08:26:34

                                   PAGE   4
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL  SigA Data

                                        *** THE SUMMARY OF MAXIMUM PERIOD ( 26304
HRS) RESULTS ***


                                    ** CONC OF PM_10    IN MICROGRAMS/M**3
             **


                       NETWORK
GROUP ID                      AVERAGE CONC                RECEPTOR  (XR, YR, ZELEV,
ZHILL, ZFLAG)  OF TYPE  GRID-ID
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - -

ALL       1ST HIGHEST VALUE IS     124.81276 AT (  482229.50,  3668011.75,   173.30,
  365.78,    0.00)  DC
          2ND HIGHEST VALUE IS     119.77299 AT (  482236.55,  3668031.34,   173.56,
  365.78,    0.00)  DC
          3RD HIGHEST VALUE IS     114.80735 AT (  482216.96,  3667990.58,   173.08,
  365.78,    0.00)  DC
          4TH HIGHEST VALUE IS     112.69261 AT (  482242.04,  3668047.80,   173.77,
  365.78,    0.00)  DC
          5TH HIGHEST VALUE IS     105.18266 AT (  482250.66,  3668068.19,   173.96,
  365.78,    0.00)  DC
          6TH HIGHEST VALUE IS      95.77702 AT (  482258.50,  3668087.00,   174.26,
  365.78,    0.00)  DC
          7TH HIGHEST VALUE IS      87.50961 AT (  482425.94,  3668072.38,   175.85,
  365.78,    0.00)  DC
          8TH HIGHEST VALUE IS      87.03627 AT (  482405.94,  3668092.38,   175.42,
  365.78,    0.00)  DC
```

```
         9TH HIGHEST VALUE IS      86.63083 AT (  482373.28,  3668115.58,   175.33,
  365.78,    0.00)  DC
        10TH HIGHEST VALUE IS      85.91499 AT (  482269.48,  3668107.38,   174.58,
  365.78,    0.00)  DC


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
 *** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
Vista\Gran Vista\Gran Vista.i ***        04/27/22
 *** AERMET - VERSION  19191 ***   ***
                       ***        08:26:34

                                  PAGE   5
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL  SigA Data

                                                *** THE SUMMARY OF HIGHEST  1-HR
RESULTS ***


                                    ** CONC OF PM_10    IN MICROGRAMS/M**3
             **

                                                        DATE
                                          NETWORK
GROUP ID                            AVERAGE CONC     (YYMMDDHH)             RECEPTOR
(XR, YR, ZELEV, ZHILL, ZFLAG)    OF TYPE  GRID-ID
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - -

ALL      HIGH   1ST HIGH VALUE IS    7161.60920  ON 10122708: AT (  482065.94,
3668112.38,   175.38,   175.38,    0.00)  DC


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
 *** AERMOD - VERSION  19191 ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Gran
Vista\Gran Vista\Gran Vista.i ***        04/27/22
 *** AERMET - VERSION  19191 ***   ***
                       ***        08:26:34

                                  PAGE   6
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  RURAL  SigA Data

 *** Message Summary : AERMOD Model Execution ***
```

```
 --------- Summary of Total Messages --------

 A Total of            0 Fatal Error Message(s)
 A Total of           38 Warning Message(s)
 A Total of          793 Informational Message(s)

 A Total of        26304 Hours Were Processed

 A Total of          353 Calm Hours Identified

 A Total of          440 Missing Hours Identified (  1.67 Percent)


    ******** FATAL ERROR MESSAGES ********
               ***  NONE  ***


    ********   WARNING MESSAGES   ********
 ME W186    2737       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used
     0.50
 MX W403    2737       PFLCNV: Turbulence data is being used w/o ADJ_U* option
SigA Data
 MX W441   14167        METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=
 11081407
 MX W441   14168        METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=
 11081408
 MX W441   14169        METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=
 11081409
 MX W441   14170        METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=
 11081410
 MX W441   14171        METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=
 11081411
 MX W441   14172        METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=
 11081412
 MX W441   14173        METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=
 11081413
 MX W441   14174        METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=
 11081414
 MX W441   14175        METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=
 11081415
 MX W441   14176        METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=
 11081416
 MX W441   14177        METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=
 11081417
 MX W441   14178        METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=
 11081418
 MX W441   14191        METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=
 11081507
 MX W441   14192        METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=
 11081508
```

```
MX W441   14193        METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=
11081509
MX W441   14194        METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=
11081510
MX W441   14195        METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=
11081511
MX W441   14196        METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=
11081512
MX W441   14197        METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=
11081513
MX W441   14198        METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=
11081514
MX W441   14199        METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=
11081515
MX W441   14200        METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=
11081516
MX W441   14201        METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=
11081517
MX W441   14202        METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=
11081518
MX W441   14215        METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=
11081607
MX W441   14216        METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=
11081608
MX W441   14217        METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=
11081609
MX W441   14218        METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=
11081610
MX W441   14219        METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=
11081611
MX W441   14220        METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=
11081612
MX W441   14221        METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=
11081613
MX W441   14222        METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=
11081614
MX W441   14223        METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=
11081615
MX W441   14224        METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=
11081616
MX W441   14225        METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=
11081617
MX W441   14226        METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=
11081618
```

HARP2 - HRACalc (dated 22118) 9/20/2022 9:39:11 AM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
Pathway receptors loaded successfully
****
RISK SCENARIO SETTINGS

Receptor Type: Resident
Scenario: All
Calculation Method: Derived

****
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: -0.25
Total Exposure Duration: 1.333

Exposure Duration Bin Distribution
3rd Trimester Bin: 0.25
0<2 Years Bin: 1.333
2<9 Years Bin: 0
2<16 Years Bin: 0
16<30 Years Bin: 0
16 to 70 Years Bin: 0

****
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: True
Dermal: True
Mother's milk: True
Water: False
Fish: False
Homegrown crops: False
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

****
INHALATION

Daily breathing rate: LongTerm24HR

Worker Adjustment Factors
Worker adjustment factors enabled: NO

Fraction at time at home
3rd Trimester to 16 years: OFF
16 years to 70 years: OFF

****
SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.05
Soil mixing depth (m): 0.01
Dermal climate: Mixed

****
TIER 2 SETTINGS

Tier2 adjustments were used in this assessment. Please see the input file for details.
Tier2 - What was changed: ED or start age changed|
Calculating cancer risk
Cancer risk breakdown by pollutant and receptor saved to:
C:\Users\apoll\Desktop\HARP2\HARP\Gran Vista\hra\ResCancerRisk.csv
Cancer risk total by receptor saved to: C:\Users\apoll\Desktop\HARP2\HARP\Gran Vista\hra\ResCancerRiskSumByRec.csv
Calculating chronic risk
Chronic risk breakdown by pollutant and receptor saved to:
C:\Users\apoll\Desktop\HARP2\HARP\Gran Vista\hra\ResNCChronicRisk.csv
Chronic risk total by receptor saved to: C:\Users\apoll\Desktop\HARP2\HARP\Gran Vista\hra\ResNCChronicRiskSumByRec.csv
Calculating acute risk
Acute risk breakdown by pollutant and receptor saved to:
C:\Users\apoll\Desktop\HARP2\HARP\Gran Vista\hra\ResNCAcuteRisk.csv
Acute risk total by receptor saved to: C:\Users\apoll\Desktop\HARP2\HARP\Gran Vista\hra\ResNCAcuteRiskSumByRec.csv
HRA ran successfully

REC	GRP	NETID	X	Y	RISK_SUM	SCENARIO	INH_RISK	SOIL_RISK	DERMAL_R	MMILK_RIS	WATER_RI	FISH_RISK	CROP_RISK	BEEF_RISK	DAIRY_RISI	PIG_RISK	CHICKEN_R	EGG_RISK
1	ALL		481885.9	3667832	5.20E-07	1.333YrCar	5.20E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2	ALL		481905.9	3667832	5.40E-07	1.333YrCar	5.40E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3	ALL		481925.9	3667832	5.57E-07	1.333YrCar	5.57E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4	ALL		482565.9	3667832	9.13E-07	1.333YrCar	9.13E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
5	ALL		482585.9	3667832	8.47E-07	1.333YrCar	8.47E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
6	ALL		481845.9	3667852	4.93E-07	1.333YrCar	4.93E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
7	ALL		481865.9	3667852	5.13E-07	1.333YrCar	5.13E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
8	ALL		481885.9	3667852	5.33E-07	1.333YrCar	5.33E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
9	ALL		481905.9	3667852	5.57E-07	1.333YrCar	5.57E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
10	ALL		481925.9	3667852	5.81E-07	1.333YrCar	5.81E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
11	ALL		482545.9	3667852	1.12E-06	1.333YrCar	1.12E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
12	ALL		482565.9	3667852	1.02E-06	1.333YrCar	1.02E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
13	ALL		482585.9	3667852	9.37E-07	1.333YrCar	9.37E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
14	ALL		482605.9	3667852	8.73E-07	1.333YrCar	8.73E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
15	ALL		481785.9	3667872	4.23E-07	1.333YrCar	4.23E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
16	ALL		481805.9	3667872	4.47E-07	1.333YrCar	4.47E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
17	ALL		481825.9	3667872	4.72E-07	1.333YrCar	4.72E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
18	ALL		481845.9	3667872	4.99E-07	1.333YrCar	4.99E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
19	ALL		481865.9	3667872	5.23E-07	1.333YrCar	5.23E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
20	ALL		481885.9	3667872	5.50E-07	1.333YrCar	5.50E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
21	ALL		481905.9	3667872	5.77E-07	1.333YrCar	5.77E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
22	ALL		481925.9	3667872	5.96E-07	1.333YrCar	5.96E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
23	ALL		481945.9	3667872	6.23E-07	1.333YrCar	6.23E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
24	ALL		482525.9	3667872	1.36E-06	1.333YrCar	1.36E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
25	ALL		482545.9	3667872	1.26E-06	1.333YrCar	1.26E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
26	ALL		482565.9	3667872	1.15E-06	1.333YrCar	1.15E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
27	ALL		482585.9	3667872	1.04E-06	1.333YrCar	1.04E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
28	ALL		482605.9	3667872	9.63E-07	1.333YrCar	9.63E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
29	ALL		482625.9	3667872	8.93E-07	1.333YrCar	8.93E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
30	ALL		481745.9	3667892	3.78E-07	1.333YrCar	3.78E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
31	ALL		481765.9	3667892	3.99E-07	1.333YrCar	3.99E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
32	ALL		481785.9	3667892	4.22E-07	1.333YrCar	4.22E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
33	ALL		481805.9	3667892	4.47E-07	1.333YrCar	4.47E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
34	ALL		481825.9	3667892	4.73E-07	1.333YrCar	4.73E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
35	ALL		481845.9	3667892	5.02E-07	1.333YrCar	5.02E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
36	ALL		481865.9	3667892	5.31E-07	1.333YrCar	5.31E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
37	ALL		481885.9	3667892	5.54E-07	1.333YrCar	5.54E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
38	ALL		481905.9	3667892	5.79E-07	1.333YrCar	5.79E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
39	ALL		481925.9	3667892	6.11E-07	1.333YrCar	6.11E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
40	ALL		481945.9	3667892	6.42E-07	1.333YrCar	6.42E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
41	ALL		482485.9	3667892	1.75E-06	1.333YrCar	1.75E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
42	ALL		482505.9	3667892	1.60E-06	1.333YrCar	1.60E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
43	ALL		482525.9	3667892	1.52E-06	1.333YrCar	1.52E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
44	ALL		482545.9	3667892	1.41E-06	1.333YrCar	1.41E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
45	ALL		482565.9	3667892	1.27E-06	1.333YrCar	1.27E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
46	ALL		482585.9	3667892	1.15E-06	1.333YrCar	1.15E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
47	ALL		482605.9	3667892	1.05E-06	1.333YrCar	1.05E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
48	ALL		482625.9	3667892	9.66E-07	1.333YrCar	9.66E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

49	ALL	482645.9	3667892	8.97E-07	1.333YrCar	8.97E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
50	ALL	481745.9	3667912	3.73E-07	1.333YrCar	3.73E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
51	ALL	481765.9	3667912	3.95E-07	1.333YrCar	3.95E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
52	ALL	481785.9	3667912	4.18E-07	1.333YrCar	4.18E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
53	ALL	481805.9	3667912	4.42E-07	1.333YrCar	4.42E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
54	ALL	481825.9	3667912	4.71E-07	1.333YrCar	4.71E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
55	ALL	481845.9	3667912	5.00E-07	1.333YrCar	5.00E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
56	ALL	481865.9	3667912	5.30E-07	1.333YrCar	5.30E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
57	ALL	481885.9	3667912	5.59E-07	1.333YrCar	5.59E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
58	ALL	481905.9	3667912	5.90E-07	1.333YrCar	5.90E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
59	ALL	481925.9	3667912	6.21E-07	1.333YrCar	6.21E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
60	ALL	481945.9	3667912	6.49E-07	1.333YrCar	6.49E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
61	ALL	482465.9	3667912	2.34E-06	1.333YrCar	2.34E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
62	ALL	482485.9	3667912	1.98E-06	1.333YrCar	1.98E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
63	ALL	482505.9	3667912	1.82E-06	1.333YrCar	1.82E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
64	ALL	482525.9	3667912	1.67E-06	1.333YrCar	1.67E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
65	ALL	482545.9	3667912	1.54E-06	1.333YrCar	1.54E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
66	ALL	482565.9	3667912	1.39E-06	1.333YrCar	1.39E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
67	ALL	482585.9	3667912	1.25E-06	1.333YrCar	1.25E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
68	ALL	482605.9	3667912	1.14E-06	1.333YrCar	1.14E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
69	ALL	482625.9	3667912	1.04E-06	1.333YrCar	1.04E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
70	ALL	482645.9	3667912	9.61E-07	1.333YrCar	9.61E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
71	ALL	482665.9	3667912	8.89E-07	1.333YrCar	8.89E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
72	ALL	481745.9	3667932	3.62E-07	1.333YrCar	3.62E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
73	ALL	481765.9	3667932	3.88E-07	1.333YrCar	3.88E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
74	ALL	481785.9	3667932	4.12E-07	1.333YrCar	4.12E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
75	ALL	481805.9	3667932	4.37E-07	1.333YrCar	4.37E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
76	ALL	481825.9	3667932	4.65E-07	1.333YrCar	4.65E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
77	ALL	481845.9	3667932	4.95E-07	1.333YrCar	4.95E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
78	ALL	481865.9	3667932	5.27E-07	1.333YrCar	5.27E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
79	ALL	481885.9	3667932	5.61E-07	1.333YrCar	5.61E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
80	ALL	481905.9	3667932	5.90E-07	1.333YrCar	5.90E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
81	ALL	481925.9	3667932	6.21E-07	1.333YrCar	6.21E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
82	ALL	481945.9	3667932	6.60E-07	1.333YrCar	6.60E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
83	ALL	481965.9	3667932	7.23E-07	1.333YrCar	7.23E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
84	ALL	482485.9	3667932	2.22E-06	1.333YrCar	2.22E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
85	ALL	482505.9	3667932	2.01E-06	1.333YrCar	2.01E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
86	ALL	482525.9	3667932	1.85E-06	1.333YrCar	1.85E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
87	ALL	482545.9	3667932	1.67E-06	1.333YrCar	1.67E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
88	ALL	482565.9	3667932	1.50E-06	1.333YrCar	1.50E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
89	ALL	482585.9	3667932	1.36E-06	1.333YrCar	1.36E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
90	ALL	482605.9	3667932	1.22E-06	1.333YrCar	1.22E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
91	ALL	482625.9	3667932	1.11E-06	1.333YrCar	1.11E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
92	ALL	482645.9	3667932	1.02E-06	1.333YrCar	1.02E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
93	ALL	482665.9	3667932	9.41E-07	1.333YrCar	9.41E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
94	ALL	482685.9	3667932	8.63E-07	1.333YrCar	8.63E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
95	ALL	481745.9	3667952	3.47E-07	1.333YrCar	3.47E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
96	ALL	481765.9	3667952	3.81E-07	1.333YrCar	3.81E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
97	ALL	481785.9	3667952	4.04E-07	1.333YrCar	4.04E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

98	ALL	481805.9	3667952	4.28E-07	1.333YrCar	4.28E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
99	ALL	481825.9	3667952	4.57E-07	1.333YrCar	4.57E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
100	ALL	481845.9	3667952	4.87E-07	1.333YrCar	4.87E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
101	ALL	481865.9	3667952	5.19E-07	1.333YrCar	5.19E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
102	ALL	481885.9	3667952	5.55E-07	1.333YrCar	5.55E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
103	ALL	481905.9	3667952	5.88E-07	1.333YrCar	5.88E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
104	ALL	481925.9	3667952	6.21E-07	1.333YrCar	6.21E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
105	ALL	481945.9	3667952	6.61E-07	1.333YrCar	6.61E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
106	ALL	481965.9	3667952	7.20E-07	1.333YrCar	7.20E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
107	ALL	482485.9	3667952	2.45E-06	1.333YrCar	2.45E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
108	ALL	482505.9	3667952	2.18E-06	1.333YrCar	2.18E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
109	ALL	482525.9	3667952	1.96E-06	1.333YrCar	1.96E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
110	ALL	482545.9	3667952	1.79E-06	1.333YrCar	1.79E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
111	ALL	482565.9	3667952	1.61E-06	1.333YrCar	1.61E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
112	ALL	482585.9	3667952	1.44E-06	1.333YrCar	1.44E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
113	ALL	482605.9	3667952	1.30E-06	1.333YrCar	1.30E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
114	ALL	482625.9	3667952	1.18E-06	1.333YrCar	1.18E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
115	ALL	482645.9	3667952	1.08E-06	1.333YrCar	1.08E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
116	ALL	482665.9	3667952	9.85E-07	1.333YrCar	9.85E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
117	ALL	482685.9	3667952	9.02E-07	1.333YrCar	9.02E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
118	ALL	482705.9	3667952	8.30E-07	1.333YrCar	8.30E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
119	ALL	481765.9	3667972	3.71E-07	1.333YrCar	3.71E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
120	ALL	481785.9	3667972	3.96E-07	1.333YrCar	3.96E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
121	ALL	481805.9	3667972	4.18E-07	1.333YrCar	4.18E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
122	ALL	481825.9	3667972	4.48E-07	1.333YrCar	4.48E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
123	ALL	481845.9	3667972	4.78E-07	1.333YrCar	4.78E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
124	ALL	481865.9	3667972	5.10E-07	1.333YrCar	5.10E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
125	ALL	481885.9	3667972	5.46E-07	1.333YrCar	5.46E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
126	ALL	481905.9	3667972	5.85E-07	1.333YrCar	5.85E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
127	ALL	481925.9	3667972	6.23E-07	1.333YrCar	6.23E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
128	ALL	481945.9	3667972	6.54E-07	1.333YrCar	6.54E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
129	ALL	482505.9	3667972	2.30E-06	1.333YrCar	2.30E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
130	ALL	482525.9	3667972	2.03E-06	1.333YrCar	2.03E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
131	ALL	482545.9	3667972	1.87E-06	1.333YrCar	1.87E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
132	ALL	482565.9	3667972	1.69E-06	1.333YrCar	1.69E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
133	ALL	482585.9	3667972	1.52E-06	1.333YrCar	1.52E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
134	ALL	482605.9	3667972	1.35E-06	1.333YrCar	1.35E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
135	ALL	482625.9	3667972	1.22E-06	1.333YrCar	1.22E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
136	ALL	482645.9	3667972	1.12E-06	1.333YrCar	1.12E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
137	ALL	482665.9	3667972	1.01E-06	1.333YrCar	1.01E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
138	ALL	482685.9	3667972	9.31E-07	1.333YrCar	9.31E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
139	ALL	482705.9	3667972	8.55E-07	1.333YrCar	8.55E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
140	ALL	482725.9	3667972	7.89E-07	1.333YrCar	7.89E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
141	ALL	482745.9	3667972	7.49E-07	1.333YrCar	7.49E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
142	ALL	481765.9	3667992	3.44E-07	1.333YrCar	3.44E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
143	ALL	481785.9	3667992	3.86E-07	1.333YrCar	3.86E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
144	ALL	481805.9	3667992	4.09E-07	1.333YrCar	4.09E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
145	ALL	481825.9	3667992	4.38E-07	1.333YrCar	4.38E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
146	ALL	481845.9	3667992	4.68E-07	1.333YrCar	4.68E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

147	ALL	481865.9	3667992	5.00E-07	1.333YrCar	5.00E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
148	ALL	481885.9	3667992	5.35E-07	1.333YrCar	5.35E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
149	ALL	481905.9	3667992	5.74E-07	1.333YrCar	5.74E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
150	ALL	482505.9	3667992	2.37E-06	1.333YrCar	2.37E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
151	ALL	482525.9	3667992	2.17E-06	1.333YrCar	2.17E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
152	ALL	482545.9	3667992	1.91E-06	1.333YrCar	1.91E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
153	ALL	482565.9	3667992	1.74E-06	1.333YrCar	1.74E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
154	ALL	482585.9	3667992	1.56E-06	1.333YrCar	1.56E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
155	ALL	482605.9	3667992	1.38E-06	1.333YrCar	1.38E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
156	ALL	482625.9	3667992	1.25E-06	1.333YrCar	1.25E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
157	ALL	482645.9	3667992	1.14E-06	1.333YrCar	1.14E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
158	ALL	482665.9	3667992	1.04E-06	1.333YrCar	1.04E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
159	ALL	482685.9	3667992	9.45E-07	1.333YrCar	9.45E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
160	ALL	482705.9	3667992	8.74E-07	1.333YrCar	8.74E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
161	ALL	482725.9	3667992	8.22E-07	1.333YrCar	8.22E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
162	ALL	481785.9	3668012	3.77E-07	1.333YrCar	3.77E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
163	ALL	481805.9	3668012	4.01E-07	1.333YrCar	4.01E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
164	ALL	481825.9	3668012	4.25E-07	1.333YrCar	4.25E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
165	ALL	481845.9	3668012	4.57E-07	1.333YrCar	4.57E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
166	ALL	481865.9	3668012	4.89E-07	1.333YrCar	4.89E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
167	ALL	482185.9	3668012	2.98E-06	1.333YrCar	2.98E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
168	ALL	482485.9	3668012	2.80E-06	1.333YrCar	2.80E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
169	ALL	482505.9	3668012	2.42E-06	1.333YrCar	2.42E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
170	ALL	482525.9	3668012	2.16E-06	1.333YrCar	2.16E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
171	ALL	482545.9	3668012	1.96E-06	1.333YrCar	1.96E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
172	ALL	482565.9	3668012	1.74E-06	1.333YrCar	1.74E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
173	ALL	482585.9	3668012	1.55E-06	1.333YrCar	1.55E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
174	ALL	482605.9	3668012	1.40E-06	1.333YrCar	1.40E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
175	ALL	482625.9	3668012	1.26E-06	1.333YrCar	1.26E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
176	ALL	482645.9	3668012	1.14E-06	1.333YrCar	1.14E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
177	ALL	482665.9	3668012	1.04E-06	1.333YrCar	1.04E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
178	ALL	482685.9	3668012	9.63E-07	1.333YrCar	9.63E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
179	ALL	482705.9	3668012	8.86E-07	1.333YrCar	8.86E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
180	ALL	482725.9	3668012	8.19E-07	1.333YrCar	8.19E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
181	ALL	481785.9	3668032	3.52E-07	1.333YrCar	3.52E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
182	ALL	481805.9	3668032	3.91E-07	1.333YrCar	3.91E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
183	ALL	481825.9	3668032	4.15E-07	1.333YrCar	4.15E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
184	ALL	482165.9	3668032	2.22E-06	1.333YrCar	2.22E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
185	ALL	482185.9	3668032	2.71E-06	1.333YrCar	2.71E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
186	ALL	482465.9	3668032	3.25E-06	1.333YrCar	3.25E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
187	ALL	482485.9	3668032	2.75E-06	1.333YrCar	2.75E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
188	ALL	482505.9	3668032	2.42E-06	1.333YrCar	2.42E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
189	ALL	482525.9	3668032	2.15E-06	1.333YrCar	2.15E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
190	ALL	482545.9	3668032	1.93E-06	1.333YrCar	1.93E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
191	ALL	482565.9	3668032	1.72E-06	1.333YrCar	1.72E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
192	ALL	482585.9	3668032	1.54E-06	1.333YrCar	1.54E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
193	ALL	482605.9	3668032	1.39E-06	1.333YrCar	1.39E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
194	ALL	482625.9	3668032	1.25E-06	1.333YrCar	1.25E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
195	ALL	482645.9	3668032	1.13E-06	1.333YrCar	1.13E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

196	ALL	482665.9	3668032	1.04E-06	1.333YrCar	1.04E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
197	ALL	482685.9	3668032	9.51E-07	1.333YrCar	9.51E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
198	ALL	482705.9	3668032	8.77E-07	1.333YrCar	8.77E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
199	ALL	481785.9	3668052	3.43E-07	1.333YrCar	3.43E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
200	ALL	482145.9	3668052	1.71E-06	1.333YrCar	1.71E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
201	ALL	482165.9	3668052	2.02E-06	1.333YrCar	2.02E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
202	ALL	482185.9	3668052	2.42E-06	1.333YrCar	2.42E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
203	ALL	482445.9	3668052	3.98E-06	1.333YrCar	3.98E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
204	ALL	482465.9	3668052	3.30E-06	1.333YrCar	3.30E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
205	ALL	482485.9	3668052	2.76E-06	1.333YrCar	2.76E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
206	ALL	482505.9	3668052	2.39E-06	1.333YrCar	2.39E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
207	ALL	482525.9	3668052	2.09E-06	1.333YrCar	2.09E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
208	ALL	482545.9	3668052	1.87E-06	1.333YrCar	1.87E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
209	ALL	482565.9	3668052	1.68E-06	1.333YrCar	1.68E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
210	ALL	482585.9	3668052	1.51E-06	1.333YrCar	1.51E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
211	ALL	482605.9	3668052	1.36E-06	1.333YrCar	1.36E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
212	ALL	482625.9	3668052	1.23E-06	1.333YrCar	1.23E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
213	ALL	482645.9	3668052	1.11E-06	1.333YrCar	1.11E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
214	ALL	482665.9	3668052	1.02E-06	1.333YrCar	1.02E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
215	ALL	482685.9	3668052	9.37E-07	1.333YrCar	9.37E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
216	ALL	482125.9	3668072	1.38E-06	1.333YrCar	1.38E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
217	ALL	482145.9	3668072	1.57E-06	1.333YrCar	1.57E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
218	ALL	482165.9	3668072	1.82E-06	1.333YrCar	1.82E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
219	ALL	482185.9	3668072	2.14E-06	1.333YrCar	2.14E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
220	ALL	482205.9	3668072	2.62E-06	1.333YrCar	2.62E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
221	ALL	482425.9	3668072	4.15E-06	1.333YrCar	4.15E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
222	ALL	482445.9	3668072	3.53E-06	1.333YrCar	3.53E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
223	ALL	482465.9	3668072	3.03E-06	1.333YrCar	3.03E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
224	ALL	482485.9	3668072	2.60E-06	1.333YrCar	2.60E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
225	ALL	482505.9	3668072	2.29E-06	1.333YrCar	2.29E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
226	ALL	482525.9	3668072	1.99E-06	1.333YrCar	1.99E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
227	ALL	482545.9	3668072	1.80E-06	1.333YrCar	1.80E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
228	ALL	482565.9	3668072	1.61E-06	1.333YrCar	1.61E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
229	ALL	482585.9	3668072	1.45E-06	1.333YrCar	1.45E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
230	ALL	482605.9	3668072	1.32E-06	1.333YrCar	1.32E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
231	ALL	482625.9	3668072	1.20E-06	1.333YrCar	1.20E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
232	ALL	482645.9	3668072	1.08E-06	1.333YrCar	1.08E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
233	ALL	482665.9	3668072	9.83E-07	1.333YrCar	9.83E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
234	ALL	482105.9	3668092	1.12E-06	1.333YrCar	1.12E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
235	ALL	482125.9	3668092	1.27E-06	1.333YrCar	1.27E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
236	ALL	482145.9	3668092	1.43E-06	1.333YrCar	1.43E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
237	ALL	482165.9	3668092	1.65E-06	1.333YrCar	1.65E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
238	ALL	482185.9	3668092	1.90E-06	1.333YrCar	1.90E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
239	ALL	482205.9	3668092	2.25E-06	1.333YrCar	2.25E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
240	ALL	482405.9	3668092	4.13E-06	1.333YrCar	4.13E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
241	ALL	482425.9	3668092	3.53E-06	1.333YrCar	3.53E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
242	ALL	482445.9	3668092	3.06E-06	1.333YrCar	3.06E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
243	ALL	482465.9	3668092	2.68E-06	1.333YrCar	2.68E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
244	ALL	482485.9	3668092	2.36E-06	1.333YrCar	2.36E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

245	ALL	482505.9	3668092	2.10E-06	1.333YrCar	2.10E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
246	ALL	482525.9	3668092	1.88E-06	1.333YrCar	1.88E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
247	ALL	482545.9	3668092	1.68E-06	1.333YrCar	1.68E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
248	ALL	482565.9	3668092	1.52E-06	1.333YrCar	1.52E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
249	ALL	482585.9	3668092	1.38E-06	1.333YrCar	1.38E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
250	ALL	482605.9	3668092	1.25E-06	1.333YrCar	1.25E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
251	ALL	482625.9	3668092	1.14E-06	1.333YrCar	1.14E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
252	ALL	482645.9	3668092	1.04E-06	1.333YrCar	1.04E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
253	ALL	482065.9	3668112	8.94E-07	1.333YrCar	8.94E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
254	ALL	482085.9	3668112	9.60E-07	1.333YrCar	9.60E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
255	ALL	482105.9	3668112	1.04E-06	1.333YrCar	1.04E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
256	ALL	482125.9	3668112	1.15E-06	1.333YrCar	1.15E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
257	ALL	482145.9	3668112	1.31E-06	1.333YrCar	1.31E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
258	ALL	482165.9	3668112	1.49E-06	1.333YrCar	1.49E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
259	ALL	482185.9	3668112	1.72E-06	1.333YrCar	1.72E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
260	ALL	482205.9	3668112	1.93E-06	1.333YrCar	1.93E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
261	ALL	482225.9	3668112	2.27E-06	1.333YrCar	2.27E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
262	ALL	482385.9	3668112	3.88E-06	1.333YrCar	3.88E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
263	ALL	482405.9	3668112	3.36E-06	1.333YrCar	3.36E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
264	ALL	482425.9	3668112	2.95E-06	1.333YrCar	2.95E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
265	ALL	482445.9	3668112	2.61E-06	1.333YrCar	2.61E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
266	ALL	482465.9	3668112	2.33E-06	1.333YrCar	2.33E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
267	ALL	482485.9	3668112	2.09E-06	1.333YrCar	2.09E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
268	ALL	482505.9	3668112	1.88E-06	1.333YrCar	1.88E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
269	ALL	482525.9	3668112	1.70E-06	1.333YrCar	1.70E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
270	ALL	482545.9	3668112	1.55E-06	1.333YrCar	1.55E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
271	ALL	482565.9	3668112	1.40E-06	1.333YrCar	1.40E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
272	ALL	482585.9	3668112	1.28E-06	1.333YrCar	1.28E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
273	ALL	482605.9	3668112	1.18E-06	1.333YrCar	1.18E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
274	ALL	482625.9	3668112	1.08E-06	1.333YrCar	1.08E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
275	ALL	482045.9	3668132	7.79E-07	1.333YrCar	7.79E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
276	ALL	482065.9	3668132	8.43E-07	1.333YrCar	8.43E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
277	ALL	482085.9	3668132	9.01E-07	1.333YrCar	9.01E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
278	ALL	482105.9	3668132	9.76E-07	1.333YrCar	9.76E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
279	ALL	482125.9	3668132	1.08E-06	1.333YrCar	1.08E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
280	ALL	482145.9	3668132	1.17E-06	1.333YrCar	1.17E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
281	ALL	482165.9	3668132	1.32E-06	1.333YrCar	1.32E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
282	ALL	482185.9	3668132	1.50E-06	1.333YrCar	1.50E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
283	ALL	482205.9	3668132	1.71E-06	1.333YrCar	1.71E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
284	ALL	482225.9	3668132	1.91E-06	1.333YrCar	1.91E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
285	ALL	482405.9	3668132	2.68E-06	1.333YrCar	2.68E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
286	ALL	482425.9	3668132	2.42E-06	1.333YrCar	2.42E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
287	ALL	482445.9	3668132	2.20E-06	1.333YrCar	2.20E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
288	ALL	482465.9	3668132	2.00E-06	1.333YrCar	2.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
289	ALL	482485.9	3668132	1.82E-06	1.333YrCar	1.82E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
290	ALL	482505.9	3668132	1.67E-06	1.333YrCar	1.67E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
291	ALL	482525.9	3668132	1.53E-06	1.333YrCar	1.53E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
292	ALL	482545.9	3668132	1.40E-06	1.333YrCar	1.40E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
293	ALL	482565.9	3668132	1.29E-06	1.333YrCar	1.29E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

294	ALL	482585.9	3668132	1.19E-06	1.333YrCar	1.19E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
295	ALL	482605.9	3668132	1.10E-06	1.333YrCar	1.10E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
296	ALL	482025.9	3668152	6.81E-07	1.333YrCar	6.81E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
297	ALL	482045.9	3668152	7.30E-07	1.333YrCar	7.30E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
298	ALL	482065.9	3668152	7.86E-07	1.333YrCar	7.86E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
299	ALL	482085.9	3668152	8.48E-07	1.333YrCar	8.48E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
300	ALL	482105.9	3668152	9.19E-07	1.333YrCar	9.19E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
301	ALL	482125.9	3668152	9.93E-07	1.333YrCar	9.93E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
302	ALL	482145.9	3668152	1.08E-06	1.333YrCar	1.08E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
303	ALL	482165.9	3668152	1.16E-06	1.333YrCar	1.16E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
304	ALL	482185.9	3668152	1.30E-06	1.333YrCar	1.30E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
305	ALL	482205.9	3668152	1.46E-06	1.333YrCar	1.46E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
306	ALL	482225.9	3668152	1.63E-06	1.333YrCar	1.63E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
307	ALL	482245.9	3668152	1.77E-06	1.333YrCar	1.77E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
308	ALL	482425.9	3668152	1.98E-06	1.333YrCar	1.98E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
309	ALL	482445.9	3668152	1.84E-06	1.333YrCar	1.84E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
310	ALL	482465.9	3668152	1.71E-06	1.333YrCar	1.71E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
311	ALL	482485.9	3668152	1.58E-06	1.333YrCar	1.58E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
312	ALL	482505.9	3668152	1.47E-06	1.333YrCar	1.47E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
313	ALL	482525.9	3668152	1.36E-06	1.333YrCar	1.36E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
314	ALL	482545.9	3668152	1.26E-06	1.333YrCar	1.26E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
315	ALL	482565.9	3668152	1.17E-06	1.333YrCar	1.17E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
316	ALL	482585.9	3668152	1.09E-06	1.333YrCar	1.09E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
317	ALL	481545.9	3668172	8.36E-08	1.333YrCar	8.36E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
318	ALL	481565.9	3668172	8.29E-08	1.333YrCar	8.29E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
319	ALL	481585.9	3668172	8.57E-08	1.333YrCar	8.57E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
320	ALL	482005.9	3668172	5.96E-07	1.333YrCar	5.96E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
321	ALL	482025.9	3668172	6.37E-07	1.333YrCar	6.37E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
322	ALL	482045.9	3668172	6.83E-07	1.333YrCar	6.83E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
323	ALL	482065.9	3668172	7.27E-07	1.333YrCar	7.27E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
324	ALL	482085.9	3668172	7.84E-07	1.333YrCar	7.84E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
325	ALL	482105.9	3668172	8.43E-07	1.333YrCar	8.43E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
326	ALL	482125.9	3668172	8.99E-07	1.333YrCar	8.99E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
327	ALL	482145.9	3668172	9.77E-07	1.333YrCar	9.77E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
328	ALL	482165.9	3668172	1.06E-06	1.333YrCar	1.06E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
329	ALL	482185.9	3668172	1.14E-06	1.333YrCar	1.14E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
330	ALL	482205.9	3668172	1.25E-06	1.333YrCar	1.25E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
331	ALL	482225.9	3668172	1.38E-06	1.333YrCar	1.38E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
332	ALL	482245.9	3668172	1.51E-06	1.333YrCar	1.51E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
333	ALL	482445.9	3668172	1.55E-06	1.333YrCar	1.55E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
334	ALL	482465.9	3668172	1.46E-06	1.333YrCar	1.46E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
335	ALL	482485.9	3668172	1.37E-06	1.333YrCar	1.37E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
336	ALL	482505.9	3668172	1.28E-06	1.333YrCar	1.28E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
337	ALL	482525.9	3668172	1.21E-06	1.333YrCar	1.21E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
338	ALL	482545.9	3668172	1.13E-06	1.333YrCar	1.13E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
339	ALL	482565.9	3668172	1.06E-06	1.333YrCar	1.06E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
340	ALL	481505.9	3668192	8.10E-08	1.333YrCar	8.10E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
341	ALL	481525.9	3668192	7.84E-08	1.333YrCar	7.84E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
342	ALL	481545.9	3668192	7.70E-08	1.333YrCar	7.70E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

343	ALL	481565.9	3668192	7.81E-08	1.333YrCar	7.81E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
344	ALL	481585.9	3668192	7.86E-08	1.333YrCar	7.86E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
345	ALL	481985.9	3668192	5.23E-07	1.333YrCar	5.23E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
346	ALL	482005.9	3668192	5.61E-07	1.333YrCar	5.61E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
347	ALL	482025.9	3668192	5.98E-07	1.333YrCar	5.98E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
348	ALL	482045.9	3668192	6.36E-07	1.333YrCar	6.36E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
349	ALL	482065.9	3668192	6.71E-07	1.333YrCar	6.71E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
350	ALL	482085.9	3668192	7.13E-07	1.333YrCar	7.13E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
351	ALL	482105.9	3668192	7.61E-07	1.333YrCar	7.61E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
352	ALL	482125.9	3668192	8.16E-07	1.333YrCar	8.16E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
353	ALL	482145.9	3668192	8.80E-07	1.333YrCar	8.80E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
354	ALL	482165.9	3668192	9.46E-07	1.333YrCar	9.46E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
355	ALL	482185.9	3668192	1.02E-06	1.333YrCar	1.02E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
356	ALL	482205.9	3668192	1.09E-06	1.333YrCar	1.09E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
357	ALL	482225.9	3668192	1.18E-06	1.333YrCar	1.18E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
358	ALL	482245.9	3668192	1.27E-06	1.333YrCar	1.27E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
359	ALL	482265.9	3668192	1.35E-06	1.333YrCar	1.35E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
360	ALL	482465.9	3668192	1.25E-06	1.333YrCar	1.25E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
361	ALL	482485.9	3668192	1.19E-06	1.333YrCar	1.19E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
362	ALL	482505.9	3668192	1.13E-06	1.333YrCar	1.13E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
363	ALL	482525.9	3668192	1.07E-06	1.333YrCar	1.07E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
364	ALL	482545.9	3668192	1.01E-06	1.333YrCar	1.01E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
365	ALL	481445.9	3668212	9.84E-08	1.333YrCar	9.84E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
366	ALL	481465.9	3668212	8.35E-08	1.333YrCar	8.35E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
367	ALL	481485.9	3668212	7.98E-08	1.333YrCar	7.98E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
368	ALL	481505.9	3668212	7.88E-08	1.333YrCar	7.88E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
369	ALL	481525.9	3668212	7.48E-08	1.333YrCar	7.48E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
370	ALL	481545.9	3668212	7.48E-08	1.333YrCar	7.48E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
371	ALL	481565.9	3668212	7.63E-08	1.333YrCar	7.63E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
372	ALL	481585.9	3668212	7.72E-08	1.333YrCar	7.72E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
373	ALL	481605.9	3668212	8.39E-08	1.333YrCar	8.39E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
374	ALL	481965.9	3668212	4.39E-07	1.333YrCar	4.39E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
375	ALL	481985.9	3668212	4.86E-07	1.333YrCar	4.86E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
376	ALL	482005.9	3668212	5.27E-07	1.333YrCar	5.27E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
377	ALL	482025.9	3668212	5.57E-07	1.333YrCar	5.57E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
378	ALL	482045.9	3668212	5.89E-07	1.333YrCar	5.89E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
379	ALL	482065.9	3668212	6.24E-07	1.333YrCar	6.24E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
380	ALL	482085.9	3668212	6.58E-07	1.333YrCar	6.58E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
381	ALL	482105.9	3668212	6.97E-07	1.333YrCar	6.97E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
382	ALL	482125.9	3668212	7.37E-07	1.333YrCar	7.37E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
383	ALL	482145.9	3668212	7.78E-07	1.333YrCar	7.78E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
384	ALL	482165.9	3668212	8.31E-07	1.333YrCar	8.31E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
385	ALL	482185.9	3668212	9.06E-07	1.333YrCar	9.06E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
386	ALL	482205.9	3668212	9.66E-07	1.333YrCar	9.66E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
387	ALL	482225.9	3668212	1.02E-06	1.333YrCar	1.02E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
388	ALL	482245.9	3668212	1.08E-06	1.333YrCar	1.08E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
389	ALL	482265.9	3668212	1.14E-06	1.333YrCar	1.14E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
390	ALL	482485.9	3668212	1.03E-06	1.333YrCar	1.03E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
391	ALL	482505.9	3668212	9.89E-07	1.333YrCar	9.89E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

392	ALL	482525.9	3668212	9.45E-07	1.333YrCar	9.45E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
393	ALL	481405.9	3668232	1.24E-07	1.333YrCar	1.24E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
394	ALL	481425.9	3668232	1.11E-07	1.333YrCar	1.11E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
395	ALL	481445.9	3668232	9.96E-08	1.333YrCar	9.96E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
396	ALL	481465.9	3668232	7.77E-08	1.333YrCar	7.77E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
397	ALL	481485.9	3668232	7.51E-08	1.333YrCar	7.51E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
398	ALL	481505.9	3668232	7.67E-08	1.333YrCar	7.67E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
399	ALL	481525.9	3668232	7.58E-08	1.333YrCar	7.58E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
400	ALL	481545.9	3668232	7.48E-08	1.333YrCar	7.48E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
401	ALL	481565.9	3668232	7.68E-08	1.333YrCar	7.68E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
402	ALL	481585.9	3668232	7.89E-08	1.333YrCar	7.89E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
403	ALL	481605.9	3668232	8.01E-08	1.333YrCar	8.01E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
404	ALL	481945.9	3668232	3.24E-07	1.333YrCar	3.24E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
405	ALL	481965.9	3668232	3.89E-07	1.333YrCar	3.89E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
406	ALL	481985.9	3668232	4.55E-07	1.333YrCar	4.55E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
407	ALL	482005.9	3668232	4.75E-07	1.333YrCar	4.75E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
408	ALL	482025.9	3668232	5.01E-07	1.333YrCar	5.01E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
409	ALL	482045.9	3668232	5.46E-07	1.333YrCar	5.46E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
410	ALL	482065.9	3668232	5.75E-07	1.333YrCar	5.75E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
411	ALL	482085.9	3668232	6.07E-07	1.333YrCar	6.07E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
412	ALL	482105.9	3668232	6.39E-07	1.333YrCar	6.39E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
413	ALL	482125.9	3668232	6.68E-07	1.333YrCar	6.68E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
414	ALL	482145.9	3668232	7.06E-07	1.333YrCar	7.06E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
415	ALL	482165.9	3668232	7.33E-07	1.333YrCar	7.33E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
416	ALL	482185.9	3668232	8.05E-07	1.333YrCar	8.05E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
417	ALL	482205.9	3668232	8.58E-07	1.333YrCar	8.58E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
418	ALL	482225.9	3668232	9.03E-07	1.333YrCar	9.03E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
419	ALL	482245.9	3668232	9.44E-07	1.333YrCar	9.44E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
420	ALL	482265.9	3668232	9.81E-07	1.333YrCar	9.81E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
421	ALL	482505.9	3668232	8.73E-07	1.333YrCar	8.73E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
422	ALL	481365.9	3668252	1.46E-07	1.333YrCar	1.46E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
423	ALL	481385.9	3668252	1.46E-07	1.333YrCar	1.46E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
424	ALL	481405.9	3668252	1.16E-07	1.333YrCar	1.16E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
425	ALL	481425.9	3668252	1.06E-07	1.333YrCar	1.06E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
426	ALL	481445.9	3668252	9.25E-08	1.333YrCar	9.25E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
427	ALL	481465.9	3668252	7.82E-08	1.333YrCar	7.82E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
428	ALL	481485.9	3668252	7.15E-08	1.333YrCar	7.15E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
429	ALL	481505.9	3668252	7.41E-08	1.333YrCar	7.41E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
430	ALL	481525.9	3668252	7.44E-08	1.333YrCar	7.44E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
431	ALL	481545.9	3668252	7.42E-08	1.333YrCar	7.42E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
432	ALL	481565.9	3668252	7.39E-08	1.333YrCar	7.39E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
433	ALL	481585.9	3668252	7.97E-08	1.333YrCar	7.97E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
434	ALL	481605.9	3668252	8.14E-08	1.333YrCar	8.14E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
435	ALL	481925.9	3668252	2.48E-07	1.333YrCar	2.48E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
436	ALL	481945.9	3668252	2.88E-07	1.333YrCar	2.88E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
437	ALL	481965.9	3668252	3.50E-07	1.333YrCar	3.50E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
438	ALL	481985.9	3668252	3.59E-07	1.333YrCar	3.59E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
439	ALL	482005.9	3668252	3.46E-07	1.333YrCar	3.46E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
440	ALL	482025.9	3668252	3.39E-07	1.333YrCar	3.39E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

441	ALL	482045.9	3668252	3.73E-07	1.333YrCar	3.73E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
442	ALL	482065.9	3668252	4.31E-07	1.333YrCar	4.31E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
443	ALL	482085.9	3668252	5.19E-07	1.333YrCar	5.19E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
444	ALL	482105.9	3668252	5.84E-07	1.333YrCar	5.84E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
445	ALL	482125.9	3668252	6.04E-07	1.333YrCar	6.04E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
446	ALL	482145.9	3668252	6.17E-07	1.333YrCar	6.17E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
447	ALL	482165.9	3668252	6.18E-07	1.333YrCar	6.18E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
448	ALL	482185.9	3668252	6.65E-07	1.333YrCar	6.65E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
449	ALL	482205.9	3668252	7.47E-07	1.333YrCar	7.47E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
450	ALL	482225.9	3668252	8.03E-07	1.333YrCar	8.03E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
451	ALL	482245.9	3668252	8.34E-07	1.333YrCar	8.34E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
452	ALL	481325.9	3668272	1.33E-07	1.333YrCar	1.33E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
453	ALL	481345.9	3668272	1.39E-07	1.333YrCar	1.39E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
454	ALL	481365.9	3668272	1.43E-07	1.333YrCar	1.43E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
455	ALL	481385.9	3668272	1.18E-07	1.333YrCar	1.18E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
456	ALL	481405.9	3668272	1.13E-07	1.333YrCar	1.13E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
457	ALL	481425.9	3668272	1.04E-07	1.333YrCar	1.04E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
458	ALL	481445.9	3668272	9.76E-08	1.333YrCar	9.76E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
459	ALL	481465.9	3668272	9.83E-08	1.333YrCar	9.83E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
460	ALL	481485.9	3668272	6.97E-08	1.333YrCar	6.97E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
461	ALL	481505.9	3668272	7.25E-08	1.333YrCar	7.25E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
462	ALL	481525.9	3668272	7.53E-08	1.333YrCar	7.53E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
463	ALL	481545.9	3668272	7.59E-08	1.333YrCar	7.59E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
464	ALL	481565.9	3668272	7.38E-08	1.333YrCar	7.38E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
465	ALL	481585.9	3668272	8.18E-08	1.333YrCar	8.18E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
466	ALL	481605.9	3668272	8.41E-08	1.333YrCar	8.41E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
467	ALL	481625.9	3668272	9.01E-08	1.333YrCar	9.01E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
468	ALL	481905.9	3668272	1.97E-07	1.333YrCar	1.97E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
469	ALL	481925.9	3668272	2.15E-07	1.333YrCar	2.15E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
470	ALL	481945.9	3668272	2.59E-07	1.333YrCar	2.59E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
471	ALL	481965.9	3668272	2.64E-07	1.333YrCar	2.64E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
472	ALL	481985.9	3668272	3.08E-07	1.333YrCar	3.08E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
473	ALL	482005.9	3668272	3.18E-07	1.333YrCar	3.18E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
474	ALL	482025.9	3668272	3.08E-07	1.333YrCar	3.08E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
475	ALL	482045.9	3668272	3.06E-07	1.333YrCar	3.06E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
476	ALL	482065.9	3668272	3.06E-07	1.333YrCar	3.06E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
477	ALL	482085.9	3668272	3.14E-07	1.333YrCar	3.14E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
478	ALL	482105.9	3668272	3.28E-07	1.333YrCar	3.28E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
479	ALL	482125.9	3668272	3.78E-07	1.333YrCar	3.78E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
480	ALL	482145.9	3668272	5.23E-07	1.333YrCar	5.23E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
481	ALL	482165.9	3668272	4.60E-07	1.333YrCar	4.60E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
482	ALL	482185.9	3668272	4.83E-07	1.333YrCar	4.83E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
483	ALL	482205.9	3668272	6.41E-07	1.333YrCar	6.41E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
484	ALL	482225.9	3668272	7.10E-07	1.333YrCar	7.10E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
485	ALL	481265.9	3668292	1.06E-07	1.333YrCar	1.06E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
486	ALL	481285.9	3668292	1.11E-07	1.333YrCar	1.11E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
487	ALL	481305.9	3668292	1.18E-07	1.333YrCar	1.18E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
488	ALL	481325.9	3668292	1.29E-07	1.333YrCar	1.29E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
489	ALL	481345.9	3668292	1.38E-07	1.333YrCar	1.38E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

490	ALL	481365.9	3668292	1.31E-07	1.333YrCar	1.31E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
491	ALL	481385.9	3668292	1.27E-07	1.333YrCar	1.27E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
492	ALL	481405.9	3668292	1.16E-07	1.333YrCar	1.16E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
493	ALL	481425.9	3668292	1.06E-07	1.333YrCar	1.06E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
494	ALL	481445.9	3668292	1.02E-07	1.333YrCar	1.02E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
495	ALL	481465.9	3668292	9.75E-08	1.333YrCar	9.75E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
496	ALL	481485.9	3668292	7.12E-08	1.333YrCar	7.12E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
497	ALL	481505.9	3668292	7.21E-08	1.333YrCar	7.21E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
498	ALL	481525.9	3668292	7.80E-08	1.333YrCar	7.80E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
499	ALL	481545.9	3668292	7.90E-08	1.333YrCar	7.90E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
500	ALL	481565.9	3668292	7.58E-08	1.333YrCar	7.58E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
501	ALL	481585.9	3668292	8.19E-08	1.333YrCar	8.19E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
502	ALL	481605.9	3668292	9.08E-08	1.333YrCar	9.08E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
503	ALL	481625.9	3668292	9.28E-08	1.333YrCar	9.28E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
504	ALL	481885.9	3668292	1.60E-07	1.333YrCar	1.60E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
505	ALL	481905.9	3668292	1.64E-07	1.333YrCar	1.64E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
506	ALL	481925.9	3668292	1.93E-07	1.333YrCar	1.93E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
507	ALL	481945.9	3668292	1.95E-07	1.333YrCar	1.95E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
508	ALL	481965.9	3668292	2.32E-07	1.333YrCar	2.32E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
509	ALL	481985.9	3668292	2.74E-07	1.333YrCar	2.74E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
510	ALL	482005.9	3668292	2.89E-07	1.333YrCar	2.89E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
511	ALL	482025.9	3668292	2.96E-07	1.333YrCar	2.96E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
512	ALL	482045.9	3668292	3.04E-07	1.333YrCar	3.04E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
513	ALL	482065.9	3668292	3.04E-07	1.333YrCar	3.04E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
514	ALL	482085.9	3668292	3.05E-07	1.333YrCar	3.05E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
515	ALL	482105.9	3668292	3.17E-07	1.333YrCar	3.17E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
516	ALL	482125.9	3668292	3.41E-07	1.333YrCar	3.41E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
517	ALL	482145.9	3668292	3.84E-07	1.333YrCar	3.84E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
518	ALL	482165.9	3668292	3.94E-07	1.333YrCar	3.94E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
519	ALL	482185.9	3668292	4.30E-07	1.333YrCar	4.30E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
520	ALL	482205.9	3668292	5.68E-07	1.333YrCar	5.68E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
521	ALL	481225.9	3668312	9.84E-08	1.333YrCar	9.84E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
522	ALL	481245.9	3668312	1.02E-07	1.333YrCar	1.02E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
523	ALL	481265.9	3668312	1.07E-07	1.333YrCar	1.07E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
524	ALL	481285.9	3668312	1.12E-07	1.333YrCar	1.12E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
525	ALL	481305.9	3668312	1.16E-07	1.333YrCar	1.16E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
526	ALL	481325.9	3668312	1.27E-07	1.333YrCar	1.27E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
527	ALL	481345.9	3668312	1.35E-07	1.333YrCar	1.35E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
528	ALL	481365.9	3668312	1.15E-07	1.333YrCar	1.15E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
529	ALL	481385.9	3668312	1.16E-07	1.333YrCar	1.16E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
530	ALL	481405.9	3668312	1.10E-07	1.333YrCar	1.10E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
531	ALL	481425.9	3668312	1.06E-07	1.333YrCar	1.06E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
532	ALL	481445.9	3668312	9.92E-08	1.333YrCar	9.92E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
533	ALL	481465.9	3668312	9.45E-08	1.333YrCar	9.45E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
534	ALL	481485.9	3668312	9.08E-08	1.333YrCar	9.08E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
535	ALL	481505.9	3668312	7.39E-08	1.333YrCar	7.39E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
536	ALL	481525.9	3668312	8.06E-08	1.333YrCar	8.06E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
537	ALL	481545.9	3668312	8.31E-08	1.333YrCar	8.31E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
538	ALL	481565.9	3668312	8.39E-08	1.333YrCar	8.39E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

539	ALL	481585.9	3668312	8.55E-08	1.333YrCar	8.55E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
540	ALL	481605.9	3668312	9.49E-08	1.333YrCar	9.49E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
541	ALL	481625.9	3668312	9.94E-08	1.333YrCar	9.94E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
542	ALL	481885.9	3668312	1.30E-07	1.333YrCar	1.30E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
543	ALL	481905.9	3668312	1.47E-07	1.333YrCar	1.47E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
544	ALL	481925.9	3668312	1.59E-07	1.333YrCar	1.59E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
545	ALL	481945.9	3668312	1.61E-07	1.333YrCar	1.61E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
546	ALL	481965.9	3668312	2.06E-07	1.333YrCar	2.06E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
547	ALL	481985.9	3668312	2.54E-07	1.333YrCar	2.54E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
548	ALL	482005.9	3668312	2.60E-07	1.333YrCar	2.60E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
549	ALL	482025.9	3668312	2.63E-07	1.333YrCar	2.63E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
550	ALL	482045.9	3668312	2.64E-07	1.333YrCar	2.64E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
551	ALL	482065.9	3668312	2.70E-07	1.333YrCar	2.70E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
552	ALL	482085.9	3668312	2.79E-07	1.333YrCar	2.79E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
553	ALL	482105.9	3668312	2.88E-07	1.333YrCar	2.88E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
554	ALL	482125.9	3668312	3.05E-07	1.333YrCar	3.05E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
555	ALL	482145.9	3668312	3.37E-07	1.333YrCar	3.37E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
556	ALL	482165.9	3668312	3.85E-07	1.333YrCar	3.85E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
557	ALL	482185.9	3668312	4.21E-07	1.333YrCar	4.21E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
558	ALL	482285.9	3668312	4.14E-07	1.333YrCar	4.14E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
559	ALL	482305.9	3668312	5.76E-07	1.333YrCar	5.76E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
560	ALL	482325.9	3668312	6.42E-07	1.333YrCar	6.42E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
561	ALL	482345.9	3668312	6.45E-07	1.333YrCar	6.45E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
562	ALL	482365.9	3668312	6.46E-07	1.333YrCar	6.46E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
563	ALL	482385.9	3668312	6.33E-07	1.333YrCar	6.33E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
564	ALL	482405.9	3668312	6.28E-07	1.333YrCar	6.28E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
565	ALL	482425.9	3668312	6.18E-07	1.333YrCar	6.18E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
566	ALL	482445.9	3668312	6.02E-07	1.333YrCar	6.02E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
567	ALL	482465.9	3668312	5.86E-07	1.333YrCar	5.86E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
568	ALL	482485.9	3668312	5.68E-07	1.333YrCar	5.68E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
569	ALL	482505.9	3668312	5.54E-07	1.333YrCar	5.54E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
570	ALL	482525.9	3668312	5.37E-07	1.333YrCar	5.37E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
571	ALL	482545.9	3668312	5.22E-07	1.333YrCar	5.22E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
572	ALL	482565.9	3668312	4.63E-07	1.333YrCar	4.63E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
573	ALL	482585.9	3668312	4.29E-07	1.333YrCar	4.29E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
574	ALL	482605.9	3668312	4.04E-07	1.333YrCar	4.04E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
575	ALL	482625.9	3668312	3.71E-07	1.333YrCar	3.71E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
576	ALL	482645.9	3668312	3.31E-07	1.333YrCar	3.31E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
577	ALL	482665.9	3668312	3.08E-07	1.333YrCar	3.08E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
578	ALL	482685.9	3668312	2.78E-07	1.333YrCar	2.78E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
579	ALL	482705.9	3668312	2.46E-07	1.333YrCar	2.46E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
580	ALL	482725.9	3668312	2.35E-07	1.333YrCar	2.35E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
581	ALL	482745.9	3668312	2.24E-07	1.333YrCar	2.24E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
582	ALL	482765.9	3668312	2.13E-07	1.333YrCar	2.13E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
583	ALL	482785.9	3668312	2.04E-07	1.333YrCar	2.04E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
584	ALL	482805.9	3668312	1.97E-07	1.333YrCar	1.97E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
585	ALL	482825.9	3668312	1.88E-07	1.333YrCar	1.88E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
586	ALL	482845.9	3668312	1.81E-07	1.333YrCar	1.81E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
587	ALL	482865.9	3668312	1.72E-07	1.333YrCar	1.72E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

588	ALL	481205.9	3668332	9.49E-08	1.333YrCar	9.49E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
589	ALL	481225.9	3668332	9.81E-08	1.333YrCar	9.81E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
590	ALL	481245.9	3668332	1.02E-07	1.333YrCar	1.02E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
591	ALL	481265.9	3668332	1.07E-07	1.333YrCar	1.07E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
592	ALL	481285.9	3668332	1.12E-07	1.333YrCar	1.12E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
593	ALL	481305.9	3668332	1.18E-07	1.333YrCar	1.18E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
594	ALL	481325.9	3668332	1.26E-07	1.333YrCar	1.26E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
595	ALL	481345.9	3668332	1.31E-07	1.333YrCar	1.31E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
596	ALL	481365.9	3668332	1.12E-07	1.333YrCar	1.12E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
597	ALL	481385.9	3668332	1.10E-07	1.333YrCar	1.10E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
598	ALL	481405.9	3668332	1.11E-07	1.333YrCar	1.11E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
599	ALL	481425.9	3668332	1.11E-07	1.333YrCar	1.11E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
600	ALL	481445.9	3668332	1.02E-07	1.333YrCar	1.02E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
601	ALL	481465.9	3668332	1.12E-07	1.333YrCar	1.12E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
602	ALL	481485.9	3668332	1.12E-07	1.333YrCar	1.12E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
603	ALL	481505.9	3668332	8.14E-08	1.333YrCar	8.14E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
604	ALL	481525.9	3668332	8.27E-08	1.333YrCar	8.27E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
605	ALL	481545.9	3668332	9.28E-08	1.333YrCar	9.28E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
606	ALL	481565.9	3668332	9.91E-08	1.333YrCar	9.91E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
607	ALL	481585.9	3668332	9.45E-08	1.333YrCar	9.45E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
608	ALL	481605.9	3668332	1.02E-07	1.333YrCar	1.02E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
609	ALL	481625.9	3668332	1.14E-07	1.333YrCar	1.14E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
610	ALL	481645.9	3668332	1.17E-07	1.333YrCar	1.17E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
611	ALL	481865.9	3668332	1.09E-07	1.333YrCar	1.09E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
612	ALL	481885.9	3668332	1.09E-07	1.333YrCar	1.09E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
613	ALL	481905.9	3668332	1.29E-07	1.333YrCar	1.29E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
614	ALL	481925.9	3668332	1.27E-07	1.333YrCar	1.27E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
615	ALL	481945.9	3668332	1.30E-07	1.333YrCar	1.30E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
616	ALL	481965.9	3668332	1.16E-07	1.333YrCar	1.16E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
617	ALL	481985.9	3668332	1.23E-07	1.333YrCar	1.23E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
618	ALL	482005.9	3668332	1.37E-07	1.333YrCar	1.37E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
619	ALL	482025.9	3668332	1.55E-07	1.333YrCar	1.55E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
620	ALL	482045.9	3668332	1.75E-07	1.333YrCar	1.75E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
621	ALL	482065.9	3668332	1.92E-07	1.333YrCar	1.92E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
622	ALL	482085.9	3668332	2.16E-07	1.333YrCar	2.16E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
623	ALL	482105.9	3668332	2.46E-07	1.333YrCar	2.46E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
624	ALL	482125.9	3668332	2.65E-07	1.333YrCar	2.65E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
625	ALL	482145.9	3668332	3.01E-07	1.333YrCar	3.01E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
626	ALL	482165.9	3668332	3.33E-07	1.333YrCar	3.33E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
627	ALL	482245.9	3668332	2.41E-07	1.333YrCar	2.41E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
628	ALL	482265.9	3668332	2.49E-07	1.333YrCar	2.49E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
629	ALL	482285.9	3668332	2.96E-07	1.333YrCar	2.96E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
630	ALL	482305.9	3668332	5.24E-07	1.333YrCar	5.24E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
631	ALL	482325.9	3668332	5.81E-07	1.333YrCar	5.81E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
632	ALL	482345.9	3668332	5.85E-07	1.333YrCar	5.85E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
633	ALL	482365.9	3668332	5.86E-07	1.333YrCar	5.86E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
634	ALL	482385.9	3668332	5.72E-07	1.333YrCar	5.72E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
635	ALL	482405.9	3668332	5.60E-07	1.333YrCar	5.60E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
636	ALL	482425.9	3668332	5.50E-07	1.333YrCar	5.50E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

637	ALL	482445.9	3668332	5.34E-07	1.333YrCar	5.34E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
638	ALL	482465.9	3668332	5.18E-07	1.333YrCar	5.18E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
639	ALL	482485.9	3668332	5.02E-07	1.333YrCar	5.02E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
640	ALL	482505.9	3668332	4.81E-07	1.333YrCar	4.81E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
641	ALL	482525.9	3668332	4.43E-07	1.333YrCar	4.43E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
642	ALL	482545.9	3668332	4.74E-07	1.333YrCar	4.74E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
643	ALL	482565.9	3668332	4.18E-07	1.333YrCar	4.18E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
644	ALL	482585.9	3668332	4.01E-07	1.333YrCar	4.01E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
645	ALL	482605.9	3668332	2.90E-07	1.333YrCar	2.90E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
646	ALL	482625.9	3668332	3.01E-07	1.333YrCar	3.01E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
647	ALL	482645.9	3668332	3.02E-07	1.333YrCar	3.02E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
648	ALL	482665.9	3668332	2.78E-07	1.333YrCar	2.78E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
649	ALL	482685.9	3668332	2.54E-07	1.333YrCar	2.54E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
650	ALL	482705.9	3668332	2.30E-07	1.333YrCar	2.30E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
651	ALL	482725.9	3668332	2.16E-07	1.333YrCar	2.16E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
652	ALL	482745.9	3668332	2.06E-07	1.333YrCar	2.06E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
653	ALL	482765.9	3668332	1.95E-07	1.333YrCar	1.95E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
654	ALL	482785.9	3668332	1.87E-07	1.333YrCar	1.87E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
655	ALL	482805.9	3668332	1.78E-07	1.333YrCar	1.78E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
656	ALL	482825.9	3668332	1.73E-07	1.333YrCar	1.73E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
657	ALL	482845.9	3668332	1.66E-07	1.333YrCar	1.66E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
658	ALL	482865.9	3668332	1.61E-07	1.333YrCar	1.61E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
659	ALL	482885.9	3668332	1.54E-07	1.333YrCar	1.54E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
660	ALL	481185.9	3668352	9.28E-08	1.333YrCar	9.28E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
661	ALL	481205.9	3668352	9.45E-08	1.333YrCar	9.45E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
662	ALL	481225.9	3668352	9.77E-08	1.333YrCar	9.77E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
663	ALL	481245.9	3668352	1.03E-07	1.333YrCar	1.03E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
664	ALL	481265.9	3668352	1.08E-07	1.333YrCar	1.08E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
665	ALL	481285.9	3668352	1.12E-07	1.333YrCar	1.12E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
666	ALL	481305.9	3668352	1.19E-07	1.333YrCar	1.19E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
667	ALL	481325.9	3668352	1.25E-07	1.333YrCar	1.25E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
668	ALL	481345.9	3668352	1.34E-07	1.333YrCar	1.34E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
669	ALL	481365.9	3668352	1.31E-07	1.333YrCar	1.31E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
670	ALL	481385.9	3668352	1.06E-07	1.333YrCar	1.06E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
671	ALL	481405.9	3668352	1.12E-07	1.333YrCar	1.12E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
672	ALL	481425.9	3668352	1.19E-07	1.333YrCar	1.19E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
673	ALL	481445.9	3668352	1.18E-07	1.333YrCar	1.18E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
674	ALL	481465.9	3668352	1.20E-07	1.333YrCar	1.20E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
675	ALL	481485.9	3668352	1.18E-07	1.333YrCar	1.18E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
676	ALL	481505.9	3668352	1.02E-07	1.333YrCar	1.02E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
677	ALL	481525.9	3668352	1.00E-07	1.333YrCar	1.00E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
678	ALL	481545.9	3668352	1.07E-07	1.333YrCar	1.07E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
679	ALL	481565.9	3668352	1.06E-07	1.333YrCar	1.06E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
680	ALL	481585.9	3668352	1.06E-07	1.333YrCar	1.06E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
681	ALL	481605.9	3668352	1.12E-07	1.333YrCar	1.12E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
682	ALL	481625.9	3668352	1.29E-07	1.333YrCar	1.29E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
683	ALL	481645.9	3668352	1.34E-07	1.333YrCar	1.34E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
684	ALL	481865.9	3668352	9.01E-08	1.333YrCar	9.01E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
685	ALL	481885.9	3668352	1.03E-07	1.333YrCar	1.03E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

686	ALL	481905.9	3668352	1.04E-07	1.333YrCar	1.04E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
687	ALL	481925.9	3668352	1.11E-07	1.333YrCar	1.11E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
688	ALL	481945.9	3668352	9.00E-08	1.333YrCar	9.00E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
689	ALL	481965.9	3668352	8.78E-08	1.333YrCar	8.78E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
690	ALL	481985.9	3668352	9.00E-08	1.333YrCar	9.00E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
691	ALL	482005.9	3668352	9.34E-08	1.333YrCar	9.34E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
692	ALL	482025.9	3668352	9.63E-08	1.333YrCar	9.63E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
693	ALL	482045.9	3668352	9.74E-08	1.333YrCar	9.74E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
694	ALL	482065.9	3668352	1.02E-07	1.333YrCar	1.02E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
695	ALL	482085.9	3668352	1.14E-07	1.333YrCar	1.14E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
696	ALL	482245.9	3668352	1.78E-07	1.333YrCar	1.78E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
697	ALL	482265.9	3668352	1.88E-07	1.333YrCar	1.88E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
698	ALL	482285.9	3668352	2.47E-07	1.333YrCar	2.47E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
699	ALL	482305.9	3668352	5.06E-07	1.333YrCar	5.06E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
700	ALL	482325.9	3668352	5.29E-07	1.333YrCar	5.29E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
701	ALL	482345.9	3668352	5.32E-07	1.333YrCar	5.32E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
702	ALL	482365.9	3668352	5.35E-07	1.333YrCar	5.35E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
703	ALL	482385.9	3668352	5.28E-07	1.333YrCar	5.28E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
704	ALL	482405.9	3668352	5.24E-07	1.333YrCar	5.24E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
705	ALL	482425.9	3668352	5.17E-07	1.333YrCar	5.17E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
706	ALL	482445.9	3668352	5.05E-07	1.333YrCar	5.05E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
707	ALL	482465.9	3668352	4.88E-07	1.333YrCar	4.88E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
708	ALL	482485.9	3668352	4.74E-07	1.333YrCar	4.74E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
709	ALL	482505.9	3668352	4.59E-07	1.333YrCar	4.59E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
710	ALL	482525.9	3668352	4.43E-07	1.333YrCar	4.43E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
711	ALL	482545.9	3668352	4.31E-07	1.333YrCar	4.31E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
712	ALL	482565.9	3668352	3.75E-07	1.333YrCar	3.75E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
713	ALL	482585.9	3668352	3.60E-07	1.333YrCar	3.60E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
714	ALL	482605.9	3668352	2.64E-07	1.333YrCar	2.64E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
715	ALL	482625.9	3668352	2.66E-07	1.333YrCar	2.66E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
716	ALL	482645.9	3668352	2.70E-07	1.333YrCar	2.70E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
717	ALL	482665.9	3668352	2.46E-07	1.333YrCar	2.46E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
718	ALL	482685.9	3668352	2.30E-07	1.333YrCar	2.30E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
719	ALL	482705.9	3668352	2.12E-07	1.333YrCar	2.12E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
720	ALL	482725.9	3668352	1.99E-07	1.333YrCar	1.99E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
721	ALL	482745.9	3668352	1.90E-07	1.333YrCar	1.90E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
722	ALL	482765.9	3668352	1.83E-07	1.333YrCar	1.83E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
723	ALL	482785.9	3668352	1.76E-07	1.333YrCar	1.76E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
724	ALL	482805.9	3668352	1.70E-07	1.333YrCar	1.70E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
725	ALL	482825.9	3668352	1.63E-07	1.333YrCar	1.63E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
726	ALL	482845.9	3668352	1.56E-07	1.333YrCar	1.56E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
727	ALL	482865.9	3668352	1.50E-07	1.333YrCar	1.50E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
728	ALL	482885.9	3668352	1.45E-07	1.333YrCar	1.45E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
729	ALL	482905.9	3668352	1.40E-07	1.333YrCar	1.40E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
730	ALL	482925.9	3668352	1.34E-07	1.333YrCar	1.34E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
731	ALL	481165.9	3668372	8.99E-08	1.333YrCar	8.99E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
732	ALL	481185.9	3668372	9.20E-08	1.333YrCar	9.20E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
733	ALL	481205.9	3668372	9.46E-08	1.333YrCar	9.46E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
734	ALL	481225.9	3668372	9.75E-08	1.333YrCar	9.75E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

735	ALL	481245.9	3668372	1.02E-07	1.333YrCar	1.02E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
736	ALL	481265.9	3668372	1.07E-07	1.333YrCar	1.07E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
737	ALL	481285.9	3668372	1.12E-07	1.333YrCar	1.12E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
738	ALL	481305.9	3668372	1.23E-07	1.333YrCar	1.23E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
739	ALL	481325.9	3668372	1.26E-07	1.333YrCar	1.26E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
740	ALL	481345.9	3668372	1.34E-07	1.333YrCar	1.34E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
741	ALL	481365.9	3668372	1.34E-07	1.333YrCar	1.34E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
742	ALL	481385.9	3668372	1.06E-07	1.333YrCar	1.06E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
743	ALL	481405.9	3668372	1.16E-07	1.333YrCar	1.16E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
744	ALL	481425.9	3668372	1.24E-07	1.333YrCar	1.24E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
745	ALL	481445.9	3668372	1.29E-07	1.333YrCar	1.29E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
746	ALL	481465.9	3668372	1.27E-07	1.333YrCar	1.27E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
747	ALL	481485.9	3668372	1.24E-07	1.333YrCar	1.24E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
748	ALL	481505.9	3668372	1.21E-07	1.333YrCar	1.21E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
749	ALL	481525.9	3668372	1.09E-07	1.333YrCar	1.09E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
750	ALL	481545.9	3668372	1.26E-07	1.333YrCar	1.26E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
751	ALL	481565.9	3668372	1.23E-07	1.333YrCar	1.23E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
752	ALL	481585.9	3668372	1.19E-07	1.333YrCar	1.19E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
753	ALL	481605.9	3668372	1.46E-07	1.333YrCar	1.46E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
754	ALL	481625.9	3668372	1.49E-07	1.333YrCar	1.49E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
755	ALL	481645.9	3668372	1.51E-07	1.333YrCar	1.51E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
756	ALL	481665.9	3668372	1.62E-07	1.333YrCar	1.62E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
757	ALL	481865.9	3668372	8.66E-08	1.333YrCar	8.66E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
758	ALL	481885.9	3668372	9.16E-08	1.333YrCar	9.16E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
759	ALL	481905.9	3668372	9.18E-08	1.333YrCar	9.18E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
760	ALL	481925.9	3668372	8.98E-08	1.333YrCar	8.98E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
761	ALL	481945.9	3668372	7.83E-08	1.333YrCar	7.83E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
762	ALL	481965.9	3668372	7.89E-08	1.333YrCar	7.89E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
763	ALL	481985.9	3668372	8.08E-08	1.333YrCar	8.08E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
764	ALL	482005.9	3668372	8.28E-08	1.333YrCar	8.28E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
765	ALL	482025.9	3668372	8.50E-08	1.333YrCar	8.50E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
766	ALL	482045.9	3668372	8.76E-08	1.333YrCar	8.76E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
767	ALL	482065.9	3668372	8.95E-08	1.333YrCar	8.95E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
768	ALL	482225.9	3668372	1.40E-07	1.333YrCar	1.40E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
769	ALL	482245.9	3668372	1.45E-07	1.333YrCar	1.45E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
770	ALL	482265.9	3668372	1.58E-07	1.333YrCar	1.58E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
771	ALL	482285.9	3668372	2.42E-07	1.333YrCar	2.42E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
772	ALL	482305.9	3668372	4.71E-07	1.333YrCar	4.71E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
773	ALL	482325.9	3668372	4.84E-07	1.333YrCar	4.84E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
774	ALL	482345.9	3668372	4.88E-07	1.333YrCar	4.88E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
775	ALL	482365.9	3668372	4.84E-07	1.333YrCar	4.84E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
776	ALL	482385.9	3668372	4.81E-07	1.333YrCar	4.81E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
777	ALL	482405.9	3668372	4.71E-07	1.333YrCar	4.71E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
778	ALL	482425.9	3668372	4.63E-07	1.333YrCar	4.63E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
779	ALL	482445.9	3668372	4.52E-07	1.333YrCar	4.52E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
780	ALL	482465.9	3668372	4.43E-07	1.333YrCar	4.43E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
781	ALL	482485.9	3668372	4.30E-07	1.333YrCar	4.30E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
782	ALL	482505.9	3668372	4.18E-07	1.333YrCar	4.18E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
783	ALL	482525.9	3668372	4.03E-07	1.333YrCar	4.03E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

784	ALL	482545.9	3668372	3.86E-07	1.333YrCar	3.86E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
785	ALL	482565.9	3668372	3.44E-07	1.333YrCar	3.44E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
786	ALL	482585.9	3668372	3.27E-07	1.333YrCar	3.27E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
787	ALL	482605.9	3668372	2.41E-07	1.333YrCar	2.41E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
788	ALL	482625.9	3668372	2.45E-07	1.333YrCar	2.45E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
789	ALL	482645.9	3668372	2.30E-07	1.333YrCar	2.30E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
790	ALL	482665.9	3668372	2.21E-07	1.333YrCar	2.21E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
791	ALL	482685.9	3668372	2.05E-07	1.333YrCar	2.05E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
792	ALL	482705.9	3668372	1.90E-07	1.333YrCar	1.90E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
793	ALL	482725.9	3668372	1.79E-07	1.333YrCar	1.79E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
794	ALL	482745.9	3668372	1.72E-07	1.333YrCar	1.72E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
795	ALL	482765.9	3668372	1.66E-07	1.333YrCar	1.66E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
796	ALL	482785.9	3668372	1.60E-07	1.333YrCar	1.60E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
797	ALL	482805.9	3668372	1.55E-07	1.333YrCar	1.55E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
798	ALL	482825.9	3668372	1.46E-07	1.333YrCar	1.46E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
799	ALL	482845.9	3668372	1.44E-07	1.333YrCar	1.44E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
800	ALL	482865.9	3668372	1.40E-07	1.333YrCar	1.40E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
801	ALL	482885.9	3668372	1.36E-07	1.333YrCar	1.36E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
802	ALL	482905.9	3668372	1.31E-07	1.333YrCar	1.31E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
803	ALL	482925.9	3668372	1.27E-07	1.333YrCar	1.27E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
804	ALL	481145.9	3668392	8.68E-08	1.333YrCar	8.68E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
805	ALL	481165.9	3668392	8.88E-08	1.333YrCar	8.88E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
806	ALL	481185.9	3668392	9.12E-08	1.333YrCar	9.12E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
807	ALL	481205.9	3668392	9.54E-08	1.333YrCar	9.54E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
808	ALL	481225.9	3668392	9.82E-08	1.333YrCar	9.82E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
809	ALL	481245.9	3668392	1.02E-07	1.333YrCar	1.02E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
810	ALL	481265.9	3668392	1.11E-07	1.333YrCar	1.11E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
811	ALL	481285.9	3668392	1.18E-07	1.333YrCar	1.18E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
812	ALL	481305.9	3668392	1.24E-07	1.333YrCar	1.24E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
813	ALL	481325.9	3668392	1.29E-07	1.333YrCar	1.29E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
814	ALL	481345.9	3668392	1.24E-07	1.333YrCar	1.24E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
815	ALL	481365.9	3668392	1.01E-07	1.333YrCar	1.01E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
816	ALL	481385.9	3668392	1.10E-07	1.333YrCar	1.10E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
817	ALL	481405.9	3668392	1.19E-07	1.333YrCar	1.19E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
818	ALL	481425.9	3668392	1.40E-07	1.333YrCar	1.40E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
819	ALL	481445.9	3668392	1.43E-07	1.333YrCar	1.43E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
820	ALL	481465.9	3668392	1.24E-07	1.333YrCar	1.24E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
821	ALL	481485.9	3668392	1.23E-07	1.333YrCar	1.23E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
822	ALL	481505.9	3668392	1.39E-07	1.333YrCar	1.39E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
823	ALL	481525.9	3668392	1.43E-07	1.333YrCar	1.43E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
824	ALL	481545.9	3668392	1.50E-07	1.333YrCar	1.50E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
825	ALL	481565.9	3668392	1.39E-07	1.333YrCar	1.39E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
826	ALL	481585.9	3668392	1.42E-07	1.333YrCar	1.42E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
827	ALL	481605.9	3668392	1.54E-07	1.333YrCar	1.54E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
828	ALL	481625.9	3668392	1.66E-07	1.333YrCar	1.66E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
829	ALL	481645.9	3668392	1.63E-07	1.333YrCar	1.63E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
830	ALL	481665.9	3668392	1.69E-07	1.333YrCar	1.69E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
831	ALL	481865.9	3668392	8.05E-08	1.333YrCar	8.05E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
832	ALL	481885.9	3668392	8.14E-08	1.333YrCar	8.14E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

833	ALL	481905.9	3668392	7.95E-08	1.333YrCar	7.95E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
834	ALL	481925.9	3668392	7.63E-08	1.333YrCar	7.63E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
835	ALL	481945.9	3668392	7.61E-08	1.333YrCar	7.61E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
836	ALL	481965.9	3668392	7.56E-08	1.333YrCar	7.56E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
837	ALL	481985.9	3668392	7.70E-08	1.333YrCar	7.70E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
838	ALL	482005.9	3668392	7.86E-08	1.333YrCar	7.86E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
839	ALL	482025.9	3668392	7.94E-08	1.333YrCar	7.94E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
840	ALL	482045.9	3668392	8.20E-08	1.333YrCar	8.20E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
841	ALL	482065.9	3668392	8.43E-08	1.333YrCar	8.43E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
842	ALL	482205.9	3668392	1.10E-07	1.333YrCar	1.10E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
843	ALL	482225.9	3668392	1.11E-07	1.333YrCar	1.11E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
844	ALL	482245.9	3668392	1.24E-07	1.333YrCar	1.24E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
845	ALL	482265.9	3668392	1.45E-07	1.333YrCar	1.45E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
846	ALL	482285.9	3668392	2.40E-07	1.333YrCar	2.40E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
847	ALL	482305.9	3668392	4.37E-07	1.333YrCar	4.37E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
848	ALL	482325.9	3668392	4.45E-07	1.333YrCar	4.45E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
849	ALL	482345.9	3668392	4.51E-07	1.333YrCar	4.51E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
850	ALL	482365.9	3668392	4.43E-07	1.333YrCar	4.43E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
851	ALL	482385.9	3668392	4.30E-07	1.333YrCar	4.30E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
852	ALL	482405.9	3668392	4.25E-07	1.333YrCar	4.25E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
853	ALL	482425.9	3668392	4.18E-07	1.333YrCar	4.18E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
854	ALL	482445.9	3668392	4.08E-07	1.333YrCar	4.08E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
855	ALL	482465.9	3668392	3.95E-07	1.333YrCar	3.95E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
856	ALL	482485.9	3668392	3.77E-07	1.333YrCar	3.77E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
857	ALL	482505.9	3668392	3.42E-07	1.333YrCar	3.42E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
858	ALL	482525.9	3668392	3.34E-07	1.333YrCar	3.34E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
859	ALL	482545.9	3668392	3.35E-07	1.333YrCar	3.35E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
860	ALL	482565.9	3668392	3.16E-07	1.333YrCar	3.16E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
861	ALL	482585.9	3668392	2.93E-07	1.333YrCar	2.93E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
862	ALL	482605.9	3668392	2.20E-07	1.333YrCar	2.20E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
863	ALL	482625.9	3668392	2.24E-07	1.333YrCar	2.24E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
864	ALL	482645.9	3668392	2.11E-07	1.333YrCar	2.11E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
865	ALL	482665.9	3668392	1.99E-07	1.333YrCar	1.99E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
866	ALL	482685.9	3668392	1.80E-07	1.333YrCar	1.80E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
867	ALL	482705.9	3668392	1.68E-07	1.333YrCar	1.68E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
868	ALL	482725.9	3668392	1.62E-07	1.333YrCar	1.62E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
869	ALL	482745.9	3668392	1.56E-07	1.333YrCar	1.56E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
870	ALL	482765.9	3668392	1.51E-07	1.333YrCar	1.51E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
871	ALL	482785.9	3668392	1.45E-07	1.333YrCar	1.45E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
872	ALL	482805.9	3668392	1.41E-07	1.333YrCar	1.41E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
873	ALL	482825.9	3668392	1.36E-07	1.333YrCar	1.36E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
874	ALL	482845.9	3668392	1.31E-07	1.333YrCar	1.31E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
875	ALL	482865.9	3668392	1.29E-07	1.333YrCar	1.29E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
876	ALL	482885.9	3668392	1.26E-07	1.333YrCar	1.26E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
877	ALL	482905.9	3668392	1.23E-07	1.333YrCar	1.23E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
878	ALL	482925.9	3668392	1.17E-07	1.333YrCar	1.17E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
879	ALL	481125.9	3668412	8.38E-08	1.333YrCar	8.38E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
880	ALL	481145.9	3668412	8.57E-08	1.333YrCar	8.57E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
881	ALL	481165.9	3668412	8.79E-08	1.333YrCar	8.79E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

882	ALL	481185.9	3668412	9.20E-08	1.333YrCar	9.20E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
883	ALL	481205.9	3668412	9.63E-08	1.333YrCar	9.63E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
884	ALL	481225.9	3668412	9.94E-08	1.333YrCar	9.94E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
885	ALL	481245.9	3668412	1.09E-07	1.333YrCar	1.09E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
886	ALL	481265.9	3668412	1.15E-07	1.333YrCar	1.15E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
887	ALL	481285.9	3668412	1.21E-07	1.333YrCar	1.21E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
888	ALL	481305.9	3668412	1.24E-07	1.333YrCar	1.24E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
889	ALL	481325.9	3668412	1.25E-07	1.333YrCar	1.25E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
890	ALL	481345.9	3668412	1.20E-07	1.333YrCar	1.20E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
891	ALL	481365.9	3668412	1.03E-07	1.333YrCar	1.03E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
892	ALL	481385.9	3668412	1.02E-07	1.333YrCar	1.02E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
893	ALL	481405.9	3668412	1.37E-07	1.333YrCar	1.37E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
894	ALL	481425.9	3668412	1.44E-07	1.333YrCar	1.44E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
895	ALL	481445.9	3668412	1.49E-07	1.333YrCar	1.49E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
896	ALL	481465.9	3668412	1.53E-07	1.333YrCar	1.53E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
897	ALL	481485.9	3668412	1.51E-07	1.333YrCar	1.51E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
898	ALL	481505.9	3668412	1.61E-07	1.333YrCar	1.61E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
899	ALL	481525.9	3668412	1.63E-07	1.333YrCar	1.63E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
900	ALL	481545.9	3668412	1.63E-07	1.333YrCar	1.63E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
901	ALL	481565.9	3668412	1.62E-07	1.333YrCar	1.62E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
902	ALL	481585.9	3668412	1.72E-07	1.333YrCar	1.72E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
903	ALL	481605.9	3668412	1.77E-07	1.333YrCar	1.77E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
904	ALL	481625.9	3668412	1.81E-07	1.333YrCar	1.81E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
905	ALL	481645.9	3668412	1.80E-07	1.333YrCar	1.80E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
906	ALL	481665.9	3668412	1.94E-07	1.333YrCar	1.94E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
907	ALL	481865.9	3668412	6.92E-08	1.333YrCar	6.92E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
908	ALL	481885.9	3668412	7.58E-08	1.333YrCar	7.58E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
909	ALL	481905.9	3668412	6.41E-08	1.333YrCar	6.41E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
910	ALL	481925.9	3668412	6.29E-08	1.333YrCar	6.29E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
911	ALL	481945.9	3668412	6.70E-08	1.333YrCar	6.70E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
912	ALL	481965.9	3668412	6.98E-08	1.333YrCar	6.98E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
913	ALL	481985.9	3668412	7.15E-08	1.333YrCar	7.15E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
914	ALL	482005.9	3668412	7.32E-08	1.333YrCar	7.32E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
915	ALL	482025.9	3668412	7.19E-08	1.333YrCar	7.19E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
916	ALL	482045.9	3668412	7.53E-08	1.333YrCar	7.53E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
917	ALL	482065.9	3668412	7.68E-08	1.333YrCar	7.68E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
918	ALL	482085.9	3668412	7.82E-08	1.333YrCar	7.82E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
919	ALL	482185.9	3668412	9.48E-08	1.333YrCar	9.48E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
920	ALL	482205.9	3668412	9.63E-08	1.333YrCar	9.63E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
921	ALL	482225.9	3668412	1.03E-07	1.333YrCar	1.03E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
922	ALL	482245.9	3668412	1.03E-07	1.333YrCar	1.03E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
923	ALL	482265.9	3668412	1.20E-07	1.333YrCar	1.20E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
924	ALL	482285.9	3668412	2.07E-07	1.333YrCar	2.07E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
925	ALL	482305.9	3668412	4.08E-07	1.333YrCar	4.08E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
926	ALL	482325.9	3668412	4.09E-07	1.333YrCar	4.09E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
927	ALL	482345.9	3668412	4.18E-07	1.333YrCar	4.18E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
928	ALL	482365.9	3668412	3.83E-07	1.333YrCar	3.83E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
929	ALL	482385.9	3668412	3.84E-07	1.333YrCar	3.84E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
930	ALL	482405.9	3668412	3.82E-07	1.333YrCar	3.82E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

931	ALL	482425.9	3668412	3.74E-07	1.333YrCar	3.74E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
932	ALL	482445.9	3668412	3.49E-07	1.333YrCar	3.49E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
933	ALL	482465.9	3668412	3.27E-07	1.333YrCar	3.27E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
934	ALL	482485.9	3668412	3.22E-07	1.333YrCar	3.22E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
935	ALL	482505.9	3668412	3.09E-07	1.333YrCar	3.09E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
936	ALL	482525.9	3668412	2.99E-07	1.333YrCar	2.99E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
937	ALL	482545.9	3668412	3.08E-07	1.333YrCar	3.08E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
938	ALL	482565.9	3668412	2.91E-07	1.333YrCar	2.91E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
939	ALL	482585.9	3668412	2.64E-07	1.333YrCar	2.64E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
940	ALL	482605.9	3668412	2.01E-07	1.333YrCar	2.01E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
941	ALL	482625.9	3668412	2.06E-07	1.333YrCar	2.06E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
942	ALL	482645.9	3668412	2.00E-07	1.333YrCar	2.00E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
943	ALL	482665.9	3668412	1.86E-07	1.333YrCar	1.86E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
944	ALL	482685.9	3668412	1.70E-07	1.333YrCar	1.70E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
945	ALL	482705.9	3668412	1.55E-07	1.333YrCar	1.55E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
946	ALL	482725.9	3668412	1.48E-07	1.333YrCar	1.48E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
947	ALL	482745.9	3668412	1.43E-07	1.333YrCar	1.43E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
948	ALL	482765.9	3668412	1.29E-07	1.333YrCar	1.29E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
949	ALL	482785.9	3668412	1.23E-07	1.333YrCar	1.23E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
950	ALL	482805.9	3668412	1.21E-07	1.333YrCar	1.21E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
951	ALL	482825.9	3668412	1.22E-07	1.333YrCar	1.22E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
952	ALL	482845.9	3668412	1.22E-07	1.333YrCar	1.22E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
953	ALL	482865.9	3668412	1.19E-07	1.333YrCar	1.19E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
954	ALL	482885.9	3668412	1.18E-07	1.333YrCar	1.18E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
955	ALL	482905.9	3668412	1.14E-07	1.333YrCar	1.14E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
956	ALL	481105.9	3668432	8.09E-08	1.333YrCar	8.09E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
957	ALL	481125.9	3668432	8.28E-08	1.333YrCar	8.28E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
958	ALL	481145.9	3668432	8.48E-08	1.333YrCar	8.48E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
959	ALL	481165.9	3668432	8.75E-08	1.333YrCar	8.75E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
960	ALL	481185.9	3668432	9.09E-08	1.333YrCar	9.09E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
961	ALL	481205.9	3668432	9.44E-08	1.333YrCar	9.44E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
962	ALL	481225.9	3668432	9.88E-08	1.333YrCar	9.88E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
963	ALL	481245.9	3668432	1.11E-07	1.333YrCar	1.11E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
964	ALL	481265.9	3668432	1.17E-07	1.333YrCar	1.17E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
965	ALL	481285.9	3668432	1.20E-07	1.333YrCar	1.20E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
966	ALL	481305.9	3668432	1.23E-07	1.333YrCar	1.23E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
967	ALL	481325.9	3668432	1.25E-07	1.333YrCar	1.25E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
968	ALL	481345.9	3668432	1.26E-07	1.333YrCar	1.26E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
969	ALL	481365.9	3668432	1.29E-07	1.333YrCar	1.29E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
970	ALL	481385.9	3668432	1.25E-07	1.333YrCar	1.25E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
971	ALL	481405.9	3668432	1.38E-07	1.333YrCar	1.38E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
972	ALL	481425.9	3668432	1.44E-07	1.333YrCar	1.44E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
973	ALL	481445.9	3668432	1.46E-07	1.333YrCar	1.46E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
974	ALL	481465.9	3668432	1.45E-07	1.333YrCar	1.45E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
975	ALL	481485.9	3668432	1.51E-07	1.333YrCar	1.51E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
976	ALL	481505.9	3668432	1.57E-07	1.333YrCar	1.57E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
977	ALL	481525.9	3668432	1.62E-07	1.333YrCar	1.62E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
978	ALL	481545.9	3668432	1.64E-07	1.333YrCar	1.64E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
979	ALL	481565.9	3668432	1.63E-07	1.333YrCar	1.63E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

980	ALL	481585.9	3668432	1.73E-07	1.333YrCar	1.73E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
981	ALL	481605.9	3668432	1.76E-07	1.333YrCar	1.76E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
982	ALL	481625.9	3668432	1.79E-07	1.333YrCar	1.79E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
983	ALL	481645.9	3668432	1.81E-07	1.333YrCar	1.81E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
984	ALL	481865.9	3668432	6.02E-08	1.333YrCar	6.02E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
985	ALL	481885.9	3668432	5.86E-08	1.333YrCar	5.86E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
986	ALL	481905.9	3668432	5.55E-08	1.333YrCar	5.55E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
987	ALL	481925.9	3668432	5.76E-08	1.333YrCar	5.76E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
988	ALL	481945.9	3668432	6.19E-08	1.333YrCar	6.19E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
989	ALL	481965.9	3668432	6.38E-08	1.333YrCar	6.38E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
990	ALL	481985.9	3668432	6.53E-08	1.333YrCar	6.53E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
991	ALL	482005.9	3668432	6.37E-08	1.333YrCar	6.37E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
992	ALL	482025.9	3668432	6.54E-08	1.333YrCar	6.54E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
993	ALL	482045.9	3668432	6.94E-08	1.333YrCar	6.94E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
994	ALL	482065.9	3668432	7.00E-08	1.333YrCar	7.00E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
995	ALL	482085.9	3668432	6.93E-08	1.333YrCar	6.93E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
996	ALL	482185.9	3668432	8.64E-08	1.333YrCar	8.64E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
997	ALL	482205.9	3668432	8.98E-08	1.333YrCar	8.98E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
998	ALL	482225.9	3668432	9.08E-08	1.333YrCar	9.08E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
999	ALL	482245.9	3668432	9.28E-08	1.333YrCar	9.28E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1000	ALL	482265.9	3668432	9.79E-08	1.333YrCar	9.79E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1001	ALL	482285.9	3668432	1.63E-07	1.333YrCar	1.63E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1002	ALL	482305.9	3668432	3.77E-07	1.333YrCar	3.77E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1003	ALL	482325.9	3668432	3.78E-07	1.333YrCar	3.78E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1004	ALL	482345.9	3668432	3.88E-07	1.333YrCar	3.88E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1005	ALL	482365.9	3668432	3.59E-07	1.333YrCar	3.59E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1006	ALL	482385.9	3668432	3.64E-07	1.333YrCar	3.64E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1007	ALL	482405.9	3668432	3.68E-07	1.333YrCar	3.68E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1008	ALL	482425.9	3668432	3.64E-07	1.333YrCar	3.64E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1009	ALL	482445.9	3668432	3.56E-07	1.333YrCar	3.56E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1010	ALL	482465.9	3668432	3.48E-07	1.333YrCar	3.48E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1011	ALL	482485.9	3668432	3.37E-07	1.333YrCar	3.37E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1012	ALL	482505.9	3668432	3.02E-07	1.333YrCar	3.02E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1013	ALL	482525.9	3668432	2.91E-07	1.333YrCar	2.91E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1014	ALL	482545.9	3668432	2.85E-07	1.333YrCar	2.85E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1015	ALL	482565.9	3668432	2.70E-07	1.333YrCar	2.70E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1016	ALL	482585.9	3668432	2.35E-07	1.333YrCar	2.35E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1017	ALL	482605.9	3668432	1.85E-07	1.333YrCar	1.85E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1018	ALL	482625.9	3668432	1.90E-07	1.333YrCar	1.90E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1019	ALL	482645.9	3668432	1.90E-07	1.333YrCar	1.90E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1020	ALL	482665.9	3668432	1.76E-07	1.333YrCar	1.76E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1021	ALL	482685.9	3668432	1.60E-07	1.333YrCar	1.60E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1022	ALL	482705.9	3668432	1.46E-07	1.333YrCar	1.46E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1023	ALL	482725.9	3668432	1.39E-07	1.333YrCar	1.39E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1024	ALL	482745.9	3668432	1.24E-07	1.333YrCar	1.24E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1025	ALL	482825.9	3668432	1.09E-07	1.333YrCar	1.09E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1026	ALL	482845.9	3668432	1.11E-07	1.333YrCar	1.11E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1027	ALL	482865.9	3668432	1.11E-07	1.333YrCar	1.11E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1028	ALL	482885.9	3668432	1.10E-07	1.333YrCar	1.10E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

1029	ALL	481085.9	3668452	7.82E-08	1.333YrCar	7.82E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1030	ALL	481105.9	3668452	8.00E-08	1.333YrCar	8.00E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1031	ALL	481125.9	3668452	8.21E-08	1.333YrCar	8.21E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1032	ALL	481145.9	3668452	8.41E-08	1.333YrCar	8.41E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1033	ALL	481165.9	3668452	8.66E-08	1.333YrCar	8.66E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1034	ALL	481185.9	3668452	8.93E-08	1.333YrCar	8.93E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1035	ALL	481205.9	3668452	9.26E-08	1.333YrCar	9.26E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1036	ALL	481225.9	3668452	9.55E-08	1.333YrCar	9.55E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1037	ALL	481245.9	3668452	1.03E-07	1.333YrCar	1.03E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1038	ALL	481265.9	3668452	1.16E-07	1.333YrCar	1.16E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1039	ALL	481285.9	3668452	1.17E-07	1.333YrCar	1.17E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1040	ALL	481305.9	3668452	1.20E-07	1.333YrCar	1.20E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1041	ALL	481325.9	3668452	1.25E-07	1.333YrCar	1.25E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1042	ALL	481345.9	3668452	1.28E-07	1.333YrCar	1.28E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1043	ALL	481365.9	3668452	1.31E-07	1.333YrCar	1.31E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1044	ALL	481385.9	3668452	1.35E-07	1.333YrCar	1.35E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1045	ALL	481405.9	3668452	1.38E-07	1.333YrCar	1.38E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1046	ALL	481425.9	3668452	1.41E-07	1.333YrCar	1.41E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1047	ALL	481445.9	3668452	1.36E-07	1.333YrCar	1.36E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1048	ALL	481465.9	3668452	1.40E-07	1.333YrCar	1.40E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1049	ALL	481485.9	3668452	1.42E-07	1.333YrCar	1.42E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1050	ALL	481505.9	3668452	1.50E-07	1.333YrCar	1.50E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1051	ALL	481525.9	3668452	1.56E-07	1.333YrCar	1.56E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1052	ALL	481545.9	3668452	1.60E-07	1.333YrCar	1.60E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1053	ALL	481565.9	3668452	1.57E-07	1.333YrCar	1.57E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1054	ALL	481585.9	3668452	1.61E-07	1.333YrCar	1.61E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1055	ALL	481605.9	3668452	1.67E-07	1.333YrCar	1.67E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1056	ALL	481625.9	3668452	1.74E-07	1.333YrCar	1.74E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1057	ALL	481885.9	3668452	5.19E-08	1.333YrCar	5.19E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1058	ALL	481905.9	3668452	5.21E-08	1.333YrCar	5.21E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1059	ALL	481925.9	3668452	5.49E-08	1.333YrCar	5.49E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1060	ALL	481945.9	3668452	5.65E-08	1.333YrCar	5.65E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1061	ALL	481965.9	3668452	5.84E-08	1.333YrCar	5.84E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1062	ALL	481985.9	3668452	5.66E-08	1.333YrCar	5.66E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1063	ALL	482005.9	3668452	5.84E-08	1.333YrCar	5.84E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1064	ALL	482025.9	3668452	6.14E-08	1.333YrCar	6.14E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1065	ALL	482045.9	3668452	6.35E-08	1.333YrCar	6.35E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1066	ALL	482065.9	3668452	6.37E-08	1.333YrCar	6.37E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1067	ALL	482165.9	3668452	7.21E-08	1.333YrCar	7.21E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1068	ALL	482185.9	3668452	7.99E-08	1.333YrCar	7.99E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1069	ALL	482205.9	3668452	8.24E-08	1.333YrCar	8.24E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1070	ALL	482225.9	3668452	8.55E-08	1.333YrCar	8.55E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1071	ALL	482245.9	3668452	8.64E-08	1.333YrCar	8.64E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1072	ALL	482265.9	3668452	8.87E-08	1.333YrCar	8.87E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1073	ALL	482285.9	3668452	1.54E-07	1.333YrCar	1.54E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1074	ALL	482305.9	3668452	3.47E-07	1.333YrCar	3.47E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1075	ALL	482325.9	3668452	3.49E-07	1.333YrCar	3.49E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1076	ALL	482345.9	3668452	3.61E-07	1.333YrCar	3.61E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1077	ALL	482365.9	3668452	3.33E-07	1.333YrCar	3.33E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

1078	ALL	482385.9	3668452	3.39E-07	1.333YrCar	3.39E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1079	ALL	482405.9	3668452	3.43E-07	1.333YrCar	3.43E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1080	ALL	482425.9	3668452	3.25E-07	1.333YrCar	3.25E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1081	ALL	482445.9	3668452	3.19E-07	1.333YrCar	3.19E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1082	ALL	482465.9	3668452	2.89E-07	1.333YrCar	2.89E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1083	ALL	482485.9	3668452	2.80E-07	1.333YrCar	2.80E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1084	ALL	482505.9	3668452	2.75E-07	1.333YrCar	2.75E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1085	ALL	482525.9	3668452	2.65E-07	1.333YrCar	2.65E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1086	ALL	482545.9	3668452	2.64E-07	1.333YrCar	2.64E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1087	ALL	482565.9	3668452	2.48E-07	1.333YrCar	2.48E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1088	ALL	482585.9	3668452	2.13E-07	1.333YrCar	2.13E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1089	ALL	482605.9	3668452	1.71E-07	1.333YrCar	1.71E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1090	ALL	482625.9	3668452	1.75E-07	1.333YrCar	1.75E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1091	ALL	482645.9	3668452	1.70E-07	1.333YrCar	1.70E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1092	ALL	482665.9	3668452	1.50E-07	1.333YrCar	1.50E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1093	ALL	482685.9	3668452	1.45E-07	1.333YrCar	1.45E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1094	ALL	482705.9	3668452	1.34E-07	1.333YrCar	1.34E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1095	ALL	482725.9	3668452	1.23E-07	1.333YrCar	1.23E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1096	ALL	482745.9	3668452	1.10E-07	1.333YrCar	1.10E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1097	ALL	482885.9	3668452	1.02E-07	1.333YrCar	1.02E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1098	ALL	481065.9	3668472	7.57E-08	1.333YrCar	7.57E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1099	ALL	481085.9	3668472	7.73E-08	1.333YrCar	7.73E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1100	ALL	481105.9	3668472	7.92E-08	1.333YrCar	7.92E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1101	ALL	481125.9	3668472	8.11E-08	1.333YrCar	8.11E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1102	ALL	481145.9	3668472	8.31E-08	1.333YrCar	8.31E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1103	ALL	481165.9	3668472	8.54E-08	1.333YrCar	8.54E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1104	ALL	481185.9	3668472	8.88E-08	1.333YrCar	8.88E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1105	ALL	481205.9	3668472	9.15E-08	1.333YrCar	9.15E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1106	ALL	481225.9	3668472	9.37E-08	1.333YrCar	9.37E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1107	ALL	481245.9	3668472	9.84E-08	1.333YrCar	9.84E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1108	ALL	481265.9	3668472	1.05E-07	1.333YrCar	1.05E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1109	ALL	481285.9	3668472	1.10E-07	1.333YrCar	1.10E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1110	ALL	481305.9	3668472	1.11E-07	1.333YrCar	1.11E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1111	ALL	481325.9	3668472	1.11E-07	1.333YrCar	1.11E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1112	ALL	481345.9	3668472	1.17E-07	1.333YrCar	1.17E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1113	ALL	481365.9	3668472	1.20E-07	1.333YrCar	1.20E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1114	ALL	481385.9	3668472	1.25E-07	1.333YrCar	1.25E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1115	ALL	481405.9	3668472	1.27E-07	1.333YrCar	1.27E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1116	ALL	481425.9	3668472	1.31E-07	1.333YrCar	1.31E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1117	ALL	481445.9	3668472	1.31E-07	1.333YrCar	1.31E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1118	ALL	481465.9	3668472	1.32E-07	1.333YrCar	1.32E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1119	ALL	481485.9	3668472	1.38E-07	1.333YrCar	1.38E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1120	ALL	481505.9	3668472	1.43E-07	1.333YrCar	1.43E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1121	ALL	481525.9	3668472	1.52E-07	1.333YrCar	1.52E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1122	ALL	481545.9	3668472	1.41E-07	1.333YrCar	1.41E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1123	ALL	481565.9	3668472	1.43E-07	1.333YrCar	1.43E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1124	ALL	481585.9	3668472	1.49E-07	1.333YrCar	1.49E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1125	ALL	481605.9	3668472	1.56E-07	1.333YrCar	1.56E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1126	ALL	481625.9	3668472	1.56E-07	1.333YrCar	1.56E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

1127	ALL	481885.9	3668472	4.80E-08	1.333YrCar	4.80E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1128	ALL	481905.9	3668472	4.96E-08	1.333YrCar	4.96E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1129	ALL	481925.9	3668472	5.02E-08	1.333YrCar	5.02E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1130	ALL	481945.9	3668472	5.25E-08	1.333YrCar	5.25E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1131	ALL	481965.9	3668472	5.10E-08	1.333YrCar	5.10E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1132	ALL	481985.9	3668472	5.27E-08	1.333YrCar	5.27E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1133	ALL	482005.9	3668472	5.46E-08	1.333YrCar	5.46E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1134	ALL	482025.9	3668472	5.69E-08	1.333YrCar	5.69E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1135	ALL	482045.9	3668472	5.73E-08	1.333YrCar	5.73E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1136	ALL	482065.9	3668472	5.81E-08	1.333YrCar	5.81E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1137	ALL	482145.9	3668472	6.27E-08	1.333YrCar	6.27E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1138	ALL	482165.9	3668472	6.64E-08	1.333YrCar	6.64E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1139	ALL	482185.9	3668472	7.13E-08	1.333YrCar	7.13E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1140	ALL	482205.9	3668472	7.67E-08	1.333YrCar	7.67E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1141	ALL	482225.9	3668472	7.99E-08	1.333YrCar	7.99E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1142	ALL	482245.9	3668472	8.03E-08	1.333YrCar	8.03E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1143	ALL	482265.9	3668472	8.25E-08	1.333YrCar	8.25E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1144	ALL	482285.9	3668472	1.35E-07	1.333YrCar	1.35E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1145	ALL	482305.9	3668472	3.20E-07	1.333YrCar	3.20E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1146	ALL	482325.9	3668472	3.20E-07	1.333YrCar	3.20E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1147	ALL	482345.9	3668472	3.37E-07	1.333YrCar	3.37E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1148	ALL	482365.9	3668472	3.10E-07	1.333YrCar	3.10E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1149	ALL	482385.9	3668472	3.10E-07	1.333YrCar	3.10E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1150	ALL	482405.9	3668472	3.10E-07	1.333YrCar	3.10E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1151	ALL	482425.9	3668472	2.90E-07	1.333YrCar	2.90E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1152	ALL	482445.9	3668472	2.70E-07	1.333YrCar	2.70E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1153	ALL	482465.9	3668472	2.64E-07	1.333YrCar	2.64E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1154	ALL	482485.9	3668472	2.56E-07	1.333YrCar	2.56E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1155	ALL	482505.9	3668472	2.50E-07	1.333YrCar	2.50E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1156	ALL	482525.9	3668472	2.41E-07	1.333YrCar	2.41E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1157	ALL	482545.9	3668472	2.44E-07	1.333YrCar	2.44E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1158	ALL	482565.9	3668472	2.27E-07	1.333YrCar	2.27E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1159	ALL	482585.9	3668472	1.84E-07	1.333YrCar	1.84E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1160	ALL	482605.9	3668472	1.51E-07	1.333YrCar	1.51E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1161	ALL	482625.9	3668472	1.58E-07	1.333YrCar	1.58E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1162	ALL	482645.9	3668472	1.54E-07	1.333YrCar	1.54E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1163	ALL	482665.9	3668472	1.43E-07	1.333YrCar	1.43E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1164	ALL	482685.9	3668472	1.29E-07	1.333YrCar	1.29E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1165	ALL	482705.9	3668472	1.22E-07	1.333YrCar	1.22E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1166	ALL	482725.9	3668472	1.08E-07	1.333YrCar	1.08E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1167	ALL	481045.9	3668492	7.34E-08	1.333YrCar	7.34E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1168	ALL	481065.9	3668492	7.48E-08	1.333YrCar	7.48E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1169	ALL	481085.9	3668492	7.65E-08	1.333YrCar	7.65E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1170	ALL	481105.9	3668492	7.83E-08	1.333YrCar	7.83E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1171	ALL	481125.9	3668492	8.01E-08	1.333YrCar	8.01E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1172	ALL	481145.9	3668492	8.20E-08	1.333YrCar	8.20E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1173	ALL	481165.9	3668492	8.43E-08	1.333YrCar	8.43E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1174	ALL	481185.9	3668492	8.73E-08	1.333YrCar	8.73E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1175	ALL	481205.9	3668492	9.07E-08	1.333YrCar	9.07E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

1176	ALL	481225.9	3668492	9.25E-08	1.333YrCar	9.25E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1177	ALL	481245.9	3668492	9.47E-08	1.333YrCar	9.47E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1178	ALL	481265.9	3668492	9.82E-08	1.333YrCar	9.82E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1179	ALL	481285.9	3668492	1.01E-07	1.333YrCar	1.01E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1180	ALL	481305.9	3668492	1.03E-07	1.333YrCar	1.03E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1181	ALL	481325.9	3668492	1.06E-07	1.333YrCar	1.06E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1182	ALL	481345.9	3668492	1.09E-07	1.333YrCar	1.09E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1183	ALL	481365.9	3668492	1.09E-07	1.333YrCar	1.09E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1184	ALL	481385.9	3668492	1.12E-07	1.333YrCar	1.12E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1185	ALL	481405.9	3668492	1.15E-07	1.333YrCar	1.15E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1186	ALL	481425.9	3668492	1.19E-07	1.333YrCar	1.19E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1187	ALL	481445.9	3668492	1.23E-07	1.333YrCar	1.23E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1188	ALL	481465.9	3668492	1.29E-07	1.333YrCar	1.29E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1189	ALL	481485.9	3668492	1.33E-07	1.333YrCar	1.33E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1190	ALL	481505.9	3668492	1.33E-07	1.333YrCar	1.33E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1191	ALL	481525.9	3668492	1.28E-07	1.333YrCar	1.28E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1192	ALL	481545.9	3668492	1.31E-07	1.333YrCar	1.31E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1193	ALL	481565.9	3668492	1.35E-07	1.333YrCar	1.35E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1194	ALL	481585.9	3668492	1.39E-07	1.333YrCar	1.39E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1195	ALL	481605.9	3668492	1.47E-07	1.333YrCar	1.47E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1196	ALL	481885.9	3668492	4.60E-08	1.333YrCar	4.60E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1197	ALL	481905.9	3668492	4.68E-08	1.333YrCar	4.68E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1198	ALL	481925.9	3668492	4.79E-08	1.333YrCar	4.79E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1199	ALL	481945.9	3668492	4.66E-08	1.333YrCar	4.66E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1200	ALL	481965.9	3668492	4.77E-08	1.333YrCar	4.77E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1201	ALL	481985.9	3668492	4.91E-08	1.333YrCar	4.91E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1202	ALL	482005.9	3668492	5.07E-08	1.333YrCar	5.07E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1203	ALL	482025.9	3668492	5.18E-08	1.333YrCar	5.18E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1204	ALL	482045.9	3668492	5.28E-08	1.333YrCar	5.28E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1205	ALL	482125.9	3668492	5.73E-08	1.333YrCar	5.73E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1206	ALL	482145.9	3668492	5.80E-08	1.333YrCar	5.80E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1207	ALL	482165.9	3668492	6.08E-08	1.333YrCar	6.08E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1208	ALL	482185.9	3668492	6.57E-08	1.333YrCar	6.57E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1209	ALL	482205.9	3668492	7.21E-08	1.333YrCar	7.21E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1210	ALL	482225.9	3668492	7.45E-08	1.333YrCar	7.45E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1211	ALL	482245.9	3668492	7.57E-08	1.333YrCar	7.57E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1212	ALL	482265.9	3668492	7.66E-08	1.333YrCar	7.66E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1213	ALL	482285.9	3668492	1.08E-07	1.333YrCar	1.08E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1214	ALL	482305.9	3668492	2.90E-07	1.333YrCar	2.90E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1215	ALL	482325.9	3668492	2.97E-07	1.333YrCar	2.97E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1216	ALL	482345.9	3668492	3.13E-07	1.333YrCar	3.13E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1217	ALL	482365.9	3668492	2.28E-07	1.333YrCar	2.28E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1218	ALL	482385.9	3668492	2.27E-07	1.333YrCar	2.27E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1219	ALL	482405.9	3668492	2.25E-07	1.333YrCar	2.25E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1220	ALL	482425.9	3668492	2.23E-07	1.333YrCar	2.23E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1221	ALL	482445.9	3668492	2.21E-07	1.333YrCar	2.21E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1222	ALL	482465.9	3668492	2.18E-07	1.333YrCar	2.18E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1223	ALL	482485.9	3668492	2.15E-07	1.333YrCar	2.15E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1224	ALL	482505.9	3668492	2.09E-07	1.333YrCar	2.09E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

1225	ALL	482525.9	3668492	2.07E-07	1.333YrCar	2.07E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1226	ALL	482545.9	3668492	2.23E-07	1.333YrCar	2.23E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1227	ALL	482565.9	3668492	2.08E-07	1.333YrCar	2.08E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1228	ALL	482585.9	3668492	1.63E-07	1.333YrCar	1.63E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1229	ALL	482605.9	3668492	1.34E-07	1.333YrCar	1.34E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1230	ALL	482625.9	3668492	1.40E-07	1.333YrCar	1.40E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1231	ALL	482645.9	3668492	1.38E-07	1.333YrCar	1.38E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1232	ALL	482665.9	3668492	1.35E-07	1.333YrCar	1.35E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1233	ALL	482685.9	3668492	1.20E-07	1.333YrCar	1.20E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1234	ALL	482705.9	3668492	1.05E-07	1.333YrCar	1.05E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1235	ALL	481025.9	3668512	7.13E-08	1.333YrCar	7.13E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1236	ALL	481045.9	3668512	7.26E-08	1.333YrCar	7.26E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1237	ALL	481065.9	3668512	7.41E-08	1.333YrCar	7.41E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1238	ALL	481085.9	3668512	7.57E-08	1.333YrCar	7.57E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1239	ALL	481105.9	3668512	7.74E-08	1.333YrCar	7.74E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1240	ALL	481125.9	3668512	7.92E-08	1.333YrCar	7.92E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1241	ALL	481145.9	3668512	8.14E-08	1.333YrCar	8.14E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1242	ALL	481165.9	3668512	8.32E-08	1.333YrCar	8.32E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1243	ALL	481185.9	3668512	8.58E-08	1.333YrCar	8.58E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1244	ALL	481205.9	3668512	8.82E-08	1.333YrCar	8.82E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1245	ALL	481225.9	3668512	9.07E-08	1.333YrCar	9.07E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1246	ALL	481245.9	3668512	9.27E-08	1.333YrCar	9.27E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1247	ALL	481265.9	3668512	9.50E-08	1.333YrCar	9.50E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1248	ALL	481285.9	3668512	9.77E-08	1.333YrCar	9.77E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1249	ALL	481305.9	3668512	9.91E-08	1.333YrCar	9.91E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1250	ALL	481325.9	3668512	1.01E-07	1.333YrCar	1.01E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1251	ALL	481345.9	3668512	1.03E-07	1.333YrCar	1.03E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1252	ALL	481365.9	3668512	1.05E-07	1.333YrCar	1.05E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1253	ALL	481385.9	3668512	1.08E-07	1.333YrCar	1.08E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1254	ALL	481405.9	3668512	1.11E-07	1.333YrCar	1.11E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1255	ALL	481425.9	3668512	1.16E-07	1.333YrCar	1.16E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1256	ALL	481445.9	3668512	1.19E-07	1.333YrCar	1.19E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1257	ALL	481465.9	3668512	1.24E-07	1.333YrCar	1.24E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1258	ALL	481485.9	3668512	1.19E-07	1.333YrCar	1.19E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1259	ALL	481505.9	3668512	1.19E-07	1.333YrCar	1.19E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1260	ALL	481525.9	3668512	1.21E-07	1.333YrCar	1.21E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1261	ALL	481545.9	3668512	1.24E-07	1.333YrCar	1.24E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1262	ALL	481565.9	3668512	1.28E-07	1.333YrCar	1.28E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1263	ALL	481585.9	3668512	1.34E-07	1.333YrCar	1.34E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1264	ALL	481905.9	3668512	4.46E-08	1.333YrCar	4.46E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1265	ALL	481925.9	3668512	4.40E-08	1.333YrCar	4.40E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1266	ALL	481945.9	3668512	4.43E-08	1.333YrCar	4.43E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1267	ALL	481965.9	3668512	4.48E-08	1.333YrCar	4.48E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1268	ALL	481985.9	3668512	4.64E-08	1.333YrCar	4.64E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1269	ALL	482005.9	3668512	4.73E-08	1.333YrCar	4.73E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1270	ALL	482025.9	3668512	4.81E-08	1.333YrCar	4.81E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1271	ALL	482105.9	3668512	5.20E-08	1.333YrCar	5.20E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1272	ALL	482125.9	3668512	5.36E-08	1.333YrCar	5.36E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1273	ALL	482145.9	3668512	5.51E-08	1.333YrCar	5.51E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

1274	ALL	482165.9	3668512	5.61E-08	1.333YrCar	5.61E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1275	ALL	482185.9	3668512	5.91E-08	1.333YrCar	5.91E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1276	ALL	482205.9	3668512	6.78E-08	1.333YrCar	6.78E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1277	ALL	482225.9	3668512	6.97E-08	1.333YrCar	6.97E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1278	ALL	482245.9	3668512	7.14E-08	1.333YrCar	7.14E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1279	ALL	482265.9	3668512	7.18E-08	1.333YrCar	7.18E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1280	ALL	482285.9	3668512	9.26E-08	1.333YrCar	9.26E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1281	ALL	482305.9	3668512	2.56E-07	1.333YrCar	2.56E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1282	ALL	482325.9	3668512	2.73E-07	1.333YrCar	2.73E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1283	ALL	482345.9	3668512	2.90E-07	1.333YrCar	2.90E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1284	ALL	482365.9	3668512	2.17E-07	1.333YrCar	2.17E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1285	ALL	482385.9	3668512	2.16E-07	1.333YrCar	2.16E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1286	ALL	482405.9	3668512	2.12E-07	1.333YrCar	2.12E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1287	ALL	482425.9	3668512	2.15E-07	1.333YrCar	2.15E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1288	ALL	482445.9	3668512	2.17E-07	1.333YrCar	2.17E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1289	ALL	482465.9	3668512	2.16E-07	1.333YrCar	2.16E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1290	ALL	482485.9	3668512	2.14E-07	1.333YrCar	2.14E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1291	ALL	482505.9	3668512	2.07E-07	1.333YrCar	2.07E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1292	ALL	482525.9	3668512	2.05E-07	1.333YrCar	2.05E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1293	ALL	482545.9	3668512	2.03E-07	1.333YrCar	2.03E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1294	ALL	482565.9	3668512	1.89E-07	1.333YrCar	1.89E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1295	ALL	482585.9	3668512	1.41E-07	1.333YrCar	1.41E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1296	ALL	482605.9	3668512	1.19E-07	1.333YrCar	1.19E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1297	ALL	482625.9	3668512	1.23E-07	1.333YrCar	1.23E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1298	ALL	482645.9	3668512	1.24E-07	1.333YrCar	1.24E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1299	ALL	482665.9	3668512	1.21E-07	1.333YrCar	1.21E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1300	ALL	482685.9	3668512	1.11E-07	1.333YrCar	1.11E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1301	ALL	482705.9	3668512	9.66E-08	1.333YrCar	9.66E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1302	ALL	482885.9	3668512	8.29E-08	1.333YrCar	8.29E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1303	ALL	482905.9	3668512	8.26E-08	1.333YrCar	8.26E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1304	ALL	482925.9	3668512	8.20E-08	1.333YrCar	8.20E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1305	ALL	481045.9	3668532	7.20E-08	1.333YrCar	7.20E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1306	ALL	481065.9	3668532	7.34E-08	1.333YrCar	7.34E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1307	ALL	481085.9	3668532	7.50E-08	1.333YrCar	7.50E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1308	ALL	481105.9	3668532	7.66E-08	1.333YrCar	7.66E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1309	ALL	481125.9	3668532	7.84E-08	1.333YrCar	7.84E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1310	ALL	481145.9	3668532	8.02E-08	1.333YrCar	8.02E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1311	ALL	481165.9	3668532	8.23E-08	1.333YrCar	8.23E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1312	ALL	481185.9	3668532	8.40E-08	1.333YrCar	8.40E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1313	ALL	481205.9	3668532	8.65E-08	1.333YrCar	8.65E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1314	ALL	481225.9	3668532	8.87E-08	1.333YrCar	8.87E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1315	ALL	481245.9	3668532	9.06E-08	1.333YrCar	9.06E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1316	ALL	481265.9	3668532	9.28E-08	1.333YrCar	9.28E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1317	ALL	481285.9	3668532	9.43E-08	1.333YrCar	9.43E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1318	ALL	481305.9	3668532	9.60E-08	1.333YrCar	9.60E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1319	ALL	481325.9	3668532	9.83E-08	1.333YrCar	9.83E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1320	ALL	481345.9	3668532	1.01E-07	1.333YrCar	1.01E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1321	ALL	481365.9	3668532	1.03E-07	1.333YrCar	1.03E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1322	ALL	481385.9	3668532	1.06E-07	1.333YrCar	1.06E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

1323	ALL	481405.9	3668532	1.10E-07	1.333YrCar	1.10E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1324	ALL	481425.9	3668532	1.12E-07	1.333YrCar	1.12E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1325	ALL	481445.9	3668532	1.11E-07	1.333YrCar	1.11E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1326	ALL	481465.9	3668532	1.11E-07	1.333YrCar	1.11E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1327	ALL	481485.9	3668532	1.12E-07	1.333YrCar	1.12E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1328	ALL	481505.9	3668532	1.14E-07	1.333YrCar	1.14E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1329	ALL	481525.9	3668532	1.17E-07	1.333YrCar	1.17E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1330	ALL	481545.9	3668532	1.19E-07	1.333YrCar	1.19E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1331	ALL	481565.9	3668532	1.23E-07	1.333YrCar	1.23E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1332	ALL	481905.9	3668532	4.23E-08	1.333YrCar	4.23E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1333	ALL	481925.9	3668532	4.10E-08	1.333YrCar	4.10E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1334	ALL	481945.9	3668532	4.13E-08	1.333YrCar	4.13E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1335	ALL	481965.9	3668532	4.25E-08	1.333YrCar	4.25E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1336	ALL	481985.9	3668532	4.29E-08	1.333YrCar	4.29E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1337	ALL	482005.9	3668532	4.41E-08	1.333YrCar	4.41E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1338	ALL	482105.9	3668532	4.93E-08	1.333YrCar	4.93E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1339	ALL	482125.9	3668532	5.08E-08	1.333YrCar	5.08E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1340	ALL	482145.9	3668532	5.22E-08	1.333YrCar	5.22E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1341	ALL	482165.9	3668532	5.31E-08	1.333YrCar	5.31E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1342	ALL	482185.9	3668532	5.50E-08	1.333YrCar	5.50E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1343	ALL	482205.9	3668532	6.32E-08	1.333YrCar	6.32E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1344	ALL	482225.9	3668532	6.55E-08	1.333YrCar	6.55E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1345	ALL	482245.9	3668532	6.73E-08	1.333YrCar	6.73E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1346	ALL	482265.9	3668532	6.78E-08	1.333YrCar	6.78E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1347	ALL	482285.9	3668532	8.21E-08	1.333YrCar	8.21E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1348	ALL	482305.9	3668532	2.02E-07	1.333YrCar	2.02E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1349	ALL	482325.9	3668532	2.55E-07	1.333YrCar	2.55E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1350	ALL	482345.9	3668532	2.69E-07	1.333YrCar	2.69E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1351	ALL	482365.9	3668532	2.16E-07	1.333YrCar	2.16E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1352	ALL	482385.9	3668532	2.11E-07	1.333YrCar	2.11E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1353	ALL	482405.9	3668532	2.12E-07	1.333YrCar	2.12E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1354	ALL	482425.9	3668532	2.09E-07	1.333YrCar	2.09E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1355	ALL	482445.9	3668532	2.04E-07	1.333YrCar	2.04E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1356	ALL	482465.9	3668532	1.99E-07	1.333YrCar	1.99E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1357	ALL	482485.9	3668532	1.99E-07	1.333YrCar	1.99E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1358	ALL	482505.9	3668532	1.93E-07	1.333YrCar	1.93E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1359	ALL	482525.9	3668532	1.90E-07	1.333YrCar	1.90E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1360	ALL	482545.9	3668532	1.79E-07	1.333YrCar	1.79E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1361	ALL	482565.9	3668532	1.72E-07	1.333YrCar	1.72E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1362	ALL	482585.9	3668532	1.20E-07	1.333YrCar	1.20E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1363	ALL	482605.9	3668532	1.07E-07	1.333YrCar	1.07E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1364	ALL	482625.9	3668532	1.10E-07	1.333YrCar	1.10E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1365	ALL	482645.9	3668532	1.11E-07	1.333YrCar	1.11E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1366	ALL	482665.9	3668532	1.08E-07	1.333YrCar	1.08E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1367	ALL	482685.9	3668532	9.81E-08	1.333YrCar	9.81E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1368	ALL	482705.9	3668532	8.85E-08	1.333YrCar	8.85E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1369	ALL	482845.9	3668532	8.01E-08	1.333YrCar	8.01E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1370	ALL	482865.9	3668532	7.94E-08	1.333YrCar	7.94E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1371	ALL	482885.9	3668532	7.87E-08	1.333YrCar	7.87E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

1372	ALL	482905.9	3668532	7.82E-08	1.333YrCar	7.82E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1373	ALL	482925.9	3668532	7.77E-08	1.333YrCar	7.77E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1374	ALL	482945.9	3668532	7.72E-08	1.333YrCar	7.72E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1375	ALL	481045.9	3668552	7.14E-08	1.333YrCar	7.14E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1376	ALL	481065.9	3668552	7.28E-08	1.333YrCar	7.28E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1377	ALL	481085.9	3668552	7.43E-08	1.333YrCar	7.43E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1378	ALL	481105.9	3668552	7.61E-08	1.333YrCar	7.61E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1379	ALL	481125.9	3668552	7.76E-08	1.333YrCar	7.76E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1380	ALL	481145.9	3668552	7.93E-08	1.333YrCar	7.93E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1381	ALL	481165.9	3668552	8.15E-08	1.333YrCar	8.15E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1382	ALL	481185.9	3668552	8.30E-08	1.333YrCar	8.30E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1383	ALL	481205.9	3668552	8.48E-08	1.333YrCar	8.48E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1384	ALL	481225.9	3668552	8.73E-08	1.333YrCar	8.73E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1385	ALL	481245.9	3668552	8.89E-08	1.333YrCar	8.89E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1386	ALL	481265.9	3668552	9.07E-08	1.333YrCar	9.07E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1387	ALL	481285.9	3668552	9.24E-08	1.333YrCar	9.24E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1388	ALL	481305.9	3668552	9.40E-08	1.333YrCar	9.40E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1389	ALL	481325.9	3668552	9.61E-08	1.333YrCar	9.61E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1390	ALL	481345.9	3668552	9.85E-08	1.333YrCar	9.85E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1391	ALL	481365.9	3668552	1.00E-07	1.333YrCar	1.00E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1392	ALL	481385.9	3668552	1.03E-07	1.333YrCar	1.03E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1393	ALL	481405.9	3668552	1.04E-07	1.333YrCar	1.04E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1394	ALL	481425.9	3668552	1.04E-07	1.333YrCar	1.04E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1395	ALL	481445.9	3668552	1.06E-07	1.333YrCar	1.06E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1396	ALL	481465.9	3668552	1.07E-07	1.333YrCar	1.07E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1397	ALL	481485.9	3668552	1.08E-07	1.333YrCar	1.08E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1398	ALL	481505.9	3668552	1.10E-07	1.333YrCar	1.10E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1399	ALL	481525.9	3668552	1.12E-07	1.333YrCar	1.12E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1400	ALL	481905.9	3668552	3.83E-08	1.333YrCar	3.83E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1401	ALL	481925.9	3668552	3.88E-08	1.333YrCar	3.88E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1402	ALL	481945.9	3668552	3.90E-08	1.333YrCar	3.90E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1403	ALL	481965.9	3668552	3.91E-08	1.333YrCar	3.91E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1404	ALL	481985.9	3668552	4.05E-08	1.333YrCar	4.05E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1405	ALL	482085.9	3668552	4.38E-08	1.333YrCar	4.38E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1406	ALL	482105.9	3668552	4.49E-08	1.333YrCar	4.49E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1407	ALL	482125.9	3668552	4.83E-08	1.333YrCar	4.83E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1408	ALL	482145.9	3668552	4.96E-08	1.333YrCar	4.96E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1409	ALL	482165.9	3668552	5.06E-08	1.333YrCar	5.06E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1410	ALL	482185.9	3668552	5.19E-08	1.333YrCar	5.19E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1411	ALL	482205.9	3668552	5.87E-08	1.333YrCar	5.87E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1412	ALL	482225.9	3668552	6.22E-08	1.333YrCar	6.22E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1413	ALL	482245.9	3668552	6.39E-08	1.333YrCar	6.39E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1414	ALL	482265.9	3668552	6.44E-08	1.333YrCar	6.44E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1415	ALL	482285.9	3668552	6.91E-08	1.333YrCar	6.91E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1416	ALL	482305.9	3668552	1.42E-07	1.333YrCar	1.42E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1417	ALL	482325.9	3668552	2.18E-07	1.333YrCar	2.18E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1418	ALL	482345.9	3668552	2.36E-07	1.333YrCar	2.36E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1419	ALL	482365.9	3668552	2.06E-07	1.333YrCar	2.06E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1420	ALL	482385.9	3668552	1.94E-07	1.333YrCar	1.94E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

1421	ALL	482405.9	3668552	1.90E-07	1.333YrCar	1.90E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1422	ALL	482425.9	3668552	1.88E-07	1.333YrCar	1.88E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1423	ALL	482445.9	3668552	1.87E-07	1.333YrCar	1.87E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1424	ALL	482465.9	3668552	1.86E-07	1.333YrCar	1.86E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1425	ALL	482485.9	3668552	1.83E-07	1.333YrCar	1.83E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1426	ALL	482505.9	3668552	1.77E-07	1.333YrCar	1.77E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1427	ALL	482525.9	3668552	1.72E-07	1.333YrCar	1.72E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1428	ALL	482545.9	3668552	1.60E-07	1.333YrCar	1.60E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1429	ALL	482565.9	3668552	1.57E-07	1.333YrCar	1.57E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1430	ALL	482585.9	3668552	1.04E-07	1.333YrCar	1.04E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1431	ALL	482605.9	3668552	9.65E-08	1.333YrCar	9.65E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1432	ALL	482625.9	3668552	9.95E-08	1.333YrCar	9.95E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1433	ALL	482645.9	3668552	1.01E-07	1.333YrCar	1.01E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1434	ALL	482665.9	3668552	9.88E-08	1.333YrCar	9.88E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1435	ALL	482685.9	3668552	8.90E-08	1.333YrCar	8.90E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1436	ALL	482785.9	3668552	7.70E-08	1.333YrCar	7.70E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1437	ALL	482805.9	3668552	7.67E-08	1.333YrCar	7.67E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1438	ALL	482825.9	3668552	7.62E-08	1.333YrCar	7.62E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1439	ALL	482845.9	3668552	7.58E-08	1.333YrCar	7.58E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1440	ALL	482865.9	3668552	7.52E-08	1.333YrCar	7.52E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1441	ALL	482885.9	3668552	7.46E-08	1.333YrCar	7.46E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1442	ALL	482905.9	3668552	7.42E-08	1.333YrCar	7.42E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1443	ALL	482925.9	3668552	7.38E-08	1.333YrCar	7.38E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1444	ALL	482945.9	3668552	7.33E-08	1.333YrCar	7.33E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1445	ALL	482965.9	3668552	7.28E-08	1.333YrCar	7.28E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1446	ALL	481065.9	3668572	7.23E-08	1.333YrCar	7.23E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1447	ALL	481085.9	3668572	7.37E-08	1.333YrCar	7.37E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1448	ALL	481105.9	3668572	7.52E-08	1.333YrCar	7.52E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1449	ALL	481125.9	3668572	7.70E-08	1.333YrCar	7.70E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1450	ALL	481145.9	3668572	7.85E-08	1.333YrCar	7.85E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1451	ALL	481165.9	3668572	8.02E-08	1.333YrCar	8.02E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1452	ALL	481185.9	3668572	8.20E-08	1.333YrCar	8.20E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1453	ALL	481205.9	3668572	8.36E-08	1.333YrCar	8.36E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1454	ALL	481225.9	3668572	8.57E-08	1.333YrCar	8.57E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1455	ALL	481245.9	3668572	8.74E-08	1.333YrCar	8.74E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1456	ALL	481265.9	3668572	8.89E-08	1.333YrCar	8.89E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1457	ALL	481285.9	3668572	9.05E-08	1.333YrCar	9.05E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1458	ALL	481305.9	3668572	9.19E-08	1.333YrCar	9.19E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1459	ALL	481325.9	3668572	9.35E-08	1.333YrCar	9.35E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1460	ALL	481345.9	3668572	9.60E-08	1.333YrCar	9.60E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1461	ALL	481365.9	3668572	9.71E-08	1.333YrCar	9.71E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1462	ALL	481385.9	3668572	9.79E-08	1.333YrCar	9.79E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1463	ALL	481405.9	3668572	9.91E-08	1.333YrCar	9.91E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1464	ALL	481425.9	3668572	1.01E-07	1.333YrCar	1.01E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1465	ALL	481445.9	3668572	1.02E-07	1.333YrCar	1.02E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1466	ALL	481465.9	3668572	1.04E-07	1.333YrCar	1.04E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1467	ALL	481485.9	3668572	1.05E-07	1.333YrCar	1.05E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1468	ALL	481505.9	3668572	1.06E-07	1.333YrCar	1.06E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1469	ALL	481905.9	3668572	3.60E-08	1.333YrCar	3.60E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

1470	ALL	481925.9	3668572	3.62E-08	1.333YrCar	3.62E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1471	ALL	481945.9	3668572	3.68E-08	1.333YrCar	3.68E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1472	ALL	481965.9	3668572	3.68E-08	1.333YrCar	3.68E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1473	ALL	481985.9	3668572	3.71E-08	1.333YrCar	3.71E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1474	ALL	482085.9	3668572	4.16E-08	1.333YrCar	4.16E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1475	ALL	482105.9	3668572	4.25E-08	1.333YrCar	4.25E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1476	ALL	482125.9	3668572	4.61E-08	1.333YrCar	4.61E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1477	ALL	482145.9	3668572	4.72E-08	1.333YrCar	4.72E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1478	ALL	482165.9	3668572	4.83E-08	1.333YrCar	4.83E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1479	ALL	482185.9	3668572	4.92E-08	1.333YrCar	4.92E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1480	ALL	482205.9	3668572	5.47E-08	1.333YrCar	5.47E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1481	ALL	482225.9	3668572	5.91E-08	1.333YrCar	5.91E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1482	ALL	482245.9	3668572	6.16E-08	1.333YrCar	6.16E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1483	ALL	482265.9	3668572	6.19E-08	1.333YrCar	6.19E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1484	ALL	482285.9	3668572	6.33E-08	1.333YrCar	6.33E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1485	ALL	482305.9	3668572	1.03E-07	1.333YrCar	1.03E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1486	ALL	482325.9	3668572	1.94E-07	1.333YrCar	1.94E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1487	ALL	482345.9	3668572	1.96E-07	1.333YrCar	1.96E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1488	ALL	482365.9	3668572	2.31E-07	1.333YrCar	2.31E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1489	ALL	482385.9	3668572	1.81E-07	1.333YrCar	1.81E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1490	ALL	482405.9	3668572	1.72E-07	1.333YrCar	1.72E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1491	ALL	482425.9	3668572	1.64E-07	1.333YrCar	1.64E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1492	ALL	482445.9	3668572	1.52E-07	1.333YrCar	1.52E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1493	ALL	482465.9	3668572	1.50E-07	1.333YrCar	1.50E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1494	ALL	482485.9	3668572	1.45E-07	1.333YrCar	1.45E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1495	ALL	482505.9	3668572	1.42E-07	1.333YrCar	1.42E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1496	ALL	482525.9	3668572	1.51E-07	1.333YrCar	1.51E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1497	ALL	482545.9	3668572	1.47E-07	1.333YrCar	1.47E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1498	ALL	482565.9	3668572	1.40E-07	1.333YrCar	1.40E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1499	ALL	482585.9	3668572	9.17E-08	1.333YrCar	9.17E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1500	ALL	482605.9	3668572	8.85E-08	1.333YrCar	8.85E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1501	ALL	482625.9	3668572	9.14E-08	1.333YrCar	9.14E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1502	ALL	482645.9	3668572	8.88E-08	1.333YrCar	8.88E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1503	ALL	482665.9	3668572	8.74E-08	1.333YrCar	8.74E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1504	ALL	482685.9	3668572	8.22E-08	1.333YrCar	8.22E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1505	ALL	482745.9	3668572	7.52E-08	1.333YrCar	7.52E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1506	ALL	482765.9	3668572	7.45E-08	1.333YrCar	7.45E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1507	ALL	482785.9	3668572	7.39E-08	1.333YrCar	7.39E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1508	ALL	482805.9	3668572	7.32E-08	1.333YrCar	7.32E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1509	ALL	482825.9	3668572	7.25E-08	1.333YrCar	7.25E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1510	ALL	482845.9	3668572	7.19E-08	1.333YrCar	7.19E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1511	ALL	482865.9	3668572	7.14E-08	1.333YrCar	7.14E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1512	ALL	482885.9	3668572	7.09E-08	1.333YrCar	7.09E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1513	ALL	482905.9	3668572	7.05E-08	1.333YrCar	7.05E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1514	ALL	482925.9	3668572	7.01E-08	1.333YrCar	7.01E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1515	ALL	482945.9	3668572	6.97E-08	1.333YrCar	6.97E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1516	ALL	482965.9	3668572	6.91E-08	1.333YrCar	6.91E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1517	ALL	481065.9	3668592	7.16E-08	1.333YrCar	7.16E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1518	ALL	481085.9	3668592	7.31E-08	1.333YrCar	7.31E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

1519	ALL	481105.9	3668592	7.45E-08	1.333YrCar	7.45E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1520	ALL	481125.9	3668592	7.62E-08	1.333YrCar	7.62E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1521	ALL	481145.9	3668592	7.76E-08	1.333YrCar	7.76E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1522	ALL	481165.9	3668592	7.91E-08	1.333YrCar	7.91E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1523	ALL	481185.9	3668592	8.09E-08	1.333YrCar	8.09E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1524	ALL	481205.9	3668592	8.23E-08	1.333YrCar	8.23E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1525	ALL	481225.9	3668592	8.38E-08	1.333YrCar	8.38E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1526	ALL	481245.9	3668592	8.57E-08	1.333YrCar	8.57E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1527	ALL	481265.9	3668592	8.69E-08	1.333YrCar	8.69E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1528	ALL	481285.9	3668592	8.83E-08	1.333YrCar	8.83E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1529	ALL	481305.9	3668592	8.95E-08	1.333YrCar	8.95E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1530	ALL	481325.9	3668592	9.07E-08	1.333YrCar	9.07E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1531	ALL	481345.9	3668592	9.32E-08	1.333YrCar	9.32E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1532	ALL	481365.9	3668592	9.41E-08	1.333YrCar	9.41E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1533	ALL	481385.9	3668592	9.49E-08	1.333YrCar	9.49E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1534	ALL	481405.9	3668592	9.61E-08	1.333YrCar	9.61E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1535	ALL	481425.9	3668592	9.77E-08	1.333YrCar	9.77E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1536	ALL	481445.9	3668592	9.92E-08	1.333YrCar	9.92E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1537	ALL	481465.9	3668592	1.00E-07	1.333YrCar	1.00E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1538	ALL	481485.9	3668592	1.00E-07	1.333YrCar	1.00E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1539	ALL	481925.9	3668592	3.44E-08	1.333YrCar	3.44E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1540	ALL	481945.9	3668592	3.47E-08	1.333YrCar	3.47E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1541	ALL	481965.9	3668592	3.50E-08	1.333YrCar	3.50E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1542	ALL	481985.9	3668592	3.54E-08	1.333YrCar	3.54E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1543	ALL	482085.9	3668592	3.90E-08	1.333YrCar	3.90E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1544	ALL	482105.9	3668592	4.03E-08	1.333YrCar	4.03E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1545	ALL	482125.9	3668592	4.37E-08	1.333YrCar	4.37E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1546	ALL	482145.9	3668592	4.50E-08	1.333YrCar	4.50E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1547	ALL	482165.9	3668592	4.62E-08	1.333YrCar	4.62E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1548	ALL	482185.9	3668592	4.70E-08	1.333YrCar	4.70E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1549	ALL	482205.9	3668592	5.01E-08	1.333YrCar	5.01E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1550	ALL	482225.9	3668592	5.70E-08	1.333YrCar	5.70E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1551	ALL	482245.9	3668592	5.90E-08	1.333YrCar	5.90E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1552	ALL	482265.9	3668592	6.08E-08	1.333YrCar	6.08E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1553	ALL	482285.9	3668592	6.12E-08	1.333YrCar	6.12E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1554	ALL	482305.9	3668592	8.30E-08	1.333YrCar	8.30E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1555	ALL	482325.9	3668592	1.76E-07	1.333YrCar	1.76E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1556	ALL	482345.9	3668592	1.80E-07	1.333YrCar	1.80E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1557	ALL	482365.9	3668592	2.14E-07	1.333YrCar	2.14E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1558	ALL	482385.9	3668592	1.64E-07	1.333YrCar	1.64E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1559	ALL	482405.9	3668592	1.62E-07	1.333YrCar	1.62E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1560	ALL	482425.9	3668592	1.63E-07	1.333YrCar	1.63E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1561	ALL	482445.9	3668592	1.55E-07	1.333YrCar	1.55E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1562	ALL	482465.9	3668592	1.49E-07	1.333YrCar	1.49E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1563	ALL	482485.9	3668592	1.46E-07	1.333YrCar	1.46E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1564	ALL	482505.9	3668592	1.42E-07	1.333YrCar	1.42E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1565	ALL	482525.9	3668592	1.41E-07	1.333YrCar	1.41E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1566	ALL	482545.9	3668592	1.34E-07	1.333YrCar	1.34E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1567	ALL	482565.9	3668592	1.29E-07	1.333YrCar	1.29E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

1568	ALL	482585.9	3668592	8.61E-08	1.333YrCar	8.61E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1569	ALL	482605.9	3668592	8.31E-08	1.333YrCar	8.31E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1570	ALL	482625.9	3668592	8.58E-08	1.333YrCar	8.58E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1571	ALL	482645.9	3668592	8.29E-08	1.333YrCar	8.29E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1572	ALL	482665.9	3668592	8.13E-08	1.333YrCar	8.13E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1573	ALL	482685.9	3668592	7.86E-08	1.333YrCar	7.86E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1574	ALL	482705.9	3668592	7.42E-08	1.333YrCar	7.42E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1575	ALL	482725.9	3668592	7.32E-08	1.333YrCar	7.32E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1576	ALL	482745.9	3668592	7.20E-08	1.333YrCar	7.20E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1577	ALL	482765.9	3668592	7.17E-08	1.333YrCar	7.17E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1578	ALL	482785.9	3668592	7.07E-08	1.333YrCar	7.07E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1579	ALL	482805.9	3668592	6.95E-08	1.333YrCar	6.95E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1580	ALL	482825.9	3668592	6.88E-08	1.333YrCar	6.88E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1581	ALL	482845.9	3668592	6.78E-08	1.333YrCar	6.78E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1582	ALL	482865.9	3668592	6.75E-08	1.333YrCar	6.75E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1583	ALL	482885.9	3668592	6.71E-08	1.333YrCar	6.71E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1584	ALL	482905.9	3668592	6.65E-08	1.333YrCar	6.65E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1585	ALL	482925.9	3668592	6.63E-08	1.333YrCar	6.63E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1586	ALL	482945.9	3668592	6.62E-08	1.333YrCar	6.62E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1587	ALL	481065.9	3668612	7.07E-08	1.333YrCar	7.07E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1588	ALL	481085.9	3668612	7.24E-08	1.333YrCar	7.24E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1589	ALL	481105.9	3668612	7.37E-08	1.333YrCar	7.37E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1590	ALL	481125.9	3668612	7.52E-08	1.333YrCar	7.52E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1591	ALL	481145.9	3668612	7.67E-08	1.333YrCar	7.67E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1592	ALL	481165.9	3668612	7.80E-08	1.333YrCar	7.80E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1593	ALL	481185.9	3668612	7.95E-08	1.333YrCar	7.95E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1594	ALL	481205.9	3668612	8.08E-08	1.333YrCar	8.08E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1595	ALL	481225.9	3668612	8.22E-08	1.333YrCar	8.22E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1596	ALL	481245.9	3668612	8.37E-08	1.333YrCar	8.37E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1597	ALL	481265.9	3668612	8.49E-08	1.333YrCar	8.49E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1598	ALL	481285.9	3668612	8.61E-08	1.333YrCar	8.61E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1599	ALL	481305.9	3668612	8.71E-08	1.333YrCar	8.71E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1600	ALL	481325.9	3668612	8.81E-08	1.333YrCar	8.81E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1601	ALL	481345.9	3668612	8.92E-08	1.333YrCar	8.92E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1602	ALL	481365.9	3668612	9.14E-08	1.333YrCar	9.14E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1603	ALL	481385.9	3668612	9.24E-08	1.333YrCar	9.24E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1604	ALL	481405.9	3668612	9.35E-08	1.333YrCar	9.35E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1605	ALL	481425.9	3668612	9.45E-08	1.333YrCar	9.45E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1606	ALL	481445.9	3668612	9.45E-08	1.333YrCar	9.45E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1607	ALL	481465.9	3668612	9.54E-08	1.333YrCar	9.54E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1608	ALL	481925.9	3668612	3.28E-08	1.333YrCar	3.28E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1609	ALL	481945.9	3668612	3.33E-08	1.333YrCar	3.33E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1610	ALL	481965.9	3668612	3.34E-08	1.333YrCar	3.34E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1611	ALL	481985.9	3668612	3.36E-08	1.333YrCar	3.36E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1612	ALL	482005.9	3668612	3.39E-08	1.333YrCar	3.39E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1613	ALL	482085.9	3668612	3.74E-08	1.333YrCar	3.74E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1614	ALL	482105.9	3668612	3.85E-08	1.333YrCar	3.85E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1615	ALL	482125.9	3668612	4.10E-08	1.333YrCar	4.10E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1616	ALL	482145.9	3668612	4.30E-08	1.333YrCar	4.30E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

1617	ALL	482165.9	3668612	4.43E-08	1.333YrCar	4.43E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1618	ALL	482185.9	3668612	4.50E-08	1.333YrCar	4.50E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1619	ALL	482205.9	3668612	4.64E-08	1.333YrCar	4.64E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1620	ALL	482225.9	3668612	5.51E-08	1.333YrCar	5.51E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1621	ALL	482245.9	3668612	5.76E-08	1.333YrCar	5.76E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1622	ALL	482265.9	3668612	6.01E-08	1.333YrCar	6.01E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1623	ALL	482285.9	3668612	5.96E-08	1.333YrCar	5.96E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1624	ALL	482305.9	3668612	6.63E-08	1.333YrCar	6.63E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1625	ALL	482325.9	3668612	1.47E-07	1.333YrCar	1.47E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1626	ALL	482345.9	3668612	1.66E-07	1.333YrCar	1.66E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1627	ALL	482365.9	3668612	1.79E-07	1.333YrCar	1.79E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1628	ALL	482385.9	3668612	1.57E-07	1.333YrCar	1.57E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1629	ALL	482405.9	3668612	1.52E-07	1.333YrCar	1.52E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1630	ALL	482425.9	3668612	1.46E-07	1.333YrCar	1.46E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1631	ALL	482445.9	3668612	1.42E-07	1.333YrCar	1.42E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1632	ALL	482465.9	3668612	1.40E-07	1.333YrCar	1.40E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1633	ALL	482485.9	3668612	1.37E-07	1.333YrCar	1.37E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1634	ALL	482505.9	3668612	1.32E-07	1.333YrCar	1.32E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1635	ALL	482525.9	3668612	1.31E-07	1.333YrCar	1.31E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1636	ALL	482545.9	3668612	1.26E-07	1.333YrCar	1.26E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1637	ALL	482565.9	3668612	1.22E-07	1.333YrCar	1.22E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1638	ALL	482585.9	3668612	8.27E-08	1.333YrCar	8.27E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1639	ALL	482605.9	3668612	7.92E-08	1.333YrCar	7.92E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1640	ALL	482625.9	3668612	8.24E-08	1.333YrCar	8.24E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1641	ALL	482645.9	3668612	8.14E-08	1.333YrCar	8.14E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1642	ALL	482665.9	3668612	7.89E-08	1.333YrCar	7.89E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1643	ALL	482685.9	3668612	7.33E-08	1.333YrCar	7.33E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1644	ALL	482705.9	3668612	7.12E-08	1.333YrCar	7.12E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1645	ALL	482725.9	3668612	7.06E-08	1.333YrCar	7.06E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1646	ALL	482745.9	3668612	7.00E-08	1.333YrCar	7.00E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1647	ALL	482765.9	3668612	6.85E-08	1.333YrCar	6.85E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1648	ALL	482785.9	3668612	6.75E-08	1.333YrCar	6.75E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1649	ALL	482805.9	3668612	6.69E-08	1.333YrCar	6.69E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1650	ALL	482825.9	3668612	6.55E-08	1.333YrCar	6.55E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1651	ALL	482845.9	3668612	6.43E-08	1.333YrCar	6.43E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1652	ALL	482865.9	3668612	6.37E-08	1.333YrCar	6.37E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1653	ALL	482885.9	3668612	6.31E-08	1.333YrCar	6.31E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1654	ALL	482905.9	3668612	6.27E-08	1.333YrCar	6.27E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1655	ALL	482925.9	3668612	6.28E-08	1.333YrCar	6.28E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1656	ALL	482945.9	3668612	6.29E-08	1.333YrCar	6.29E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1657	ALL	481085.9	3668632	7.16E-08	1.333YrCar	7.16E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1658	ALL	481105.9	3668632	7.29E-08	1.333YrCar	7.29E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1659	ALL	481125.9	3668632	7.42E-08	1.333YrCar	7.42E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1660	ALL	481145.9	3668632	7.57E-08	1.333YrCar	7.57E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1661	ALL	481165.9	3668632	7.68E-08	1.333YrCar	7.68E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1662	ALL	481185.9	3668632	7.81E-08	1.333YrCar	7.81E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1663	ALL	481205.9	3668632	7.94E-08	1.333YrCar	7.94E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1664	ALL	481225.9	3668632	8.04E-08	1.333YrCar	8.04E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1665	ALL	481245.9	3668632	8.16E-08	1.333YrCar	8.16E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

1666	ALL	481265.9	3668632	8.28E-08	1.333YrCar	8.28E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1667	ALL	481285.9	3668632	8.38E-08	1.333YrCar	8.38E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1668	ALL	481305.9	3668632	8.46E-08	1.333YrCar	8.46E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1669	ALL	481325.9	3668632	8.54E-08	1.333YrCar	8.54E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1670	ALL	481345.9	3668632	8.64E-08	1.333YrCar	8.64E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1671	ALL	481365.9	3668632	8.84E-08	1.333YrCar	8.84E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1672	ALL	481385.9	3668632	8.95E-08	1.333YrCar	8.95E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1673	ALL	481405.9	3668632	8.95E-08	1.333YrCar	8.95E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1674	ALL	481425.9	3668632	9.02E-08	1.333YrCar	9.02E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1675	ALL	481445.9	3668632	9.13E-08	1.333YrCar	9.13E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1676	ALL	481465.9	3668632	9.25E-08	1.333YrCar	9.25E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1677	ALL	481485.9	3668632	9.39E-08	1.333YrCar	9.39E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1678	ALL	481925.9	3668632	3.12E-08	1.333YrCar	3.12E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1679	ALL	481945.9	3668632	3.15E-08	1.333YrCar	3.15E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1680	ALL	481965.9	3668632	3.19E-08	1.333YrCar	3.19E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1681	ALL	481985.9	3668632	3.22E-08	1.333YrCar	3.22E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1682	ALL	482005.9	3668632	3.22E-08	1.333YrCar	3.22E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1683	ALL	482105.9	3668632	3.68E-08	1.333YrCar	3.68E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1684	ALL	482125.9	3668632	3.83E-08	1.333YrCar	3.83E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1685	ALL	482145.9	3668632	4.12E-08	1.333YrCar	4.12E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1686	ALL	482165.9	3668632	4.24E-08	1.333YrCar	4.24E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1687	ALL	482185.9	3668632	4.34E-08	1.333YrCar	4.34E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1688	ALL	482205.9	3668632	4.42E-08	1.333YrCar	4.42E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1689	ALL	482225.9	3668632	5.06E-08	1.333YrCar	5.06E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1690	ALL	482245.9	3668632	5.62E-08	1.333YrCar	5.62E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1691	ALL	482265.9	3668632	5.89E-08	1.333YrCar	5.89E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1692	ALL	482285.9	3668632	5.87E-08	1.333YrCar	5.87E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1693	ALL	482305.9	3668632	6.08E-08	1.333YrCar	6.08E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1694	ALL	482325.9	3668632	1.13E-07	1.333YrCar	1.13E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1695	ALL	482345.9	3668632	1.51E-07	1.333YrCar	1.51E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1696	ALL	482365.9	3668632	1.57E-07	1.333YrCar	1.57E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1697	ALL	482385.9	3668632	1.46E-07	1.333YrCar	1.46E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1698	ALL	482405.9	3668632	1.29E-07	1.333YrCar	1.29E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1699	ALL	482425.9	3668632	1.31E-07	1.333YrCar	1.31E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1700	ALL	482445.9	3668632	1.30E-07	1.333YrCar	1.30E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1701	ALL	482465.9	3668632	1.29E-07	1.333YrCar	1.29E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1702	ALL	482485.9	3668632	1.28E-07	1.333YrCar	1.28E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1703	ALL	482505.9	3668632	1.23E-07	1.333YrCar	1.23E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1704	ALL	482525.9	3668632	1.23E-07	1.333YrCar	1.23E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1705	ALL	482545.9	3668632	1.20E-07	1.333YrCar	1.20E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1706	ALL	482565.9	3668632	1.17E-07	1.333YrCar	1.17E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1707	ALL	482585.9	3668632	8.12E-08	1.333YrCar	8.12E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1708	ALL	482605.9	3668632	7.67E-08	1.333YrCar	7.67E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1709	ALL	482625.9	3668632	8.00E-08	1.333YrCar	8.00E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1710	ALL	482645.9	3668632	7.84E-08	1.333YrCar	7.84E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1711	ALL	482665.9	3668632	7.61E-08	1.333YrCar	7.61E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1712	ALL	482685.9	3668632	7.00E-08	1.333YrCar	7.00E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1713	ALL	482705.9	3668632	7.05E-08	1.333YrCar	7.05E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1714	ALL	482725.9	3668632	6.92E-08	1.333YrCar	6.92E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

1715	ALL	482745.9	3668632	6.74E-08	1.333YrCar	6.74E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1716	ALL	482765.9	3668632	6.61E-08	1.333YrCar	6.61E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1717	ALL	482785.9	3668632	6.49E-08	1.333YrCar	6.49E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1718	ALL	482805.9	3668632	6.27E-08	1.333YrCar	6.27E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1719	ALL	481085.9	3668652	7.05E-08	1.333YrCar	7.05E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1720	ALL	481105.9	3668652	7.20E-08	1.333YrCar	7.20E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1721	ALL	481125.9	3668652	7.31E-08	1.333YrCar	7.31E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1722	ALL	481145.9	3668652	7.44E-08	1.333YrCar	7.44E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1723	ALL	481165.9	3668652	7.55E-08	1.333YrCar	7.55E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1724	ALL	481185.9	3668652	7.66E-08	1.333YrCar	7.66E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1725	ALL	481205.9	3668652	7.77E-08	1.333YrCar	7.77E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1726	ALL	481225.9	3668652	7.86E-08	1.333YrCar	7.86E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1727	ALL	481245.9	3668652	7.96E-08	1.333YrCar	7.96E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1728	ALL	481265.9	3668652	8.06E-08	1.333YrCar	8.06E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1729	ALL	481285.9	3668652	8.14E-08	1.333YrCar	8.14E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1730	ALL	481305.9	3668652	8.22E-08	1.333YrCar	8.22E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1731	ALL	481325.9	3668652	8.29E-08	1.333YrCar	8.29E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1732	ALL	481345.9	3668652	8.38E-08	1.333YrCar	8.38E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1733	ALL	481365.9	3668652	8.47E-08	1.333YrCar	8.47E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1734	ALL	481385.9	3668652	8.55E-08	1.333YrCar	8.55E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1735	ALL	481405.9	3668652	8.65E-08	1.333YrCar	8.65E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1736	ALL	481425.9	3668652	8.75E-08	1.333YrCar	8.75E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1737	ALL	481445.9	3668652	8.88E-08	1.333YrCar	8.88E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1738	ALL	481465.9	3668652	9.00E-08	1.333YrCar	9.00E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1739	ALL	481485.9	3668652	9.14E-08	1.333YrCar	9.14E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1740	ALL	481925.9	3668652	2.96E-08	1.333YrCar	2.96E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1741	ALL	481945.9	3668652	2.98E-08	1.333YrCar	2.98E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1742	ALL	481965.9	3668652	3.02E-08	1.333YrCar	3.02E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1743	ALL	481985.9	3668652	3.06E-08	1.333YrCar	3.06E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1744	ALL	482005.9	3668652	3.08E-08	1.333YrCar	3.08E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1745	ALL	482105.9	3668652	3.53E-08	1.333YrCar	3.53E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1746	ALL	482125.9	3668652	3.62E-08	1.333YrCar	3.62E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1747	ALL	482145.9	3668652	3.95E-08	1.333YrCar	3.95E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1748	ALL	482165.9	3668652	4.07E-08	1.333YrCar	4.07E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1749	ALL	482185.9	3668652	4.19E-08	1.333YrCar	4.19E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1750	ALL	482205.9	3668652	4.25E-08	1.333YrCar	4.25E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1751	ALL	482225.9	3668652	4.59E-08	1.333YrCar	4.59E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1752	ALL	482245.9	3668652	5.51E-08	1.333YrCar	5.51E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1753	ALL	482265.9	3668652	5.76E-08	1.333YrCar	5.76E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1754	ALL	482285.9	3668652	5.94E-08	1.333YrCar	5.94E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1755	ALL	482305.9	3668652	5.90E-08	1.333YrCar	5.90E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1756	ALL	482325.9	3668652	8.39E-08	1.333YrCar	8.39E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1757	ALL	482345.9	3668652	1.43E-07	1.333YrCar	1.43E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1758	ALL	482365.9	3668652	1.46E-07	1.333YrCar	1.46E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1759	ALL	482385.9	3668652	1.40E-07	1.333YrCar	1.40E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1760	ALL	482405.9	3668652	1.20E-07	1.333YrCar	1.20E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1761	ALL	482425.9	3668652	1.18E-07	1.333YrCar	1.18E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1762	ALL	482445.9	3668652	1.16E-07	1.333YrCar	1.16E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1763	ALL	482465.9	3668652	1.14E-07	1.333YrCar	1.14E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

1764	ALL	482485.9	3668652	1.15E-07	1.333YrCar	1.15E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1765	ALL	482505.9	3668652	1.13E-07	1.333YrCar	1.13E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1766	ALL	482525.9	3668652	1.15E-07	1.333YrCar	1.15E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1767	ALL	482545.9	3668652	1.13E-07	1.333YrCar	1.13E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1768	ALL	482565.9	3668652	1.11E-07	1.333YrCar	1.11E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1769	ALL	482585.9	3668652	7.93E-08	1.333YrCar	7.93E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1770	ALL	482605.9	3668652	7.47E-08	1.333YrCar	7.47E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1771	ALL	482625.9	3668652	7.77E-08	1.333YrCar	7.77E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1772	ALL	482645.9	3668652	7.74E-08	1.333YrCar	7.74E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1773	ALL	482665.9	3668652	7.48E-08	1.333YrCar	7.48E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1774	ALL	482685.9	3668652	7.17E-08	1.333YrCar	7.17E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1775	ALL	482705.9	3668652	6.89E-08	1.333YrCar	6.89E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1776	ALL	482725.9	3668652	6.59E-08	1.333YrCar	6.59E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1777	ALL	482745.9	3668652	6.47E-08	1.333YrCar	6.47E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1778	ALL	482765.9	3668652	6.32E-08	1.333YrCar	6.32E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1779	ALL	482785.9	3668652	6.05E-08	1.333YrCar	6.05E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1780	ALL	481105.9	3668672	7.09E-08	1.333YrCar	7.09E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1781	ALL	481125.9	3668672	7.19E-08	1.333YrCar	7.19E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1782	ALL	481145.9	3668672	7.29E-08	1.333YrCar	7.29E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1783	ALL	481165.9	3668672	7.41E-08	1.333YrCar	7.41E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1784	ALL	481185.9	3668672	7.49E-08	1.333YrCar	7.49E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1785	ALL	481205.9	3668672	7.59E-08	1.333YrCar	7.59E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1786	ALL	481225.9	3668672	7.67E-08	1.333YrCar	7.67E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1787	ALL	481245.9	3668672	7.75E-08	1.333YrCar	7.75E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1788	ALL	481265.9	3668672	7.83E-08	1.333YrCar	7.83E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1789	ALL	481285.9	3668672	7.91E-08	1.333YrCar	7.91E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1790	ALL	481305.9	3668672	7.98E-08	1.333YrCar	7.98E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1791	ALL	481325.9	3668672	8.05E-08	1.333YrCar	8.05E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1792	ALL	481345.9	3668672	8.13E-08	1.333YrCar	8.13E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1793	ALL	481365.9	3668672	8.21E-08	1.333YrCar	8.21E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1794	ALL	481385.9	3668672	8.30E-08	1.333YrCar	8.30E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1795	ALL	481405.9	3668672	8.42E-08	1.333YrCar	8.42E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1796	ALL	481425.9	3668672	8.55E-08	1.333YrCar	8.55E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1797	ALL	481445.9	3668672	8.66E-08	1.333YrCar	8.66E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1798	ALL	481465.9	3668672	8.77E-08	1.333YrCar	8.77E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1799	ALL	481485.9	3668672	8.90E-08	1.333YrCar	8.90E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1800	ALL	481505.9	3668672	9.05E-08	1.333YrCar	9.05E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1801	ALL	481945.9	3668672	2.85E-08	1.333YrCar	2.85E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1802	ALL	481965.9	3668672	2.88E-08	1.333YrCar	2.88E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1803	ALL	481985.9	3668672	2.91E-08	1.333YrCar	2.91E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1804	ALL	482005.9	3668672	2.95E-08	1.333YrCar	2.95E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1805	ALL	482105.9	3668672	3.36E-08	1.333YrCar	3.36E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1806	ALL	482125.9	3668672	3.47E-08	1.333YrCar	3.47E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1807	ALL	482145.9	3668672	3.74E-08	1.333YrCar	3.74E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1808	ALL	482165.9	3668672	3.93E-08	1.333YrCar	3.93E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1809	ALL	482185.9	3668672	4.07E-08	1.333YrCar	4.07E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1810	ALL	482205.9	3668672	4.12E-08	1.333YrCar	4.12E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1811	ALL	482225.9	3668672	4.24E-08	1.333YrCar	4.24E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1812	ALL	482245.9	3668672	5.26E-08	1.333YrCar	5.26E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

1813	ALL	482265.9	3668672	5.67E-08	1.333YrCar	5.67E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1814	ALL	482285.9	3668672	6.01E-08	1.333YrCar	6.01E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1815	ALL	482305.9	3668672	5.87E-08	1.333YrCar	5.87E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1816	ALL	482325.9	3668672	6.78E-08	1.333YrCar	6.78E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1817	ALL	482345.9	3668672	1.33E-07	1.333YrCar	1.33E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1818	ALL	482365.9	3668672	1.33E-07	1.333YrCar	1.33E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1819	ALL	482385.9	3668672	1.42E-07	1.333YrCar	1.42E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1820	ALL	482405.9	3668672	1.21E-07	1.333YrCar	1.21E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1821	ALL	482425.9	3668672	1.18E-07	1.333YrCar	1.18E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1822	ALL	482445.9	3668672	1.15E-07	1.333YrCar	1.15E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1823	ALL	482465.9	3668672	1.14E-07	1.333YrCar	1.14E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1824	ALL	482485.9	3668672	1.14E-07	1.333YrCar	1.14E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1825	ALL	482505.9	3668672	1.12E-07	1.333YrCar	1.12E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1826	ALL	482525.9	3668672	1.10E-07	1.333YrCar	1.10E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1827	ALL	482545.9	3668672	1.08E-07	1.333YrCar	1.08E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1828	ALL	482565.9	3668672	1.05E-07	1.333YrCar	1.05E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1829	ALL	482585.9	3668672	7.67E-08	1.333YrCar	7.67E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1830	ALL	482605.9	3668672	7.25E-08	1.333YrCar	7.25E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1831	ALL	482625.9	3668672	7.58E-08	1.333YrCar	7.58E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1832	ALL	482645.9	3668672	7.16E-08	1.333YrCar	7.16E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1833	ALL	482665.9	3668672	6.94E-08	1.333YrCar	6.94E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1834	ALL	482685.9	3668672	6.73E-08	1.333YrCar	6.73E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1835	ALL	482705.9	3668672	6.55E-08	1.333YrCar	6.55E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1836	ALL	482725.9	3668672	6.33E-08	1.333YrCar	6.33E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1837	ALL	482745.9	3668672	6.27E-08	1.333YrCar	6.27E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1838	ALL	481105.9	3668692	6.95E-08	1.333YrCar	6.95E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1839	ALL	481125.9	3668692	7.06E-08	1.333YrCar	7.06E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1840	ALL	481145.9	3668692	7.15E-08	1.333YrCar	7.15E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1841	ALL	481165.9	3668692	7.25E-08	1.333YrCar	7.25E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1842	ALL	481185.9	3668692	7.32E-08	1.333YrCar	7.32E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1843	ALL	481205.9	3668692	7.40E-08	1.333YrCar	7.40E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1844	ALL	481225.9	3668692	7.47E-08	1.333YrCar	7.47E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1845	ALL	481245.9	3668692	7.54E-08	1.333YrCar	7.54E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1846	ALL	481265.9	3668692	7.61E-08	1.333YrCar	7.61E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1847	ALL	481285.9	3668692	7.68E-08	1.333YrCar	7.68E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1848	ALL	481365.9	3668692	7.98E-08	1.333YrCar	7.98E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1849	ALL	481385.9	3668692	8.12E-08	1.333YrCar	8.12E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1850	ALL	481405.9	3668692	8.22E-08	1.333YrCar	8.22E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1851	ALL	481425.9	3668692	8.32E-08	1.333YrCar	8.32E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1852	ALL	481445.9	3668692	8.43E-08	1.333YrCar	8.43E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1853	ALL	481465.9	3668692	8.55E-08	1.333YrCar	8.55E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1854	ALL	481485.9	3668692	8.68E-08	1.333YrCar	8.68E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1855	ALL	481505.9	3668692	8.82E-08	1.333YrCar	8.82E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1856	ALL	481945.9	3668692	2.73E-08	1.333YrCar	2.73E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1857	ALL	481965.9	3668692	2.76E-08	1.333YrCar	2.76E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1858	ALL	481985.9	3668692	2.80E-08	1.333YrCar	2.80E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1859	ALL	482005.9	3668692	2.83E-08	1.333YrCar	2.83E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1860	ALL	482105.9	3668692	3.25E-08	1.333YrCar	3.25E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1861	ALL	482125.9	3668692	3.30E-08	1.333YrCar	3.30E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

1862	ALL	482145.9	3668692	3.52E-08	1.333YrCar	3.52E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1863	ALL	482165.9	3668692	3.81E-08	1.333YrCar	3.81E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1864	ALL	482185.9	3668692	3.93E-08	1.333YrCar	3.93E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1865	ALL	482205.9	3668692	4.01E-08	1.333YrCar	4.01E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1866	ALL	482225.9	3668692	4.06E-08	1.333YrCar	4.06E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1867	ALL	482245.9	3668692	4.83E-08	1.333YrCar	4.83E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1868	ALL	482265.9	3668692	5.66E-08	1.333YrCar	5.66E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1869	ALL	482285.9	3668692	6.03E-08	1.333YrCar	6.03E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1870	ALL	482305.9	3668692	5.97E-08	1.333YrCar	5.97E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1871	ALL	482325.9	3668692	6.11E-08	1.333YrCar	6.11E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1872	ALL	482345.9	3668692	1.14E-07	1.333YrCar	1.14E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1873	ALL	482365.9	3668692	1.23E-07	1.333YrCar	1.23E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1874	ALL	482385.9	3668692	1.33E-07	1.333YrCar	1.33E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1875	ALL	482405.9	3668692	1.14E-07	1.333YrCar	1.14E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1876	ALL	482425.9	3668692	1.12E-07	1.333YrCar	1.12E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1877	ALL	482445.9	3668692	1.10E-07	1.333YrCar	1.10E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1878	ALL	482465.9	3668692	1.08E-07	1.333YrCar	1.08E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1879	ALL	482485.9	3668692	1.07E-07	1.333YrCar	1.07E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1880	ALL	482505.9	3668692	1.06E-07	1.333YrCar	1.06E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1881	ALL	482525.9	3668692	1.04E-07	1.333YrCar	1.04E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1882	ALL	482545.9	3668692	1.03E-07	1.333YrCar	1.03E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1883	ALL	482565.9	3668692	9.81E-08	1.333YrCar	9.81E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1884	ALL	482585.9	3668692	7.71E-08	1.333YrCar	7.71E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1885	ALL	482605.9	3668692	7.32E-08	1.333YrCar	7.32E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1886	ALL	482625.9	3668692	7.39E-08	1.333YrCar	7.39E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1887	ALL	482645.9	3668692	6.92E-08	1.333YrCar	6.92E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1888	ALL	482665.9	3668692	6.62E-08	1.333YrCar	6.62E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1889	ALL	482685.9	3668692	6.41E-08	1.333YrCar	6.41E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1890	ALL	482705.9	3668692	6.37E-08	1.333YrCar	6.37E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1891	ALL	482725.9	3668692	6.22E-08	1.333YrCar	6.22E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1892	ALL	481125.9	3668712	6.92E-08	1.333YrCar	6.92E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1893	ALL	481145.9	3668712	6.99E-08	1.333YrCar	6.99E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1894	ALL	481165.9	3668712	7.07E-08	1.333YrCar	7.07E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1895	ALL	481185.9	3668712	7.14E-08	1.333YrCar	7.14E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1896	ALL	481205.9	3668712	7.21E-08	1.333YrCar	7.21E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1897	ALL	481225.9	3668712	7.27E-08	1.333YrCar	7.27E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1898	ALL	481245.9	3668712	7.33E-08	1.333YrCar	7.33E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1899	ALL	481365.9	3668712	7.79E-08	1.333YrCar	7.79E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1900	ALL	481385.9	3668712	7.91E-08	1.333YrCar	7.91E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1901	ALL	481405.9	3668712	8.01E-08	1.333YrCar	8.01E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1902	ALL	481425.9	3668712	8.11E-08	1.333YrCar	8.11E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1903	ALL	481445.9	3668712	8.22E-08	1.333YrCar	8.22E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1904	ALL	481465.9	3668712	8.36E-08	1.333YrCar	8.36E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1905	ALL	481485.9	3668712	8.49E-08	1.333YrCar	8.49E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1906	ALL	481505.9	3668712	8.62E-08	1.333YrCar	8.62E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1907	ALL	481525.9	3668712	9.00E-08	1.333YrCar	9.00E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1908	ALL	481945.9	3668712	2.64E-08	1.333YrCar	2.64E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1909	ALL	481965.9	3668712	2.66E-08	1.333YrCar	2.66E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1910	ALL	481985.9	3668712	2.70E-08	1.333YrCar	2.70E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

1911	ALL	482005.9	3668712	2.73E-08	1.333YrCar	2.73E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1912	ALL	482025.9	3668712	2.77E-08	1.333YrCar	2.77E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1913	ALL	482125.9	3668712	3.20E-08	1.333YrCar	3.20E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1914	ALL	482145.9	3668712	3.33E-08	1.333YrCar	3.33E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1915	ALL	482165.9	3668712	3.70E-08	1.333YrCar	3.70E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1916	ALL	482185.9	3668712	3.79E-08	1.333YrCar	3.79E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1917	ALL	482205.9	3668712	3.91E-08	1.333YrCar	3.91E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1918	ALL	482225.9	3668712	3.95E-08	1.333YrCar	3.95E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1919	ALL	482245.9	3668712	4.39E-08	1.333YrCar	4.39E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1920	ALL	482265.9	3668712	5.64E-08	1.333YrCar	5.64E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1921	ALL	482285.9	3668712	5.92E-08	1.333YrCar	5.92E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1922	ALL	482305.9	3668712	6.22E-08	1.333YrCar	6.22E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1923	ALL	482325.9	3668712	6.11E-08	1.333YrCar	6.11E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1924	ALL	482345.9	3668712	9.13E-08	1.333YrCar	9.13E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1925	ALL	482365.9	3668712	1.11E-07	1.333YrCar	1.11E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1926	ALL	482385.9	3668712	1.23E-07	1.333YrCar	1.23E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1927	ALL	482405.9	3668712	1.07E-07	1.333YrCar	1.07E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1928	ALL	482425.9	3668712	1.04E-07	1.333YrCar	1.04E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1929	ALL	482445.9	3668712	1.02E-07	1.333YrCar	1.02E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1930	ALL	482465.9	3668712	1.01E-07	1.333YrCar	1.01E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1931	ALL	482485.9	3668712	9.99E-08	1.333YrCar	9.99E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1932	ALL	482505.9	3668712	9.94E-08	1.333YrCar	9.94E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1933	ALL	482525.9	3668712	9.85E-08	1.333YrCar	9.85E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1934	ALL	482545.9	3668712	9.69E-08	1.333YrCar	9.69E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1935	ALL	482565.9	3668712	8.92E-08	1.333YrCar	8.92E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1936	ALL	482585.9	3668712	7.96E-08	1.333YrCar	7.96E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1937	ALL	482605.9	3668712	7.58E-08	1.333YrCar	7.58E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1938	ALL	482625.9	3668712	7.24E-08	1.333YrCar	7.24E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1939	ALL	482645.9	3668712	6.93E-08	1.333YrCar	6.93E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1940	ALL	482665.9	3668712	6.59E-08	1.333YrCar	6.59E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1941	ALL	482685.9	3668712	6.44E-08	1.333YrCar	6.44E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1942	ALL	482705.9	3668712	6.28E-08	1.333YrCar	6.28E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1943	ALL	482725.9	3668712	6.14E-08	1.333YrCar	6.14E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1944	ALL	481125.9	3668732	6.77E-08	1.333YrCar	6.77E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1945	ALL	481145.9	3668732	6.83E-08	1.333YrCar	6.83E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1946	ALL	481165.9	3668732	6.90E-08	1.333YrCar	6.90E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1947	ALL	481185.9	3668732	6.96E-08	1.333YrCar	6.96E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1948	ALL	481205.9	3668732	7.02E-08	1.333YrCar	7.02E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1949	ALL	481385.9	3668732	7.72E-08	1.333YrCar	7.72E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1950	ALL	481405.9	3668732	7.82E-08	1.333YrCar	7.82E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1951	ALL	481425.9	3668732	7.94E-08	1.333YrCar	7.94E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1952	ALL	481445.9	3668732	8.07E-08	1.333YrCar	8.07E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1953	ALL	481465.9	3668732	8.19E-08	1.333YrCar	8.19E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1954	ALL	481485.9	3668732	8.31E-08	1.333YrCar	8.31E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1955	ALL	481505.9	3668732	8.49E-08	1.333YrCar	8.49E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1956	ALL	481965.9	3668732	2.57E-08	1.333YrCar	2.57E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1957	ALL	481985.9	3668732	2.61E-08	1.333YrCar	2.61E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1958	ALL	482005.9	3668732	2.64E-08	1.333YrCar	2.64E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1959	ALL	482025.9	3668732	2.67E-08	1.333YrCar	2.67E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

1960	ALL	482125.9	3668732	3.13E-08	1.333YrCar	3.13E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1961	ALL	482145.9	3668732	3.20E-08	1.333YrCar	3.20E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1962	ALL	482165.9	3668732	3.52E-08	1.333YrCar	3.52E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1963	ALL	482185.9	3668732	3.70E-08	1.333YrCar	3.70E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1964	ALL	482205.9	3668732	3.84E-08	1.333YrCar	3.84E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1965	ALL	482225.9	3668732	3.87E-08	1.333YrCar	3.87E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1966	ALL	482245.9	3668732	4.02E-08	1.333YrCar	4.02E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1967	ALL	482265.9	3668732	5.35E-08	1.333YrCar	5.35E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1968	ALL	482285.9	3668732	5.90E-08	1.333YrCar	5.90E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1969	ALL	482305.9	3668732	6.41E-08	1.333YrCar	6.41E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1970	ALL	482325.9	3668732	6.19E-08	1.333YrCar	6.19E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1971	ALL	482345.9	3668732	7.25E-08	1.333YrCar	7.25E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1972	ALL	482365.9	3668732	1.04E-07	1.333YrCar	1.04E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1973	ALL	482385.9	3668732	1.10E-07	1.333YrCar	1.10E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1974	ALL	482405.9	3668732	9.53E-08	1.333YrCar	9.53E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1975	ALL	482425.9	3668732	8.73E-08	1.333YrCar	8.73E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1976	ALL	482445.9	3668732	8.76E-08	1.333YrCar	8.76E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1977	ALL	482465.9	3668732	8.85E-08	1.333YrCar	8.85E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1978	ALL	482485.9	3668732	8.78E-08	1.333YrCar	8.78E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1979	ALL	482505.9	3668732	8.84E-08	1.333YrCar	8.84E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1980	ALL	482525.9	3668732	8.83E-08	1.333YrCar	8.83E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1981	ALL	482545.9	3668732	9.10E-08	1.333YrCar	9.10E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1982	ALL	482565.9	3668732	8.41E-08	1.333YrCar	8.41E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1983	ALL	482585.9	3668732	7.98E-08	1.333YrCar	7.98E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1984	ALL	482605.9	3668732	7.60E-08	1.333YrCar	7.60E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1985	ALL	482625.9	3668732	7.21E-08	1.333YrCar	7.21E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1986	ALL	482645.9	3668732	6.82E-08	1.333YrCar	6.82E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1987	ALL	482665.9	3668732	6.48E-08	1.333YrCar	6.48E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1988	ALL	482685.9	3668732	6.27E-08	1.333YrCar	6.27E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1989	ALL	482705.9	3668732	6.04E-08	1.333YrCar	6.04E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1990	ALL	482725.9	3668732	5.89E-08	1.333YrCar	5.89E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1991	ALL	482745.9	3668732	5.79E-08	1.333YrCar	5.79E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1992	ALL	481145.9	3668752	6.67E-08	1.333YrCar	6.67E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1993	ALL	481165.9	3668752	6.73E-08	1.333YrCar	6.73E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1994	ALL	481405.9	3668752	7.66E-08	1.333YrCar	7.66E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1995	ALL	481425.9	3668752	7.77E-08	1.333YrCar	7.77E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1996	ALL	481445.9	3668752	7.91E-08	1.333YrCar	7.91E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1997	ALL	481465.9	3668752	8.02E-08	1.333YrCar	8.02E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1998	ALL	481485.9	3668752	8.15E-08	1.333YrCar	8.15E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1999	ALL	481505.9	3668752	8.58E-08	1.333YrCar	8.58E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2000	ALL	481965.9	3668752	2.48E-08	1.333YrCar	2.48E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2001	ALL	481985.9	3668752	2.52E-08	1.333YrCar	2.52E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2002	ALL	482005.9	3668752	2.55E-08	1.333YrCar	2.55E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2003	ALL	482025.9	3668752	2.58E-08	1.333YrCar	2.58E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2004	ALL	482125.9	3668752	3.09E-08	1.333YrCar	3.09E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2005	ALL	482145.9	3668752	3.16E-08	1.333YrCar	3.16E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2006	ALL	482165.9	3668752	3.32E-08	1.333YrCar	3.32E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2007	ALL	482185.9	3668752	3.63E-08	1.333YrCar	3.63E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2008	ALL	482205.9	3668752	3.78E-08	1.333YrCar	3.78E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

2009	ALL	482225.9	3668752	3.85E-08	1.333YrCar	3.85E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2010	ALL	482245.9	3668752	3.92E-08	1.333YrCar	3.92E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2011	ALL	482265.9	3668752	4.89E-08	1.333YrCar	4.89E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2012	ALL	482285.9	3668752	6.11E-08	1.333YrCar	6.11E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2013	ALL	482305.9	3668752	6.52E-08	1.333YrCar	6.52E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2014	ALL	482325.9	3668752	6.48E-08	1.333YrCar	6.48E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2015	ALL	482345.9	3668752	6.47E-08	1.333YrCar	6.47E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2016	ALL	482365.9	3668752	9.87E-08	1.333YrCar	9.87E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2017	ALL	482385.9	3668752	9.86E-08	1.333YrCar	9.86E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2018	ALL	482405.9	3668752	9.85E-08	1.333YrCar	9.85E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2019	ALL	482425.9	3668752	8.72E-08	1.333YrCar	8.72E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2020	ALL	482445.9	3668752	8.68E-08	1.333YrCar	8.68E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2021	ALL	482465.9	3668752	8.74E-08	1.333YrCar	8.74E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2022	ALL	482485.9	3668752	8.75E-08	1.333YrCar	8.75E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2023	ALL	482505.9	3668752	8.74E-08	1.333YrCar	8.74E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2024	ALL	482525.9	3668752	8.75E-08	1.333YrCar	8.75E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2025	ALL	482545.9	3668752	8.90E-08	1.333YrCar	8.90E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2026	ALL	482565.9	3668752	8.67E-08	1.333YrCar	8.67E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2027	ALL	482585.9	3668752	8.05E-08	1.333YrCar	8.05E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2028	ALL	482605.9	3668752	7.43E-08	1.333YrCar	7.43E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2029	ALL	482625.9	3668752	6.74E-08	1.333YrCar	6.74E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2030	ALL	482645.9	3668752	6.38E-08	1.333YrCar	6.38E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2031	ALL	482665.9	3668752	6.13E-08	1.333YrCar	6.13E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2032	ALL	482685.9	3668752	5.91E-08	1.333YrCar	5.91E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2033	ALL	482705.9	3668752	5.78E-08	1.333YrCar	5.78E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2034	ALL	482725.9	3668752	5.64E-08	1.333YrCar	5.64E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2035	ALL	482745.9	3668752	5.51E-08	1.333YrCar	5.51E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2036	ALL	482765.9	3668752	5.43E-08	1.333YrCar	5.43E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2037	ALL	481405.9	3668772	7.51E-08	1.333YrCar	7.51E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2038	ALL	481425.9	3668772	7.62E-08	1.333YrCar	7.62E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2039	ALL	481445.9	3668772	7.74E-08	1.333YrCar	7.74E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2040	ALL	481465.9	3668772	7.87E-08	1.333YrCar	7.87E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2041	ALL	481485.9	3668772	8.12E-08	1.333YrCar	8.12E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2042	ALL	481965.9	3668772	2.41E-08	1.333YrCar	2.41E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2043	ALL	481985.9	3668772	2.44E-08	1.333YrCar	2.44E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2044	ALL	482005.9	3668772	2.47E-08	1.333YrCar	2.47E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2045	ALL	482025.9	3668772	2.50E-08	1.333YrCar	2.50E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2046	ALL	482125.9	3668772	3.07E-08	1.333YrCar	3.07E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2047	ALL	482145.9	3668772	3.14E-08	1.333YrCar	3.14E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2048	ALL	482165.9	3668772	3.20E-08	1.333YrCar	3.20E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2049	ALL	482185.9	3668772	3.60E-08	1.333YrCar	3.60E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2050	ALL	482205.9	3668772	3.75E-08	1.333YrCar	3.75E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2051	ALL	482225.9	3668772	3.93E-08	1.333YrCar	3.93E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2052	ALL	482245.9	3668772	3.94E-08	1.333YrCar	3.94E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2053	ALL	482265.9	3668772	4.46E-08	1.333YrCar	4.46E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2054	ALL	482285.9	3668772	5.94E-08	1.333YrCar	5.94E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2055	ALL	482305.9	3668772	6.35E-08	1.333YrCar	6.35E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2056	ALL	482325.9	3668772	6.95E-08	1.333YrCar	6.95E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2057	ALL	482345.9	3668772	8.21E-08	1.333YrCar	8.21E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

2058	ALL	482365.9	3668772	9.34E-08	1.333YrCar	9.34E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2059	ALL	482385.9	3668772	9.23E-08	1.333YrCar	9.23E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2060	ALL	482405.9	3668772	9.49E-08	1.333YrCar	9.49E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2061	ALL	482425.9	3668772	8.33E-08	1.333YrCar	8.33E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2062	ALL	482445.9	3668772	8.39E-08	1.333YrCar	8.39E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2063	ALL	482465.9	3668772	8.57E-08	1.333YrCar	8.57E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2064	ALL	482485.9	3668772	8.46E-08	1.333YrCar	8.46E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2065	ALL	482505.9	3668772	8.41E-08	1.333YrCar	8.41E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2066	ALL	482525.9	3668772	8.43E-08	1.333YrCar	8.43E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2067	ALL	482545.9	3668772	8.26E-08	1.333YrCar	8.26E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2068	ALL	482565.9	3668772	8.00E-08	1.333YrCar	8.00E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2069	ALL	482585.9	3668772	7.61E-08	1.333YrCar	7.61E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2070	ALL	482605.9	3668772	7.04E-08	1.333YrCar	7.04E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2071	ALL	482625.9	3668772	6.41E-08	1.333YrCar	6.41E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2072	ALL	482645.9	3668772	5.92E-08	1.333YrCar	5.92E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2073	ALL	482665.9	3668772	5.67E-08	1.333YrCar	5.67E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2074	ALL	482685.9	3668772	5.53E-08	1.333YrCar	5.53E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2075	ALL	482705.9	3668772	5.40E-08	1.333YrCar	5.40E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2076	ALL	482725.9	3668772	5.35E-08	1.333YrCar	5.35E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2077	ALL	482745.9	3668772	5.26E-08	1.333YrCar	5.26E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2078	ALL	482765.9	3668772	5.16E-08	1.333YrCar	5.16E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2079	ALL	482785.9	3668772	5.08E-08	1.333YrCar	5.08E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2080	ALL	481425.9	3668792	7.50E-08	1.333YrCar	7.50E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2081	ALL	481445.9	3668792	7.60E-08	1.333YrCar	7.60E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2082	ALL	481465.9	3668792	7.73E-08	1.333YrCar	7.73E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2083	ALL	481965.9	3668792	2.34E-08	1.333YrCar	2.34E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2084	ALL	481985.9	3668792	2.36E-08	1.333YrCar	2.36E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2085	ALL	482005.9	3668792	2.39E-08	1.333YrCar	2.39E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2086	ALL	482025.9	3668792	2.42E-08	1.333YrCar	2.42E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2087	ALL	482045.9	3668792	2.46E-08	1.333YrCar	2.46E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2088	ALL	482145.9	3668792	3.13E-08	1.333YrCar	3.13E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2089	ALL	482165.9	3668792	3.21E-08	1.333YrCar	3.21E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2090	ALL	482185.9	3668792	3.47E-08	1.333YrCar	3.47E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2091	ALL	482205.9	3668792	3.68E-08	1.333YrCar	3.68E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2092	ALL	482225.9	3668792	3.89E-08	1.333YrCar	3.89E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2093	ALL	482245.9	3668792	4.18E-08	1.333YrCar	4.18E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2094	ALL	482265.9	3668792	4.63E-08	1.333YrCar	4.63E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2095	ALL	482285.9	3668792	5.27E-08	1.333YrCar	5.27E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2096	ALL	482305.9	3668792	5.96E-08	1.333YrCar	5.96E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2097	ALL	482325.9	3668792	6.51E-08	1.333YrCar	6.51E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2098	ALL	482345.9	3668792	7.35E-08	1.333YrCar	7.35E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2099	ALL	482365.9	3668792	8.16E-08	1.333YrCar	8.16E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2100	ALL	482385.9	3668792	8.65E-08	1.333YrCar	8.65E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2101	ALL	482405.9	3668792	9.48E-08	1.333YrCar	9.48E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2102	ALL	482425.9	3668792	7.49E-08	1.333YrCar	7.49E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2103	ALL	482445.9	3668792	7.74E-08	1.333YrCar	7.74E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2104	ALL	482465.9	3668792	8.05E-08	1.333YrCar	8.05E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2105	ALL	482485.9	3668792	7.87E-08	1.333YrCar	7.87E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2106	ALL	482505.9	3668792	7.83E-08	1.333YrCar	7.83E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

2107	ALL	482525.9	3668792	7.87E-08	1.333YrCar	7.87E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2108	ALL	482545.9	3668792	7.89E-08	1.333YrCar	7.89E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2109	ALL	482565.9	3668792	7.33E-08	1.333YrCar	7.33E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2110	ALL	482585.9	3668792	6.84E-08	1.333YrCar	6.84E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2111	ALL	482605.9	3668792	5.91E-08	1.333YrCar	5.91E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2112	ALL	482625.9	3668792	5.54E-08	1.333YrCar	5.54E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2113	ALL	482645.9	3668792	5.41E-08	1.333YrCar	5.41E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2114	ALL	482665.9	3668792	5.31E-08	1.333YrCar	5.31E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2115	ALL	482685.9	3668792	5.28E-08	1.333YrCar	5.28E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2116	ALL	482705.9	3668792	5.18E-08	1.333YrCar	5.18E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2117	ALL	482725.9	3668792	4.96E-08	1.333YrCar	4.96E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2118	ALL	482745.9	3668792	5.01E-08	1.333YrCar	5.01E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2119	ALL	482765.9	3668792	4.94E-08	1.333YrCar	4.94E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2120	ALL	482785.9	3668792	4.88E-08	1.333YrCar	4.88E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2121	ALL	482805.9	3668792	4.72E-08	1.333YrCar	4.72E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2122	ALL	481445.9	3668812	7.86E-08	1.333YrCar	7.86E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2123	ALL	481465.9	3668812	7.89E-08	1.333YrCar	7.89E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2124	ALL	481985.9	3668812	2.29E-08	1.333YrCar	2.29E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2125	ALL	482005.9	3668812	2.32E-08	1.333YrCar	2.32E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2126	ALL	482025.9	3668812	2.35E-08	1.333YrCar	2.35E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2127	ALL	482045.9	3668812	2.38E-08	1.333YrCar	2.38E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2128	ALL	482145.9	3668812	3.03E-08	1.333YrCar	3.03E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2129	ALL	482165.9	3668812	3.16E-08	1.333YrCar	3.16E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2130	ALL	482185.9	3668812	3.29E-08	1.333YrCar	3.29E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2131	ALL	482205.9	3668812	3.36E-08	1.333YrCar	3.36E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2132	ALL	482225.9	3668812	3.66E-08	1.333YrCar	3.66E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2133	ALL	482245.9	3668812	3.85E-08	1.333YrCar	3.85E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2134	ALL	482265.9	3668812	4.21E-08	1.333YrCar	4.21E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2135	ALL	482285.9	3668812	4.79E-08	1.333YrCar	4.79E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2136	ALL	482305.9	3668812	5.42E-08	1.333YrCar	5.42E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2137	ALL	482325.9	3668812	5.91E-08	1.333YrCar	5.91E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2138	ALL	482345.9	3668812	6.26E-08	1.333YrCar	6.26E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2139	ALL	482365.9	3668812	7.17E-08	1.333YrCar	7.17E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2140	ALL	482385.9	3668812	8.18E-08	1.333YrCar	8.18E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2141	ALL	482405.9	3668812	8.79E-08	1.333YrCar	8.79E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2142	ALL	482425.9	3668812	7.19E-08	1.333YrCar	7.19E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2143	ALL	482445.9	3668812	7.40E-08	1.333YrCar	7.40E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2144	ALL	482465.9	3668812	7.68E-08	1.333YrCar	7.68E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2145	ALL	482485.9	3668812	7.51E-08	1.333YrCar	7.51E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2146	ALL	482505.9	3668812	7.10E-08	1.333YrCar	7.10E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2147	ALL	482525.9	3668812	6.76E-08	1.333YrCar	6.76E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2148	ALL	482545.9	3668812	6.49E-08	1.333YrCar	6.49E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2149	ALL	482565.9	3668812	6.18E-08	1.333YrCar	6.18E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2150	ALL	482585.9	3668812	5.90E-08	1.333YrCar	5.90E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2151	ALL	482605.9	3668812	5.72E-08	1.333YrCar	5.72E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2152	ALL	482625.9	3668812	5.46E-08	1.333YrCar	5.46E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2153	ALL	482645.9	3668812	5.35E-08	1.333YrCar	5.35E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2154	ALL	482665.9	3668812	5.27E-08	1.333YrCar	5.27E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2155	ALL	482685.9	3668812	5.15E-08	1.333YrCar	5.15E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

2156	ALL	482705.9	3668812	4.92E-08	1.333YrCar	4.92E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2157	ALL	482725.9	3668812	4.69E-08	1.333YrCar	4.69E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2158	ALL	482745.9	3668812	4.72E-08	1.333YrCar	4.72E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2159	ALL	482765.9	3668812	4.78E-08	1.333YrCar	4.78E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2160	ALL	482785.9	3668812	4.71E-08	1.333YrCar	4.71E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2161	ALL	482805.9	3668812	4.67E-08	1.333YrCar	4.67E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2162	ALL	482825.9	3668812	4.57E-08	1.333YrCar	4.57E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2163	ALL	481445.9	3668832	8.92E-08	1.333YrCar	8.92E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2164	ALL	481985.9	3668832	2.23E-08	1.333YrCar	2.23E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2165	ALL	482005.9	3668832	2.26E-08	1.333YrCar	2.26E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2166	ALL	482025.9	3668832	2.29E-08	1.333YrCar	2.29E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2167	ALL	482045.9	3668832	2.32E-08	1.333YrCar	2.32E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2168	ALL	482145.9	3668832	2.93E-08	1.333YrCar	2.93E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2169	ALL	482165.9	3668832	3.04E-08	1.333YrCar	3.04E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2170	ALL	482185.9	3668832	3.14E-08	1.333YrCar	3.14E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2171	ALL	482205.9	3668832	3.19E-08	1.333YrCar	3.19E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2172	ALL	482225.9	3668832	3.51E-08	1.333YrCar	3.51E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2173	ALL	482245.9	3668832	3.67E-08	1.333YrCar	3.67E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2174	ALL	482265.9	3668832	3.83E-08	1.333YrCar	3.83E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2175	ALL	482285.9	3668832	4.18E-08	1.333YrCar	4.18E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2176	ALL	482305.9	3668832	4.31E-08	1.333YrCar	4.31E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2177	ALL	482325.9	3668832	4.58E-08	1.333YrCar	4.58E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2178	ALL	482345.9	3668832	4.70E-08	1.333YrCar	4.70E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2179	ALL	482365.9	3668832	6.34E-08	1.333YrCar	6.34E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2180	ALL	482385.9	3668832	7.74E-08	1.333YrCar	7.74E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2181	ALL	482405.9	3668832	8.33E-08	1.333YrCar	8.33E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2182	ALL	482425.9	3668832	6.96E-08	1.333YrCar	6.96E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2183	ALL	482445.9	3668832	7.10E-08	1.333YrCar	7.10E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2184	ALL	482465.9	3668832	7.39E-08	1.333YrCar	7.39E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2185	ALL	482485.9	3668832	7.20E-08	1.333YrCar	7.20E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2186	ALL	482505.9	3668832	7.07E-08	1.333YrCar	7.07E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2187	ALL	482525.9	3668832	6.78E-08	1.333YrCar	6.78E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2188	ALL	482545.9	3668832	6.39E-08	1.333YrCar	6.39E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2189	ALL	482565.9	3668832	6.22E-08	1.333YrCar	6.22E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2190	ALL	482585.9	3668832	6.06E-08	1.333YrCar	6.06E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2191	ALL	482605.9	3668832	5.76E-08	1.333YrCar	5.76E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2192	ALL	482625.9	3668832	5.48E-08	1.333YrCar	5.48E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2193	ALL	482645.9	3668832	5.25E-08	1.333YrCar	5.25E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2194	ALL	482665.9	3668832	5.04E-08	1.333YrCar	5.04E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2195	ALL	482685.9	3668832	4.97E-08	1.333YrCar	4.97E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2196	ALL	482705.9	3668832	4.91E-08	1.333YrCar	4.91E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2197	ALL	482725.9	3668832	4.69E-08	1.333YrCar	4.69E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2198	ALL	482745.9	3668832	4.49E-08	1.333YrCar	4.49E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2199	ALL	482765.9	3668832	4.52E-08	1.333YrCar	4.52E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2200	ALL	482785.9	3668832	4.55E-08	1.333YrCar	4.55E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2201	ALL	482805.9	3668832	4.49E-08	1.333YrCar	4.49E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2202	ALL	482825.9	3668832	4.46E-08	1.333YrCar	4.46E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2203	ALL	482845.9	3668832	4.43E-08	1.333YrCar	4.43E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2204	ALL	481985.9	3668852	2.17E-08	1.333YrCar	2.17E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

2205	ALL	482005.9	3668852	2.21E-08	1.333YrCar	2.21E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2206	ALL	482025.9	3668852	2.24E-08	1.333YrCar	2.24E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2207	ALL	482045.9	3668852	2.26E-08	1.333YrCar	2.26E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2208	ALL	482145.9	3668852	2.84E-08	1.333YrCar	2.84E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2209	ALL	482165.9	3668852	2.97E-08	1.333YrCar	2.97E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2210	ALL	482185.9	3668852	3.05E-08	1.333YrCar	3.05E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2211	ALL	482205.9	3668852	3.14E-08	1.333YrCar	3.14E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2212	ALL	482225.9	3668852	3.28E-08	1.333YrCar	3.28E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2213	ALL	482245.9	3668852	3.49E-08	1.333YrCar	3.49E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2214	ALL	482265.9	3668852	3.69E-08	1.333YrCar	3.69E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2215	ALL	482285.9	3668852	3.95E-08	1.333YrCar	3.95E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2216	ALL	482305.9	3668852	4.25E-08	1.333YrCar	4.25E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2217	ALL	482325.9	3668852	4.52E-08	1.333YrCar	4.52E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2218	ALL	482345.9	3668852	4.60E-08	1.333YrCar	4.60E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2219	ALL	482365.9	3668852	6.08E-08	1.333YrCar	6.08E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2220	ALL	482385.9	3668852	7.31E-08	1.333YrCar	7.31E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2221	ALL	482405.9	3668852	7.77E-08	1.333YrCar	7.77E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2222	ALL	482425.9	3668852	6.73E-08	1.333YrCar	6.73E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2223	ALL	482445.9	3668852	6.82E-08	1.333YrCar	6.82E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2224	ALL	482465.9	3668852	7.08E-08	1.333YrCar	7.08E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2225	ALL	482485.9	3668852	6.92E-08	1.333YrCar	6.92E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2226	ALL	482505.9	3668852	7.03E-08	1.333YrCar	7.03E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2227	ALL	482525.9	3668852	6.87E-08	1.333YrCar	6.87E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2228	ALL	482545.9	3668852	6.57E-08	1.333YrCar	6.57E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2229	ALL	482565.9	3668852	6.18E-08	1.333YrCar	6.18E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2230	ALL	482585.9	3668852	5.69E-08	1.333YrCar	5.69E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2231	ALL	482605.9	3668852	5.52E-08	1.333YrCar	5.52E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2232	ALL	482625.9	3668852	5.18E-08	1.333YrCar	5.18E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2233	ALL	482645.9	3668852	4.97E-08	1.333YrCar	4.97E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2234	ALL	482665.9	3668852	4.90E-08	1.333YrCar	4.90E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2235	ALL	482685.9	3668852	4.87E-08	1.333YrCar	4.87E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2236	ALL	482705.9	3668852	5.18E-08	1.333YrCar	5.18E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2237	ALL	482725.9	3668852	5.19E-08	1.333YrCar	5.19E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2238	ALL	482745.9	3668852	4.49E-08	1.333YrCar	4.49E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2239	ALL	482765.9	3668852	4.31E-08	1.333YrCar	4.31E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2240	ALL	482785.9	3668852	4.32E-08	1.333YrCar	4.32E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2241	ALL	482805.9	3668852	4.35E-08	1.333YrCar	4.35E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2242	ALL	482825.9	3668852	4.34E-08	1.333YrCar	4.34E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2243	ALL	482845.9	3668852	4.30E-08	1.333YrCar	4.30E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2244	ALL	482865.9	3668852	4.25E-08	1.333YrCar	4.25E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2245	ALL	482885.9	3668852	4.19E-08	1.333YrCar	4.19E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2246	ALL	482905.9	3668852	4.14E-08	1.333YrCar	4.14E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2247	ALL	482925.9	3668852	4.11E-08	1.333YrCar	4.11E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2248	ALL	482945.9	3668852	4.08E-08	1.333YrCar	4.08E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2249	ALL	482965.9	3668852	4.06E-08	1.333YrCar	4.06E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2250	ALL	482985.9	3668852	4.03E-08	1.333YrCar	4.03E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2251	ALL	483005.9	3668852	3.98E-08	1.333YrCar	3.98E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2252	ALL	483025.9	3668852	3.94E-08	1.333YrCar	3.94E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2253	ALL	483045.9	3668852	3.93E-08	1.333YrCar	3.93E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

2254	ALL	483065.9	3668852	3.92E-08	1.333YrCar	3.92E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2255	ALL	483085.9	3668852	3.93E-08	1.333YrCar	3.93E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2256	ALL	483105.9	3668852	3.93E-08	1.333YrCar	3.93E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2257	ALL	483125.9	3668852	3.93E-08	1.333YrCar	3.93E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2258	ALL	483145.9	3668852	3.93E-08	1.333YrCar	3.93E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2259	ALL	481985.9	3668872	2.13E-08	1.333YrCar	2.13E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2260	ALL	482005.9	3668872	2.16E-08	1.333YrCar	2.16E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2261	ALL	482025.9	3668872	2.19E-08	1.333YrCar	2.19E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2262	ALL	482045.9	3668872	2.22E-08	1.333YrCar	2.22E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2263	ALL	482065.9	3668872	2.28E-08	1.333YrCar	2.28E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2264	ALL	482125.9	3668872	2.66E-08	1.333YrCar	2.66E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2265	ALL	482145.9	3668872	2.73E-08	1.333YrCar	2.73E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2266	ALL	482165.9	3668872	2.83E-08	1.333YrCar	2.83E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2267	ALL	482185.9	3668872	2.97E-08	1.333YrCar	2.97E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2268	ALL	482205.9	3668872	3.12E-08	1.333YrCar	3.12E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2269	ALL	482225.9	3668872	3.26E-08	1.333YrCar	3.26E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2270	ALL	482245.9	3668872	3.43E-08	1.333YrCar	3.43E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2271	ALL	482265.9	3668872	3.68E-08	1.333YrCar	3.68E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2272	ALL	482285.9	3668872	4.09E-08	1.333YrCar	4.09E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2273	ALL	482305.9	3668872	4.50E-08	1.333YrCar	4.50E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2274	ALL	482325.9	3668872	4.70E-08	1.333YrCar	4.70E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2275	ALL	482345.9	3668872	4.59E-08	1.333YrCar	4.59E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2276	ALL	482365.9	3668872	5.74E-08	1.333YrCar	5.74E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2277	ALL	482385.9	3668872	6.93E-08	1.333YrCar	6.93E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2278	ALL	482405.9	3668872	7.43E-08	1.333YrCar	7.43E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2279	ALL	482425.9	3668872	6.48E-08	1.333YrCar	6.48E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2280	ALL	482445.9	3668872	6.57E-08	1.333YrCar	6.57E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2281	ALL	482465.9	3668872	6.83E-08	1.333YrCar	6.83E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2282	ALL	482485.9	3668872	6.60E-08	1.333YrCar	6.60E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2283	ALL	482505.9	3668872	6.73E-08	1.333YrCar	6.73E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2284	ALL	482525.9	3668872	6.42E-08	1.333YrCar	6.42E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2285	ALL	482545.9	3668872	6.08E-08	1.333YrCar	6.08E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2286	ALL	482565.9	3668872	5.82E-08	1.333YrCar	5.82E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2287	ALL	482585.9	3668872	5.56E-08	1.333YrCar	5.56E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2288	ALL	482605.9	3668872	5.38E-08	1.333YrCar	5.38E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2289	ALL	482625.9	3668872	5.07E-08	1.333YrCar	5.07E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2290	ALL	482645.9	3668872	5.04E-08	1.333YrCar	5.04E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2291	ALL	482665.9	3668872	5.02E-08	1.333YrCar	5.02E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2292	ALL	482685.9	3668872	5.01E-08	1.333YrCar	5.01E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2293	ALL	482705.9	3668872	5.00E-08	1.333YrCar	5.00E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2294	ALL	482725.9	3668872	5.00E-08	1.333YrCar	5.00E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2295	ALL	482745.9	3668872	4.98E-08	1.333YrCar	4.98E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2296	ALL	482765.9	3668872	4.37E-08	1.333YrCar	4.37E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2297	ALL	482785.9	3668872	4.17E-08	1.333YrCar	4.17E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2298	ALL	482805.9	3668872	4.18E-08	1.333YrCar	4.18E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2299	ALL	482825.9	3668872	4.20E-08	1.333YrCar	4.20E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2300	ALL	482845.9	3668872	4.16E-08	1.333YrCar	4.16E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2301	ALL	482865.9	3668872	4.12E-08	1.333YrCar	4.12E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2302	ALL	482885.9	3668872	4.09E-08	1.333YrCar	4.09E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

2303	ALL	482905.9	3668872	4.05E-08	1.333YrCar	4.05E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2304	ALL	482925.9	3668872	4.02E-08	1.333YrCar	4.02E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2305	ALL	482945.9	3668872	3.99E-08	1.333YrCar	3.99E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2306	ALL	482965.9	3668872	3.95E-08	1.333YrCar	3.95E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2307	ALL	482985.9	3668872	3.92E-08	1.333YrCar	3.92E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2308	ALL	483005.9	3668872	3.87E-08	1.333YrCar	3.87E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2309	ALL	483025.9	3668872	3.84E-08	1.333YrCar	3.84E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2310	ALL	483045.9	3668872	3.82E-08	1.333YrCar	3.82E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2311	ALL	483065.9	3668872	3.80E-08	1.333YrCar	3.80E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2312	ALL	483085.9	3668872	3.80E-08	1.333YrCar	3.80E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2313	ALL	483105.9	3668872	3.81E-08	1.333YrCar	3.81E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2314	ALL	483125.9	3668872	3.81E-08	1.333YrCar	3.81E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2315	ALL	483145.9	3668872	3.82E-08	1.333YrCar	3.82E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2316	ALL	483165.9	3668872	3.82E-08	1.333YrCar	3.82E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2317	ALL	483185.9	3668872	3.82E-08	1.333YrCar	3.82E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2318	ALL	482005.9	3668892	2.11E-08	1.333YrCar	2.11E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2319	ALL	482025.9	3668892	2.15E-08	1.333YrCar	2.15E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2320	ALL	482045.9	3668892	2.18E-08	1.333YrCar	2.18E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2321	ALL	482065.9	3668892	2.23E-08	1.333YrCar	2.23E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2322	ALL	482125.9	3668892	2.59E-08	1.333YrCar	2.59E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2323	ALL	482145.9	3668892	2.62E-08	1.333YrCar	2.62E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2324	ALL	482165.9	3668892	2.66E-08	1.333YrCar	2.66E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2325	ALL	482185.9	3668892	2.97E-08	1.333YrCar	2.97E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2326	ALL	482205.9	3668892	3.04E-08	1.333YrCar	3.04E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2327	ALL	482225.9	3668892	3.14E-08	1.333YrCar	3.14E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2328	ALL	482245.9	3668892	3.10E-08	1.333YrCar	3.10E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2329	ALL	482265.9	3668892	3.28E-08	1.333YrCar	3.28E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2330	ALL	482285.9	3668892	4.58E-08	1.333YrCar	4.58E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2331	ALL	482305.9	3668892	4.68E-08	1.333YrCar	4.68E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2332	ALL	482325.9	3668892	4.84E-08	1.333YrCar	4.84E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2333	ALL	482345.9	3668892	4.67E-08	1.333YrCar	4.67E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2334	ALL	482365.9	3668892	5.30E-08	1.333YrCar	5.30E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2335	ALL	482385.9	3668892	6.55E-08	1.333YrCar	6.55E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2336	ALL	482405.9	3668892	7.04E-08	1.333YrCar	7.04E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2337	ALL	482425.9	3668892	6.20E-08	1.333YrCar	6.20E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2338	ALL	482445.9	3668892	6.31E-08	1.333YrCar	6.31E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2339	ALL	482465.9	3668892	6.54E-08	1.333YrCar	6.54E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2340	ALL	482485.9	3668892	6.44E-08	1.333YrCar	6.44E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2341	ALL	482505.9	3668892	6.47E-08	1.333YrCar	6.47E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2342	ALL	482525.9	3668892	6.08E-08	1.333YrCar	6.08E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2343	ALL	482545.9	3668892	5.85E-08	1.333YrCar	5.85E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2344	ALL	482565.9	3668892	5.77E-08	1.333YrCar	5.77E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2345	ALL	482585.9	3668892	5.71E-08	1.333YrCar	5.71E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2346	ALL	482605.9	3668892	5.61E-08	1.333YrCar	5.61E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2347	ALL	482625.9	3668892	4.92E-08	1.333YrCar	4.92E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2348	ALL	482645.9	3668892	4.87E-08	1.333YrCar	4.87E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2349	ALL	482665.9	3668892	4.85E-08	1.333YrCar	4.85E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2350	ALL	482685.9	3668892	4.85E-08	1.333YrCar	4.85E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2351	ALL	482705.9	3668892	4.84E-08	1.333YrCar	4.84E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

2352	ALL	482725.9	3668892	4.84E-08	1.333YrCar	4.84E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2353	ALL	482745.9	3668892	4.84E-08	1.333YrCar	4.84E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2354	ALL	482765.9	3668892	4.84E-08	1.333YrCar	4.84E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2355	ALL	482785.9	3668892	4.57E-08	1.333YrCar	4.57E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2356	ALL	482805.9	3668892	4.12E-08	1.333YrCar	4.12E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2357	ALL	482825.9	3668892	4.05E-08	1.333YrCar	4.05E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2358	ALL	482845.9	3668892	3.97E-08	1.333YrCar	3.97E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2359	ALL	482865.9	3668892	3.94E-08	1.333YrCar	3.94E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2360	ALL	482885.9	3668892	3.92E-08	1.333YrCar	3.92E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2361	ALL	482905.9	3668892	3.90E-08	1.333YrCar	3.90E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2362	ALL	482925.9	3668892	3.88E-08	1.333YrCar	3.88E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2363	ALL	482945.9	3668892	3.88E-08	1.333YrCar	3.88E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2364	ALL	482965.9	3668892	3.82E-08	1.333YrCar	3.82E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2365	ALL	482985.9	3668892	3.79E-08	1.333YrCar	3.79E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2366	ALL	483005.9	3668892	3.75E-08	1.333YrCar	3.75E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2367	ALL	483025.9	3668892	3.71E-08	1.333YrCar	3.71E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2368	ALL	483045.9	3668892	3.69E-08	1.333YrCar	3.69E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2369	ALL	483065.9	3668892	3.69E-08	1.333YrCar	3.69E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2370	ALL	483085.9	3668892	3.69E-08	1.333YrCar	3.69E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2371	ALL	483105.9	3668892	3.69E-08	1.333YrCar	3.69E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2372	ALL	483125.9	3668892	3.69E-08	1.333YrCar	3.69E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2373	ALL	483145.9	3668892	3.70E-08	1.333YrCar	3.70E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2374	ALL	483165.9	3668892	3.71E-08	1.333YrCar	3.71E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2375	ALL	483185.9	3668892	3.72E-08	1.333YrCar	3.72E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2376	ALL	483205.9	3668892	3.72E-08	1.333YrCar	3.72E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2377	ALL	483225.9	3668892	3.72E-08	1.333YrCar	3.72E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2378	ALL	482005.9	3668912	2.07E-08	1.333YrCar	2.07E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2379	ALL	482025.9	3668912	2.11E-08	1.333YrCar	2.11E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2380	ALL	482045.9	3668912	2.15E-08	1.333YrCar	2.15E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2381	ALL	482125.9	3668912	2.52E-08	1.333YrCar	2.52E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2382	ALL	482145.9	3668912	2.55E-08	1.333YrCar	2.55E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2383	ALL	482165.9	3668912	2.59E-08	1.333YrCar	2.59E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2384	ALL	482185.9	3668912	2.88E-08	1.333YrCar	2.88E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2385	ALL	482205.9	3668912	2.93E-08	1.333YrCar	2.93E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2386	ALL	482225.9	3668912	3.02E-08	1.333YrCar	3.02E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2387	ALL	482245.9	3668912	3.00E-08	1.333YrCar	3.00E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2388	ALL	482265.9	3668912	3.13E-08	1.333YrCar	3.13E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2389	ALL	482285.9	3668912	4.50E-08	1.333YrCar	4.50E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2390	ALL	482305.9	3668912	4.64E-08	1.333YrCar	4.64E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2391	ALL	482325.9	3668912	4.92E-08	1.333YrCar	4.92E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2392	ALL	482345.9	3668912	4.71E-08	1.333YrCar	4.71E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2393	ALL	482365.9	3668912	5.13E-08	1.333YrCar	5.13E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2394	ALL	482385.9	3668912	6.24E-08	1.333YrCar	6.24E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2395	ALL	482405.9	3668912	6.61E-08	1.333YrCar	6.61E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2396	ALL	482425.9	3668912	5.96E-08	1.333YrCar	5.96E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2397	ALL	482445.9	3668912	6.05E-08	1.333YrCar	6.05E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2398	ALL	482465.9	3668912	5.93E-08	1.333YrCar	5.93E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2399	ALL	482485.9	3668912	5.78E-08	1.333YrCar	5.78E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2400	ALL	482505.9	3668912	5.74E-08	1.333YrCar	5.74E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

2401	ALL	482525.9	3668912	5.51E-08	1.333YrCar	5.51E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2402	ALL	482545.9	3668912	5.50E-08	1.333YrCar	5.50E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2403	ALL	482565.9	3668912	5.52E-08	1.333YrCar	5.52E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2404	ALL	482585.9	3668912	5.47E-08	1.333YrCar	5.47E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2405	ALL	482605.9	3668912	5.41E-08	1.333YrCar	5.41E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2406	ALL	482625.9	3668912	4.73E-08	1.333YrCar	4.73E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2407	ALL	482645.9	3668912	4.71E-08	1.333YrCar	4.71E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2408	ALL	482665.9	3668912	4.68E-08	1.333YrCar	4.68E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2409	ALL	482685.9	3668912	4.69E-08	1.333YrCar	4.69E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2410	ALL	482705.9	3668912	4.68E-08	1.333YrCar	4.68E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2411	ALL	482725.9	3668912	4.67E-08	1.333YrCar	4.67E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2412	ALL	482745.9	3668912	4.68E-08	1.333YrCar	4.68E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2413	ALL	482765.9	3668912	4.65E-08	1.333YrCar	4.65E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2414	ALL	482785.9	3668912	4.21E-08	1.333YrCar	4.21E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2415	ALL	482805.9	3668912	4.06E-08	1.333YrCar	4.06E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2416	ALL	482825.9	3668912	4.00E-08	1.333YrCar	4.00E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2417	ALL	482845.9	3668912	3.99E-08	1.333YrCar	3.99E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2418	ALL	482865.9	3668912	3.95E-08	1.333YrCar	3.95E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2419	ALL	482885.9	3668912	3.87E-08	1.333YrCar	3.87E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2420	ALL	482905.9	3668912	3.77E-08	1.333YrCar	3.77E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2421	ALL	482925.9	3668912	3.77E-08	1.333YrCar	3.77E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2422	ALL	482945.9	3668912	3.79E-08	1.333YrCar	3.79E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2423	ALL	482965.9	3668912	3.76E-08	1.333YrCar	3.76E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2424	ALL	482985.9	3668912	3.73E-08	1.333YrCar	3.73E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2425	ALL	483005.9	3668912	3.71E-08	1.333YrCar	3.71E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2426	ALL	483025.9	3668912	3.70E-08	1.333YrCar	3.70E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2427	ALL	483045.9	3668912	3.71E-08	1.333YrCar	3.71E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2428	ALL	483065.9	3668912	3.73E-08	1.333YrCar	3.73E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2429	ALL	483085.9	3668912	3.72E-08	1.333YrCar	3.72E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2430	ALL	483105.9	3668912	3.67E-08	1.333YrCar	3.67E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2431	ALL	483125.9	3668912	3.62E-08	1.333YrCar	3.62E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2432	ALL	483145.9	3668912	3.59E-08	1.333YrCar	3.59E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2433	ALL	483165.9	3668912	3.61E-08	1.333YrCar	3.61E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2434	ALL	483185.9	3668912	3.61E-08	1.333YrCar	3.61E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2435	ALL	483205.9	3668912	3.62E-08	1.333YrCar	3.62E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2436	ALL	483225.9	3668912	3.62E-08	1.333YrCar	3.62E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2437	ALL	482125.9	3668932	2.45E-08	1.333YrCar	2.45E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2438	ALL	482145.9	3668932	2.48E-08	1.333YrCar	2.48E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2439	ALL	482165.9	3668932	2.52E-08	1.333YrCar	2.52E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2440	ALL	482185.9	3668932	2.80E-08	1.333YrCar	2.80E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2441	ALL	482205.9	3668932	2.84E-08	1.333YrCar	2.84E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2442	ALL	482225.9	3668932	2.92E-08	1.333YrCar	2.92E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2443	ALL	482245.9	3668932	2.90E-08	1.333YrCar	2.90E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2444	ALL	482265.9	3668932	3.04E-08	1.333YrCar	3.04E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2445	ALL	482285.9	3668932	4.44E-08	1.333YrCar	4.44E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2446	ALL	482305.9	3668932	4.62E-08	1.333YrCar	4.62E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2447	ALL	482325.9	3668932	4.81E-08	1.333YrCar	4.81E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2448	ALL	482345.9	3668932	4.57E-08	1.333YrCar	4.57E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2449	ALL	482365.9	3668932	4.84E-08	1.333YrCar	4.84E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

2450	ALL	482385.9	3668932	5.94E-08	1.333YrCar	5.94E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2451	ALL	482405.9	3668932	6.33E-08	1.333YrCar	6.33E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2452	ALL	482425.9	3668932	5.91E-08	1.333YrCar	5.91E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2453	ALL	482445.9	3668932	5.59E-08	1.333YrCar	5.59E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2454	ALL	482465.9	3668932	5.49E-08	1.333YrCar	5.49E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2455	ALL	482485.9	3668932	5.43E-08	1.333YrCar	5.43E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2456	ALL	482505.9	3668932	5.35E-08	1.333YrCar	5.35E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2457	ALL	482525.9	3668932	5.23E-08	1.333YrCar	5.23E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2458	ALL	482545.9	3668932	5.26E-08	1.333YrCar	5.26E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2459	ALL	482565.9	3668932	5.27E-08	1.333YrCar	5.27E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2460	ALL	482585.9	3668932	5.27E-08	1.333YrCar	5.27E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2461	ALL	482605.9	3668932	5.23E-08	1.333YrCar	5.23E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2462	ALL	482625.9	3668932	4.55E-08	1.333YrCar	4.55E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2463	ALL	482645.9	3668932	4.54E-08	1.333YrCar	4.54E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2464	ALL	482665.9	3668932	4.53E-08	1.333YrCar	4.53E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2465	ALL	482685.9	3668932	4.52E-08	1.333YrCar	4.52E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2466	ALL	482705.9	3668932	4.52E-08	1.333YrCar	4.52E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2467	ALL	482725.9	3668932	4.52E-08	1.333YrCar	4.52E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2468	ALL	482745.9	3668932	4.51E-08	1.333YrCar	4.51E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2469	ALL	482765.9	3668932	4.52E-08	1.333YrCar	4.52E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2470	ALL	482785.9	3668932	4.09E-08	1.333YrCar	4.09E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2471	ALL	482805.9	3668932	4.04E-08	1.333YrCar	4.04E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2472	ALL	482825.9	3668932	3.94E-08	1.333YrCar	3.94E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2473	ALL	482845.9	3668932	3.88E-08	1.333YrCar	3.88E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2474	ALL	482865.9	3668932	3.89E-08	1.333YrCar	3.89E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2475	ALL	482885.9	3668932	3.91E-08	1.333YrCar	3.91E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2476	ALL	482905.9	3668932	3.70E-08	1.333YrCar	3.70E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2477	ALL	482925.9	3668932	3.70E-08	1.333YrCar	3.70E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2478	ALL	482945.9	3668932	3.72E-08	1.333YrCar	3.72E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2479	ALL	482965.9	3668932	3.70E-08	1.333YrCar	3.70E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2480	ALL	482985.9	3668932	3.71E-08	1.333YrCar	3.71E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2481	ALL	483005.9	3668932	3.70E-08	1.333YrCar	3.70E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2482	ALL	483025.9	3668932	3.69E-08	1.333YrCar	3.69E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2483	ALL	483045.9	3668932	3.66E-08	1.333YrCar	3.66E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2484	ALL	483065.9	3668932	3.64E-08	1.333YrCar	3.64E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2485	ALL	483085.9	3668932	3.62E-08	1.333YrCar	3.62E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2486	ALL	483105.9	3668932	3.61E-08	1.333YrCar	3.61E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2487	ALL	483125.9	3668932	3.60E-08	1.333YrCar	3.60E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2488	ALL	483145.9	3668932	3.52E-08	1.333YrCar	3.52E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2489	ALL	483165.9	3668932	3.51E-08	1.333YrCar	3.51E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2490	ALL	483185.9	3668932	3.52E-08	1.333YrCar	3.52E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2491	ALL	483205.9	3668932	3.52E-08	1.333YrCar	3.52E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2492	ALL	482125.9	3668952	2.39E-08	1.333YrCar	2.39E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2493	ALL	482145.9	3668952	2.41E-08	1.333YrCar	2.41E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2494	ALL	482165.9	3668952	2.46E-08	1.333YrCar	2.46E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2495	ALL	482185.9	3668952	2.71E-08	1.333YrCar	2.71E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2496	ALL	482205.9	3668952	2.75E-08	1.333YrCar	2.75E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2497	ALL	482225.9	3668952	2.83E-08	1.333YrCar	2.83E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2498	ALL	482245.9	3668952	2.80E-08	1.333YrCar	2.80E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

2499	ALL	482265.9	3668952	2.96E-08	1.333YrCar	2.96E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2500	ALL	482285.9	3668952	4.31E-08	1.333YrCar	4.31E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2501	ALL	482305.9	3668952	4.44E-08	1.333YrCar	4.44E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2502	ALL	482325.9	3668952	4.63E-08	1.333YrCar	4.63E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2503	ALL	482345.9	3668952	4.39E-08	1.333YrCar	4.39E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2504	ALL	482365.9	3668952	4.61E-08	1.333YrCar	4.61E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2505	ALL	482385.9	3668952	5.64E-08	1.333YrCar	5.64E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2506	ALL	482405.9	3668952	6.00E-08	1.333YrCar	6.00E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2507	ALL	482425.9	3668952	5.60E-08	1.333YrCar	5.60E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2508	ALL	482445.9	3668952	5.35E-08	1.333YrCar	5.35E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2509	ALL	482465.9	3668952	5.24E-08	1.333YrCar	5.24E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2510	ALL	482485.9	3668952	5.18E-08	1.333YrCar	5.18E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2511	ALL	482505.9	3668952	5.17E-08	1.333YrCar	5.17E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2512	ALL	482525.9	3668952	5.01E-08	1.333YrCar	5.01E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2513	ALL	482545.9	3668952	5.01E-08	1.333YrCar	5.01E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2514	ALL	482565.9	3668952	5.03E-08	1.333YrCar	5.03E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2515	ALL	482585.9	3668952	5.04E-08	1.333YrCar	5.04E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2516	ALL	482605.9	3668952	5.03E-08	1.333YrCar	5.03E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2517	ALL	482625.9	3668952	4.37E-08	1.333YrCar	4.37E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2518	ALL	482645.9	3668952	4.33E-08	1.333YrCar	4.33E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2519	ALL	482665.9	3668952	4.34E-08	1.333YrCar	4.34E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2520	ALL	482685.9	3668952	4.34E-08	1.333YrCar	4.34E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2521	ALL	482705.9	3668952	4.36E-08	1.333YrCar	4.36E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2522	ALL	482725.9	3668952	4.37E-08	1.333YrCar	4.37E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2523	ALL	482745.9	3668952	4.36E-08	1.333YrCar	4.36E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2524	ALL	482765.9	3668952	4.25E-08	1.333YrCar	4.25E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2525	ALL	482785.9	3668952	4.10E-08	1.333YrCar	4.10E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2526	ALL	482805.9	3668952	4.03E-08	1.333YrCar	4.03E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2527	ALL	482825.9	3668952	3.85E-08	1.333YrCar	3.85E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2528	ALL	482845.9	3668952	3.79E-08	1.333YrCar	3.79E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2529	ALL	482865.9	3668952	3.83E-08	1.333YrCar	3.83E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2530	ALL	482885.9	3668952	3.80E-08	1.333YrCar	3.80E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2531	ALL	482905.9	3668952	3.62E-08	1.333YrCar	3.62E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2532	ALL	482925.9	3668952	3.66E-08	1.333YrCar	3.66E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2533	ALL	482945.9	3668952	3.66E-08	1.333YrCar	3.66E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2534	ALL	482965.9	3668952	3.64E-08	1.333YrCar	3.64E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2535	ALL	482985.9	3668952	3.62E-08	1.333YrCar	3.62E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2536	ALL	483005.9	3668952	3.63E-08	1.333YrCar	3.63E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2537	ALL	483025.9	3668952	3.61E-08	1.333YrCar	3.61E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2538	ALL	483045.9	3668952	3.59E-08	1.333YrCar	3.59E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2539	ALL	483065.9	3668952	3.56E-08	1.333YrCar	3.56E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2540	ALL	483085.9	3668952	3.54E-08	1.333YrCar	3.54E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2541	ALL	483105.9	3668952	3.52E-08	1.333YrCar	3.52E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2542	ALL	483125.9	3668952	3.45E-08	1.333YrCar	3.45E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2543	ALL	483145.9	3668952	3.45E-08	1.333YrCar	3.45E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2544	ALL	483165.9	3668952	3.45E-08	1.333YrCar	3.45E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2545	ALL	483185.9	3668952	3.42E-08	1.333YrCar	3.42E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2546	ALL	482125.9	3668972	2.32E-08	1.333YrCar	2.32E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2547	ALL	482145.9	3668972	2.35E-08	1.333YrCar	2.35E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

2548	ALL	482165.9	3668972	2.42E-08	1.333YrCar	2.42E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2549	ALL	482185.9	3668972	2.63E-08	1.333YrCar	2.63E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2550	ALL	482205.9	3668972	2.68E-08	1.333YrCar	2.68E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2551	ALL	482225.9	3668972	2.74E-08	1.333YrCar	2.74E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2552	ALL	482245.9	3668972	2.85E-08	1.333YrCar	2.85E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2553	ALL	482265.9	3668972	2.91E-08	1.333YrCar	2.91E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2554	ALL	482285.9	3668972	4.18E-08	1.333YrCar	4.18E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2555	ALL	482305.9	3668972	4.29E-08	1.333YrCar	4.29E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2556	ALL	482325.9	3668972	4.45E-08	1.333YrCar	4.45E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2557	ALL	482345.9	3668972	4.25E-08	1.333YrCar	4.25E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2558	ALL	482365.9	3668972	4.37E-08	1.333YrCar	4.37E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2559	ALL	482385.9	3668972	5.37E-08	1.333YrCar	5.37E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2560	ALL	482405.9	3668972	5.72E-08	1.333YrCar	5.72E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2561	ALL	482425.9	3668972	5.33E-08	1.333YrCar	5.33E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2562	ALL	482445.9	3668972	5.09E-08	1.333YrCar	5.09E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2563	ALL	482465.9	3668972	4.99E-08	1.333YrCar	4.99E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2564	ALL	482485.9	3668972	4.94E-08	1.333YrCar	4.94E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2565	ALL	482505.9	3668972	4.90E-08	1.333YrCar	4.90E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2566	ALL	482525.9	3668972	4.79E-08	1.333YrCar	4.79E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2567	ALL	482545.9	3668972	4.81E-08	1.333YrCar	4.81E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2568	ALL	482565.9	3668972	4.81E-08	1.333YrCar	4.81E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2569	ALL	482585.9	3668972	4.82E-08	1.333YrCar	4.82E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2570	ALL	482605.9	3668972	4.83E-08	1.333YrCar	4.83E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2571	ALL	482625.9	3668972	4.17E-08	1.333YrCar	4.17E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2572	ALL	482645.9	3668972	4.14E-08	1.333YrCar	4.14E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2573	ALL	482665.9	3668972	4.16E-08	1.333YrCar	4.16E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2574	ALL	482685.9	3668972	4.20E-08	1.333YrCar	4.20E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2575	ALL	482705.9	3668972	4.22E-08	1.333YrCar	4.22E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2576	ALL	482725.9	3668972	4.24E-08	1.333YrCar	4.24E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2577	ALL	482745.9	3668972	4.24E-08	1.333YrCar	4.24E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2578	ALL	482765.9	3668972	4.12E-08	1.333YrCar	4.12E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2579	ALL	482785.9	3668972	4.04E-08	1.333YrCar	4.04E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2580	ALL	482805.9	3668972	4.01E-08	1.333YrCar	4.01E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2581	ALL	482825.9	3668972	3.68E-08	1.333YrCar	3.68E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2582	ALL	482845.9	3668972	3.73E-08	1.333YrCar	3.73E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2583	ALL	482865.9	3668972	3.76E-08	1.333YrCar	3.76E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2584	ALL	482885.9	3668972	3.73E-08	1.333YrCar	3.73E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2585	ALL	482905.9	3668972	3.57E-08	1.333YrCar	3.57E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2586	ALL	482925.9	3668972	3.64E-08	1.333YrCar	3.64E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2587	ALL	482945.9	3668972	3.61E-08	1.333YrCar	3.61E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2588	ALL	482965.9	3668972	3.60E-08	1.333YrCar	3.60E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2589	ALL	482985.9	3668972	3.54E-08	1.333YrCar	3.54E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2590	ALL	483005.9	3668972	3.57E-08	1.333YrCar	3.57E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2591	ALL	483025.9	3668972	3.51E-08	1.333YrCar	3.51E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2592	ALL	483045.9	3668972	3.47E-08	1.333YrCar	3.47E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2593	ALL	483065.9	3668972	3.45E-08	1.333YrCar	3.45E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2594	ALL	483085.9	3668972	3.44E-08	1.333YrCar	3.44E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2595	ALL	483105.9	3668972	3.43E-08	1.333YrCar	3.43E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2596	ALL	483125.9	3668972	3.40E-08	1.333YrCar	3.40E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

2597	ALL	483145.9	3668972	3.40E-08	1.333YrCar	3.40E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2598	ALL	483165.9	3668972	3.37E-08	1.333YrCar	3.37E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2599	ALL	482125.9	3668992	2.26E-08	1.333YrCar	2.26E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2600	ALL	482145.9	3668992	2.34E-08	1.333YrCar	2.34E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2601	ALL	482165.9	3668992	2.38E-08	1.333YrCar	2.38E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2602	ALL	482185.9	3668992	2.55E-08	1.333YrCar	2.55E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2603	ALL	482205.9	3668992	2.60E-08	1.333YrCar	2.60E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2604	ALL	482225.9	3668992	2.64E-08	1.333YrCar	2.64E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2605	ALL	482245.9	3668992	2.75E-08	1.333YrCar	2.75E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2606	ALL	482265.9	3668992	2.87E-08	1.333YrCar	2.87E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2607	ALL	482285.9	3668992	4.06E-08	1.333YrCar	4.06E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2608	ALL	482305.9	3668992	4.12E-08	1.333YrCar	4.12E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2609	ALL	482325.9	3668992	4.30E-08	1.333YrCar	4.30E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2610	ALL	482345.9	3668992	4.11E-08	1.333YrCar	4.11E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2611	ALL	482365.9	3668992	4.28E-08	1.333YrCar	4.28E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2612	ALL	482385.9	3668992	5.12E-08	1.333YrCar	5.12E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2613	ALL	482405.9	3668992	5.45E-08	1.333YrCar	5.45E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2614	ALL	482425.9	3668992	5.05E-08	1.333YrCar	5.05E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2615	ALL	482445.9	3668992	4.86E-08	1.333YrCar	4.86E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2616	ALL	482465.9	3668992	4.77E-08	1.333YrCar	4.77E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2617	ALL	482485.9	3668992	4.71E-08	1.333YrCar	4.71E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2618	ALL	482505.9	3668992	4.56E-08	1.333YrCar	4.56E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2619	ALL	482525.9	3668992	4.47E-08	1.333YrCar	4.47E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2620	ALL	482545.9	3668992	4.61E-08	1.333YrCar	4.61E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2621	ALL	482565.9	3668992	4.60E-08	1.333YrCar	4.60E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2622	ALL	482585.9	3668992	4.60E-08	1.333YrCar	4.60E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2623	ALL	482605.9	3668992	4.61E-08	1.333YrCar	4.61E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2624	ALL	482625.9	3668992	3.96E-08	1.333YrCar	3.96E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2625	ALL	482645.9	3668992	3.96E-08	1.333YrCar	3.96E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2626	ALL	482665.9	3668992	4.01E-08	1.333YrCar	4.01E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2627	ALL	482685.9	3668992	4.06E-08	1.333YrCar	4.06E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2628	ALL	482705.9	3668992	4.11E-08	1.333YrCar	4.11E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2629	ALL	482725.9	3668992	4.12E-08	1.333YrCar	4.12E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2630	ALL	482745.9	3668992	4.15E-08	1.333YrCar	4.15E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2631	ALL	482765.9	3668992	4.02E-08	1.333YrCar	4.02E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2632	ALL	482785.9	3668992	4.02E-08	1.333YrCar	4.02E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2633	ALL	482805.9	3668992	3.97E-08	1.333YrCar	3.97E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2634	ALL	482825.9	3668992	3.59E-08	1.333YrCar	3.59E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2635	ALL	482845.9	3668992	3.67E-08	1.333YrCar	3.67E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2636	ALL	482865.9	3668992	3.68E-08	1.333YrCar	3.68E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2637	ALL	482885.9	3668992	3.65E-08	1.333YrCar	3.65E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2638	ALL	482905.9	3668992	3.57E-08	1.333YrCar	3.57E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2639	ALL	482925.9	3668992	3.61E-08	1.333YrCar	3.61E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2640	ALL	482945.9	3668992	3.57E-08	1.333YrCar	3.57E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2641	ALL	482965.9	3668992	3.54E-08	1.333YrCar	3.54E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2642	ALL	482985.9	3668992	3.48E-08	1.333YrCar	3.48E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2643	ALL	483005.9	3668992	3.52E-08	1.333YrCar	3.52E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2644	ALL	483025.9	3668992	3.47E-08	1.333YrCar	3.47E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2645	ALL	483045.9	3668992	3.44E-08	1.333YrCar	3.44E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

2646	ALL	483065.9	3668992	3.40E-08	1.333YrCar	3.40E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2647	ALL	483085.9	3668992	3.39E-08	1.333YrCar	3.39E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2648	ALL	483105.9	3668992	3.36E-08	1.333YrCar	3.36E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2649	ALL	483125.9	3668992	3.36E-08	1.333YrCar	3.36E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2650	ALL	483145.9	3668992	3.33E-08	1.333YrCar	3.33E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2651	ALL	482125.9	3669012	2.21E-08	1.333YrCar	2.21E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2652	ALL	482145.9	3669012	2.28E-08	1.333YrCar	2.28E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2653	ALL	482165.9	3669012	2.34E-08	1.333YrCar	2.34E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2654	ALL	482185.9	3669012	2.48E-08	1.333YrCar	2.48E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2655	ALL	482205.9	3669012	2.53E-08	1.333YrCar	2.53E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2656	ALL	482225.9	3669012	2.67E-08	1.333YrCar	2.67E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2657	ALL	482245.9	3669012	2.66E-08	1.333YrCar	2.66E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2658	ALL	482265.9	3669012	2.78E-08	1.333YrCar	2.78E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2659	ALL	482285.9	3669012	3.91E-08	1.333YrCar	3.91E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2660	ALL	482305.9	3669012	3.98E-08	1.333YrCar	3.98E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2661	ALL	482325.9	3669012	4.15E-08	1.333YrCar	4.15E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2662	ALL	482345.9	3669012	3.95E-08	1.333YrCar	3.95E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2663	ALL	482365.9	3669012	4.14E-08	1.333YrCar	4.14E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2664	ALL	482385.9	3669012	4.91E-08	1.333YrCar	4.91E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2665	ALL	482405.9	3669012	5.17E-08	1.333YrCar	5.17E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2666	ALL	482425.9	3669012	4.84E-08	1.333YrCar	4.84E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2667	ALL	482445.9	3669012	4.69E-08	1.333YrCar	4.69E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2668	ALL	482465.9	3669012	4.58E-08	1.333YrCar	4.58E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2669	ALL	482485.9	3669012	4.16E-08	1.333YrCar	4.16E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2670	ALL	482505.9	3669012	4.19E-08	1.333YrCar	4.19E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2671	ALL	482525.9	3669012	4.29E-08	1.333YrCar	4.29E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2672	ALL	482545.9	3669012	4.47E-08	1.333YrCar	4.47E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2673	ALL	482565.9	3669012	4.44E-08	1.333YrCar	4.44E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2674	ALL	482585.9	3669012	4.47E-08	1.333YrCar	4.47E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2675	ALL	482605.9	3669012	4.48E-08	1.333YrCar	4.48E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2676	ALL	482625.9	3669012	3.84E-08	1.333YrCar	3.84E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2677	ALL	482645.9	3669012	3.90E-08	1.333YrCar	3.90E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2678	ALL	482665.9	3669012	3.91E-08	1.333YrCar	3.91E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2679	ALL	482685.9	3669012	3.94E-08	1.333YrCar	3.94E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2680	ALL	482705.9	3669012	3.97E-08	1.333YrCar	3.97E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2681	ALL	482725.9	3669012	3.99E-08	1.333YrCar	3.99E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2682	ALL	482745.9	3669012	4.05E-08	1.333YrCar	4.05E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2683	ALL	482765.9	3669012	3.95E-08	1.333YrCar	3.95E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2684	ALL	482785.9	3669012	3.94E-08	1.333YrCar	3.94E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2685	ALL	482805.9	3669012	3.91E-08	1.333YrCar	3.91E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2686	ALL	482825.9	3669012	3.55E-08	1.333YrCar	3.55E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2687	ALL	482845.9	3669012	3.62E-08	1.333YrCar	3.62E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2688	ALL	482865.9	3669012	3.63E-08	1.333YrCar	3.63E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2689	ALL	482885.9	3669012	3.58E-08	1.333YrCar	3.58E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2690	ALL	482905.9	3669012	3.53E-08	1.333YrCar	3.53E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2691	ALL	482925.9	3669012	3.57E-08	1.333YrCar	3.57E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2692	ALL	482945.9	3669012	3.55E-08	1.333YrCar	3.55E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2693	ALL	482965.9	3669012	3.47E-08	1.333YrCar	3.47E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2694	ALL	482985.9	3669012	3.42E-08	1.333YrCar	3.42E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

2695	ALL	483005.9	3669012	3.45E-08	1.333YrCar	3.45E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2696	ALL	483025.9	3669012	3.42E-08	1.333YrCar	3.42E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2697	ALL	483045.9	3669012	3.40E-08	1.333YrCar	3.40E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2698	ALL	483065.9	3669012	3.37E-08	1.333YrCar	3.37E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2699	ALL	483085.9	3669012	3.34E-08	1.333YrCar	3.34E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2700	ALL	483105.9	3669012	3.33E-08	1.333YrCar	3.33E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2701	ALL	483125.9	3669012	3.29E-08	1.333YrCar	3.29E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2702	ALL	482125.9	3669032	2.15E-08	1.333YrCar	2.15E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2703	ALL	482145.9	3669032	2.22E-08	1.333YrCar	2.22E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2704	ALL	482165.9	3669032	2.31E-08	1.333YrCar	2.31E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2705	ALL	482185.9	3669032	2.41E-08	1.333YrCar	2.41E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2706	ALL	482205.9	3669032	2.46E-08	1.333YrCar	2.46E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2707	ALL	482225.9	3669032	2.58E-08	1.333YrCar	2.58E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2708	ALL	482245.9	3669032	2.58E-08	1.333YrCar	2.58E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2709	ALL	482265.9	3669032	2.71E-08	1.333YrCar	2.71E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2710	ALL	482285.9	3669032	3.78E-08	1.333YrCar	3.78E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2711	ALL	482305.9	3669032	3.84E-08	1.333YrCar	3.84E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2712	ALL	482325.9	3669032	4.00E-08	1.333YrCar	4.00E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2713	ALL	482345.9	3669032	3.80E-08	1.333YrCar	3.80E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2714	ALL	482365.9	3669032	3.96E-08	1.333YrCar	3.96E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2715	ALL	482385.9	3669032	4.73E-08	1.333YrCar	4.73E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2716	ALL	482405.9	3669032	4.99E-08	1.333YrCar	4.99E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2717	ALL	482425.9	3669032	4.66E-08	1.333YrCar	4.66E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2718	ALL	482445.9	3669032	4.53E-08	1.333YrCar	4.53E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2719	ALL	482465.9	3669032	4.43E-08	1.333YrCar	4.43E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2720	ALL	482485.9	3669032	4.06E-08	1.333YrCar	4.06E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2721	ALL	482505.9	3669032	4.09E-08	1.333YrCar	4.09E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2722	ALL	482525.9	3669032	4.17E-08	1.333YrCar	4.17E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2723	ALL	482545.9	3669032	4.27E-08	1.333YrCar	4.27E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2724	ALL	482565.9	3669032	4.25E-08	1.333YrCar	4.25E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2725	ALL	482585.9	3669032	4.30E-08	1.333YrCar	4.30E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2726	ALL	482605.9	3669032	4.30E-08	1.333YrCar	4.30E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2727	ALL	482625.9	3669032	3.74E-08	1.333YrCar	3.74E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2728	ALL	482645.9	3669032	3.81E-08	1.333YrCar	3.81E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2729	ALL	482665.9	3669032	3.88E-08	1.333YrCar	3.88E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2730	ALL	482685.9	3669032	3.90E-08	1.333YrCar	3.90E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2731	ALL	482705.9	3669032	3.90E-08	1.333YrCar	3.90E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2732	ALL	482725.9	3669032	3.91E-08	1.333YrCar	3.91E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2733	ALL	482745.9	3669032	3.92E-08	1.333YrCar	3.92E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2734	ALL	482765.9	3669032	3.87E-08	1.333YrCar	3.87E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2735	ALL	482785.9	3669032	3.85E-08	1.333YrCar	3.85E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2736	ALL	482805.9	3669032	3.83E-08	1.333YrCar	3.83E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2737	ALL	482825.9	3669032	3.50E-08	1.333YrCar	3.50E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2738	ALL	482845.9	3669032	3.58E-08	1.333YrCar	3.58E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2739	ALL	482865.9	3669032	3.57E-08	1.333YrCar	3.57E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2740	ALL	482885.9	3669032	3.53E-08	1.333YrCar	3.53E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2741	ALL	482905.9	3669032	3.46E-08	1.333YrCar	3.46E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2742	ALL	482925.9	3669032	3.51E-08	1.333YrCar	3.51E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2743	ALL	482945.9	3669032	3.49E-08	1.333YrCar	3.49E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

2744	ALL	482965.9	3669032	3.40E-08	1.333YrCar	3.40E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2745	ALL	482985.9	3669032	3.37E-08	1.333YrCar	3.37E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2746	ALL	483005.9	3669032	3.40E-08	1.333YrCar	3.40E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2747	ALL	483025.9	3669032	3.35E-08	1.333YrCar	3.35E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2748	ALL	483045.9	3669032	3.34E-08	1.333YrCar	3.34E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2749	ALL	483065.9	3669032	3.32E-08	1.333YrCar	3.32E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2750	ALL	483085.9	3669032	3.29E-08	1.333YrCar	3.29E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2751	ALL	483105.9	3669032	3.25E-08	1.333YrCar	3.25E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2752	ALL	482125.9	3669052	2.10E-08	1.333YrCar	2.10E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2753	ALL	482145.9	3669052	2.16E-08	1.333YrCar	2.16E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2754	ALL	482165.9	3669052	2.26E-08	1.333YrCar	2.26E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2755	ALL	482185.9	3669052	2.34E-08	1.333YrCar	2.34E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2756	ALL	482205.9	3669052	2.39E-08	1.333YrCar	2.39E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2757	ALL	482225.9	3669052	2.51E-08	1.333YrCar	2.51E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2758	ALL	482245.9	3669052	2.50E-08	1.333YrCar	2.50E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2759	ALL	482265.9	3669052	2.64E-08	1.333YrCar	2.64E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2760	ALL	482285.9	3669052	3.67E-08	1.333YrCar	3.67E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2761	ALL	482305.9	3669052	3.73E-08	1.333YrCar	3.73E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2762	ALL	482325.9	3669052	3.87E-08	1.333YrCar	3.87E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2763	ALL	482345.9	3669052	3.70E-08	1.333YrCar	3.70E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2764	ALL	482365.9	3669052	3.83E-08	1.333YrCar	3.83E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2765	ALL	482385.9	3669052	4.55E-08	1.333YrCar	4.55E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2766	ALL	482405.9	3669052	4.80E-08	1.333YrCar	4.80E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2767	ALL	482425.9	3669052	4.50E-08	1.333YrCar	4.50E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2768	ALL	482445.9	3669052	4.37E-08	1.333YrCar	4.37E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2769	ALL	482465.9	3669052	4.30E-08	1.333YrCar	4.30E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2770	ALL	482485.9	3669052	4.11E-08	1.333YrCar	4.11E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2771	ALL	482505.9	3669052	4.08E-08	1.333YrCar	4.08E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2772	ALL	482525.9	3669052	4.08E-08	1.333YrCar	4.08E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2773	ALL	482545.9	3669052	4.09E-08	1.333YrCar	4.09E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2774	ALL	482565.9	3669052	4.06E-08	1.333YrCar	4.06E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2775	ALL	482585.9	3669052	4.11E-08	1.333YrCar	4.11E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2776	ALL	482605.9	3669052	4.11E-08	1.333YrCar	4.11E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2777	ALL	482625.9	3669052	3.64E-08	1.333YrCar	3.64E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2778	ALL	482645.9	3669052	3.72E-08	1.333YrCar	3.72E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2779	ALL	482665.9	3669052	3.74E-08	1.333YrCar	3.74E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2780	ALL	482685.9	3669052	3.76E-08	1.333YrCar	3.76E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2781	ALL	482705.9	3669052	3.76E-08	1.333YrCar	3.76E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2782	ALL	482725.9	3669052	3.78E-08	1.333YrCar	3.78E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2783	ALL	482745.9	3669052	3.73E-08	1.333YrCar	3.73E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2784	ALL	482765.9	3669052	3.78E-08	1.333YrCar	3.78E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2785	ALL	482785.9	3669052	3.76E-08	1.333YrCar	3.76E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2786	ALL	482805.9	3669052	3.76E-08	1.333YrCar	3.76E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2787	ALL	482825.9	3669052	3.61E-08	1.333YrCar	3.61E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2788	ALL	482845.9	3669052	3.57E-08	1.333YrCar	3.57E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2789	ALL	482865.9	3669052	3.53E-08	1.333YrCar	3.53E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2790	ALL	482885.9	3669052	3.48E-08	1.333YrCar	3.48E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2791	ALL	482905.9	3669052	3.39E-08	1.333YrCar	3.39E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2792	ALL	482925.9	3669052	3.46E-08	1.333YrCar	3.46E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

2793	ALL	482945.9	3669052	3.44E-08	1.333YrCar	3.44E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2794	ALL	482965.9	3669052	3.37E-08	1.333YrCar	3.37E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2795	ALL	482985.9	3669052	3.34E-08	1.333YrCar	3.34E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2796	ALL	483005.9	3669052	3.35E-08	1.333YrCar	3.35E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2797	ALL	483025.9	3669052	3.32E-08	1.333YrCar	3.32E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2798	ALL	483045.9	3669052	3.27E-08	1.333YrCar	3.27E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2799	ALL	483065.9	3669052	3.24E-08	1.333YrCar	3.24E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2800	ALL	483085.9	3669052	3.23E-08	1.333YrCar	3.23E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2801	ALL	482125.9	3669072	2.07E-08	1.333YrCar	2.07E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2802	ALL	482145.9	3669072	2.10E-08	1.333YrCar	2.10E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2803	ALL	482165.9	3669072	2.23E-08	1.333YrCar	2.23E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2804	ALL	482185.9	3669072	2.28E-08	1.333YrCar	2.28E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2805	ALL	482205.9	3669072	2.33E-08	1.333YrCar	2.33E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2806	ALL	482225.9	3669072	2.35E-08	1.333YrCar	2.35E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2807	ALL	482245.9	3669072	2.44E-08	1.333YrCar	2.44E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2808	ALL	482265.9	3669072	2.59E-08	1.333YrCar	2.59E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2809	ALL	482285.9	3669072	3.55E-08	1.333YrCar	3.55E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2810	ALL	482305.9	3669072	3.58E-08	1.333YrCar	3.58E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2811	ALL	482325.9	3669072	3.74E-08	1.333YrCar	3.74E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2812	ALL	482345.9	3669072	3.58E-08	1.333YrCar	3.58E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2813	ALL	482365.9	3669072	3.74E-08	1.333YrCar	3.74E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2814	ALL	482385.9	3669072	4.39E-08	1.333YrCar	4.39E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2815	ALL	482405.9	3669072	4.66E-08	1.333YrCar	4.66E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2816	ALL	482425.9	3669072	4.34E-08	1.333YrCar	4.34E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2817	ALL	482445.9	3669072	4.24E-08	1.333YrCar	4.24E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2818	ALL	482465.9	3669072	4.15E-08	1.333YrCar	4.15E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2819	ALL	482485.9	3669072	3.97E-08	1.333YrCar	3.97E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2820	ALL	482505.9	3669072	3.86E-08	1.333YrCar	3.86E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2821	ALL	482525.9	3669072	3.87E-08	1.333YrCar	3.87E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2822	ALL	482545.9	3669072	3.89E-08	1.333YrCar	3.89E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2823	ALL	482565.9	3669072	3.88E-08	1.333YrCar	3.88E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2824	ALL	482585.9	3669072	3.84E-08	1.333YrCar	3.84E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2825	ALL	482605.9	3669072	3.93E-08	1.333YrCar	3.93E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2826	ALL	482625.9	3669072	3.49E-08	1.333YrCar	3.49E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2827	ALL	482645.9	3669072	3.56E-08	1.333YrCar	3.56E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2828	ALL	482665.9	3669072	3.62E-08	1.333YrCar	3.62E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2829	ALL	482685.9	3669072	3.64E-08	1.333YrCar	3.64E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2830	ALL	482705.9	3669072	3.65E-08	1.333YrCar	3.65E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2831	ALL	482725.9	3669072	3.67E-08	1.333YrCar	3.67E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2832	ALL	482745.9	3669072	3.69E-08	1.333YrCar	3.69E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2833	ALL	482765.9	3669072	3.70E-08	1.333YrCar	3.70E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2834	ALL	482785.9	3669072	3.62E-08	1.333YrCar	3.62E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2835	ALL	482805.9	3669072	3.60E-08	1.333YrCar	3.60E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2836	ALL	482825.9	3669072	3.60E-08	1.333YrCar	3.60E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2837	ALL	482845.9	3669072	3.53E-08	1.333YrCar	3.53E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2838	ALL	482865.9	3669072	3.48E-08	1.333YrCar	3.48E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2839	ALL	482885.9	3669072	3.46E-08	1.333YrCar	3.46E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2840	ALL	482905.9	3669072	3.43E-08	1.333YrCar	3.43E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2841	ALL	482925.9	3669072	3.41E-08	1.333YrCar	3.41E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

2842	ALL	482945.9	3669072	3.38E-08	1.333YrCar	3.38E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2843	ALL	482965.9	3669072	3.34E-08	1.333YrCar	3.34E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2844	ALL	482985.9	3669072	3.30E-08	1.333YrCar	3.30E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2845	ALL	483005.9	3669072	3.26E-08	1.333YrCar	3.26E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2846	ALL	483025.9	3669072	3.23E-08	1.333YrCar	3.23E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2847	ALL	483045.9	3669072	3.20E-08	1.333YrCar	3.20E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2848	ALL	483065.9	3669072	3.18E-08	1.333YrCar	3.18E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2849	ALL	482125.9	3669092	2.00E-08	1.333YrCar	2.00E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2850	ALL	482145.9	3669092	2.04E-08	1.333YrCar	2.04E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2851	ALL	482165.9	3669092	2.17E-08	1.333YrCar	2.17E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2852	ALL	482185.9	3669092	2.23E-08	1.333YrCar	2.23E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2853	ALL	482205.9	3669092	2.26E-08	1.333YrCar	2.26E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2854	ALL	482225.9	3669092	2.28E-08	1.333YrCar	2.28E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2855	ALL	482245.9	3669092	2.38E-08	1.333YrCar	2.38E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2856	ALL	482265.9	3669092	2.69E-08	1.333YrCar	2.69E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2857	ALL	482285.9	3669092	3.42E-08	1.333YrCar	3.42E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2858	ALL	482305.9	3669092	3.52E-08	1.333YrCar	3.52E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2859	ALL	482325.9	3669092	3.61E-08	1.333YrCar	3.61E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2860	ALL	482345.9	3669092	3.45E-08	1.333YrCar	3.45E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2861	ALL	482365.9	3669092	3.61E-08	1.333YrCar	3.61E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2862	ALL	482385.9	3669092	4.23E-08	1.333YrCar	4.23E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2863	ALL	482405.9	3669092	4.51E-08	1.333YrCar	4.51E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2864	ALL	482425.9	3669092	4.17E-08	1.333YrCar	4.17E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2865	ALL	482445.9	3669092	4.11E-08	1.333YrCar	4.11E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2866	ALL	482465.9	3669092	4.05E-08	1.333YrCar	4.05E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2867	ALL	482485.9	3669092	3.92E-08	1.333YrCar	3.92E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2868	ALL	482505.9	3669092	3.71E-08	1.333YrCar	3.71E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2869	ALL	482525.9	3669092	3.72E-08	1.333YrCar	3.72E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2870	ALL	482545.9	3669092	3.71E-08	1.333YrCar	3.71E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2871	ALL	482565.9	3669092	3.70E-08	1.333YrCar	3.70E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2872	ALL	482585.9	3669092	3.70E-08	1.333YrCar	3.70E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2873	ALL	482605.9	3669092	3.75E-08	1.333YrCar	3.75E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2874	ALL	482625.9	3669092	3.38E-08	1.333YrCar	3.38E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2875	ALL	482645.9	3669092	3.43E-08	1.333YrCar	3.43E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2876	ALL	482665.9	3669092	3.52E-08	1.333YrCar	3.52E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2877	ALL	482685.9	3669092	3.53E-08	1.333YrCar	3.53E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2878	ALL	482705.9	3669092	3.54E-08	1.333YrCar	3.54E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2879	ALL	482725.9	3669092	3.53E-08	1.333YrCar	3.53E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2880	ALL	482745.9	3669092	3.58E-08	1.333YrCar	3.58E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2881	ALL	482765.9	3669092	3.64E-08	1.333YrCar	3.64E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2882	ALL	482785.9	3669092	3.43E-08	1.333YrCar	3.43E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2883	ALL	482805.9	3669092	3.39E-08	1.333YrCar	3.39E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2884	ALL	482825.9	3669092	3.40E-08	1.333YrCar	3.40E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2885	ALL	482845.9	3669092	3.38E-08	1.333YrCar	3.38E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2886	ALL	482865.9	3669092	3.35E-08	1.333YrCar	3.35E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2887	ALL	482885.9	3669092	3.33E-08	1.333YrCar	3.33E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2888	ALL	482905.9	3669092	3.30E-08	1.333YrCar	3.30E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2889	ALL	482925.9	3669092	3.28E-08	1.333YrCar	3.28E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2890	ALL	482945.9	3669092	3.25E-08	1.333YrCar	3.25E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

2891	ALL	482965.9	3669092	3.23E-08	1.333YrCar	3.23E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2892	ALL	482985.9	3669092	3.21E-08	1.333YrCar	3.21E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2893	ALL	483005.9	3669092	3.19E-08	1.333YrCar	3.19E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2894	ALL	483025.9	3669092	3.21E-08	1.333YrCar	3.21E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2895	ALL	483045.9	3669092	3.20E-08	1.333YrCar	3.20E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2896	ALL	482125.9	3669112	1.96E-08	1.333YrCar	1.96E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2897	ALL	482145.9	3669112	1.99E-08	1.333YrCar	1.99E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2898	ALL	482165.9	3669112	2.06E-08	1.333YrCar	2.06E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2899	ALL	482185.9	3669112	2.12E-08	1.333YrCar	2.12E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2900	ALL	482205.9	3669112	2.17E-08	1.333YrCar	2.17E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2901	ALL	482225.9	3669112	2.22E-08	1.333YrCar	2.22E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2902	ALL	482245.9	3669112	2.29E-08	1.333YrCar	2.29E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2903	ALL	482265.9	3669112	2.59E-08	1.333YrCar	2.59E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2904	ALL	482285.9	3669112	2.92E-08	1.333YrCar	2.92E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2905	ALL	482305.9	3669112	3.13E-08	1.333YrCar	3.13E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2906	ALL	482325.9	3669112	3.35E-08	1.333YrCar	3.35E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2907	ALL	482345.9	3669112	3.48E-08	1.333YrCar	3.48E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2908	ALL	482365.9	3669112	3.73E-08	1.333YrCar	3.73E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2909	ALL	482385.9	3669112	4.08E-08	1.333YrCar	4.08E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2910	ALL	482405.9	3669112	4.17E-08	1.333YrCar	4.17E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2911	ALL	482425.9	3669112	3.97E-08	1.333YrCar	3.97E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2912	ALL	482445.9	3669112	3.88E-08	1.333YrCar	3.88E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2913	ALL	482465.9	3669112	3.83E-08	1.333YrCar	3.83E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2914	ALL	482485.9	3669112	3.75E-08	1.333YrCar	3.75E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2915	ALL	482505.9	3669112	3.68E-08	1.333YrCar	3.68E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2916	ALL	482525.9	3669112	3.65E-08	1.333YrCar	3.65E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2917	ALL	482545.9	3669112	3.64E-08	1.333YrCar	3.64E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2918	ALL	482565.9	3669112	3.64E-08	1.333YrCar	3.64E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2919	ALL	482585.9	3669112	3.64E-08	1.333YrCar	3.64E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2920	ALL	482605.9	3669112	3.64E-08	1.333YrCar	3.64E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2921	ALL	482625.9	3669112	3.56E-08	1.333YrCar	3.56E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2922	ALL	482645.9	3669112	3.58E-08	1.333YrCar	3.58E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2923	ALL	482665.9	3669112	3.59E-08	1.333YrCar	3.59E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2924	ALL	482685.9	3669112	3.62E-08	1.333YrCar	3.62E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2925	ALL	482705.9	3669112	3.61E-08	1.333YrCar	3.61E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2926	ALL	482725.9	3669112	3.62E-08	1.333YrCar	3.62E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2927	ALL	482745.9	3669112	3.59E-08	1.333YrCar	3.59E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2928	ALL	482765.9	3669112	3.62E-08	1.333YrCar	3.62E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2929	ALL	482785.9	3669112	3.49E-08	1.333YrCar	3.49E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2930	ALL	482805.9	3669112	3.42E-08	1.333YrCar	3.42E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2931	ALL	482105.9	3669132	1.88E-08	1.333YrCar	1.88E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2932	ALL	482217	3667991	5.45E-06	1.333YrCar	5.45E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2933	ALL	482229.5	3668012	5.92E-06	1.333YrCar	5.92E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2934	ALL	482236.6	3668031	5.68E-06	1.333YrCar	5.68E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2935	ALL	482242	3668048	5.35E-06	1.333YrCar	5.35E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2936	ALL	482250.7	3668068	4.99E-06	1.333YrCar	4.99E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2937	ALL	482258.5	3668087	4.55E-06	1.333YrCar	4.55E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2938	ALL	482269.5	3668107	4.08E-06	1.333YrCar	4.08E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2939	ALL	482275	3668126	3.21E-06	1.333YrCar	3.21E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

2940	ALL	482282	3668146	2.45E-06	1.333YrCar	2.45E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2941	ALL	482285.2	3668166	1.87E-06	1.333YrCar	1.87E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2942	ALL	482279.7	3668187	1.47E-06	1.333YrCar	1.47E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2943	ALL	482184.3	3668008	2.98E-06	1.333YrCar	2.98E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2944	ALL	482281.4	3668219	1.11E-06	1.333YrCar	1.11E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2945	ALL	482169.5	3668350	2.15E-07	1.333YrCar	2.15E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2946	ALL	482099.1	3668347	1.42E-07	1.333YrCar	1.42E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2947	ALL	482075.6	3668388	8.58E-08	1.333YrCar	8.58E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2948	ALL	482092.4	3668419	7.34E-08	1.333YrCar	7.34E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2949	ALL	482069.7	3668475	5.59E-08	1.333YrCar	5.59E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2950	ALL	481993.4	3668560	3.89E-08	1.333YrCar	3.89E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2951	ALL	482077.3	3668909	2.23E-08	1.333YrCar	2.23E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2952	ALL	481998.4	3668921	2.06E-08	1.333YrCar	2.06E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2953	ALL	481850	3668379	8.56E-08	1.333YrCar	8.56E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2954	ALL	481874.3	3668301	1.63E-07	1.333YrCar	1.63E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2955	ALL	481931.4	3668239	2.68E-07	1.333YrCar	2.68E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2956	ALL	482131	3668051	1.52E-06	1.333YrCar	1.52E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2957	ALL	482373.3	3668116	4.11E-06	1.333YrCar	4.11E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2958	ALL	482494.1	3667985	2.55E-06	1.333YrCar	2.55E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2959	ALL	482458.2	3667914	2.64E-06	1.333YrCar	2.64E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2960	ALL	482582.7	3667817	8.00E-07	1.333YrCar	8.00E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2961	ALL	482756.4	3667982	7.27E-07	1.333YrCar	7.27E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2962	ALL	482507.3	3668238	8.40E-07	1.333YrCar	8.40E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2963	ALL	482301.6	3668297	6.86E-07	1.333YrCar	6.86E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2964	ALL	482254.4	3668321	3.00E-07	1.333YrCar	3.00E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2965	ALL	482067.6	3668561	4.19E-08	1.333YrCar	4.19E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2966	ALL	482129.9	3668802	2.97E-08	1.333YrCar	2.97E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2967	ALL	482105.3	3669133	1.87E-08	1.333YrCar	1.87E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2968	ALL	483039.4	3669106	3.19E-08	1.333YrCar	3.19E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2969	ALL	483256.4	3668899	3.64E-08	1.333YrCar	3.64E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2970	ALL	483120.6	3668833	4.05E-08	1.333YrCar	4.05E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2971	ALL	482863.9	3668835	4.34E-08	1.333YrCar	4.34E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2972	ALL	482724.3	3668704	6.21E-08	1.333YrCar	6.21E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2973	ALL	482814.9	3668633	6.19E-08	1.333YrCar	6.19E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2974	ALL	482945.1	3668616	6.23E-08	1.333YrCar	6.23E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2975	ALL	482979	3668567	6.85E-08	1.333YrCar	6.85E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2976	ALL	482916.8	3668497	8.53E-08	1.333YrCar	8.53E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2977	ALL	482694.1	3668589	7.63E-08	1.333YrCar	7.63E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2978	ALL	482711.1	3668514	9.41E-08	1.333YrCar	9.41E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2979	ALL	482775.2	3668418	1.23E-07	1.333YrCar	1.23E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2980	ALL	482886.6	3668459	9.98E-08	1.333YrCar	9.98E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2981	ALL	482945.1	3668365	1.23E-07	1.333YrCar	1.23E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2982	ALL	482860.1	3668295	1.88E-07	1.333YrCar	1.88E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2983	ALL	481786.4	3668055	3.43E-07	1.333YrCar	3.43E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2984	ALL	481722.3	3667900	3.49E-07	1.333YrCar	3.49E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2985	ALL	481922.3	3667810	5.20E-07	1.333YrCar	5.20E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2986	ALL	481984.6	3667963	7.49E-07	1.333YrCar	7.49E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2987	ALL	481582.6	3668150	9.38E-08	1.333YrCar	9.38E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2988	ALL	481677	3668399	2.00E-07	1.333YrCar	2.00E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

2989	ALL	481614.7	3668497	1.37E-07	1.333YrCar	1.37E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2990	ALL	481473.2	3668604	9.72E-08	1.333YrCar	9.72E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2991	ALL	481529.8	3668716	9.20E-08	1.333YrCar	9.20E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2992	ALL	481454.3	3668846	8.06E-08	1.333YrCar	8.06E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2993	ALL	481337.3	3668670	8.11E-08	1.333YrCar	8.11E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2994	ALL	481137.3	3668776	6.44E-08	1.333YrCar	6.44E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2995	ALL	481016.5	3668502	7.11E-08	1.333YrCar	7.11E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2996	ALL	481209	3668317	9.59E-08	1.333YrCar	9.59E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

REC	GRP	NETID	X	Y	SCENARIO	CV	CNS	IMMUN	KIDNEY	GILV	REPRO/DE\	RESP	SKIN	EYE	BONE/TEET	ENDO	BLOOD	ODOR	GENERAL	MAXHI
1	ALL		481885.9	3667832	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.48E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.48E-04
2	ALL		481905.9	3667832	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.64E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.64E-04
3	ALL		481925.9	3667832	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.79E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.79E-04
4	ALL		482565.9	3667832	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.85E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.85E-04
5	ALL		482585.9	3667832	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.29E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.29E-04
6	ALL		481845.9	3667852	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.24E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.24E-04
7	ALL		481865.9	3667852	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.41E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.41E-04
8	ALL		481885.9	3667852	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.58E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.58E-04
9	ALL		481905.9	3667852	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.79E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.79E-04
10	ALL		481925.9	3667852	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.00E-04
11	ALL		482545.9	3667852	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.59E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.59E-04
12	ALL		482565.9	3667852	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.79E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.79E-04
13	ALL		482585.9	3667852	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.06E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.06E-04
14	ALL		482605.9	3667852	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.51E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.51E-04
15	ALL		481785.9	3667872	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.64E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.64E-04
16	ALL		481805.9	3667872	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.84E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.84E-04
17	ALL		481825.9	3667872	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.06E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.06E-04
18	ALL		481845.9	3667872	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.29E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.29E-04
19	ALL		481865.9	3667872	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.50E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.50E-04
20	ALL		481885.9	3667872	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.73E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.73E-04
21	ALL		481905.9	3667872	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.97E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.97E-04
22	ALL		481925.9	3667872	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.13E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.13E-04
23	ALL		481945.9	3667872	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.36E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.36E-04
24	ALL		482525.9	3667872	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.17E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.17E-03
25	ALL		482545.9	3667872	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.08E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.08E-03
26	ALL		482565.9	3667872	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.89E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.89E-04
27	ALL		482585.9	3667872	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.96E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.96E-04
28	ALL		482605.9	3667872	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.28E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.28E-04
29	ALL		482625.9	3667872	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.68E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.68E-04
30	ALL		481745.9	3667892	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.25E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.25E-04
31	ALL		481765.9	3667892	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.44E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.44E-04
32	ALL		481785.9	3667892	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.63E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.63E-04
33	ALL		481805.9	3667892	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.84E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.84E-04
34	ALL		481825.9	3667892	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.07E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.07E-04
35	ALL		481845.9	3667892	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.32E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.32E-04
36	ALL		481865.9	3667892	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.57E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.57E-04
37	ALL		481885.9	3667892	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.77E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.77E-04
38	ALL		481905.9	3667892	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.98E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.98E-04
39	ALL		481925.9	3667892	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.25E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.25E-04
40	ALL		481945.9	3667892	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.52E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.52E-04
41	ALL		482485.9	3667892	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.50E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.50E-03
42	ALL		482505.9	3667892	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.37E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.37E-03
43	ALL		482525.9	3667892	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.31E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.31E-03
44	ALL		482545.9	3667892	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.21E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.21E-03
45	ALL		482565.9	3667892	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.09E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.09E-03
46	ALL		482585.9	3667892	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.87E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.87E-04
47	ALL		482605.9	3667892	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.03E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.03E-04
48	ALL		482625.9	3667892	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.31E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.31E-04
49	ALL		482645.9	3667892	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.71E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.71E-04
50	ALL		481745.9	3667912	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.21E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.21E-04
51	ALL		481765.9	3667912	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.40E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.40E-04
52	ALL		481785.9	3667912	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.59E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.59E-04
53	ALL		481805.9	3667912	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.80E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.80E-04
54	ALL		481825.9	3667912	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.05E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.05E-04

55	ALL	481845.9	3667912	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.30E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.30E-04
56	ALL	481865.9	3667912	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.56E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.56E-04
57	ALL	481885.9	3667912	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.81E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.81E-04
58	ALL	481905.9	3667912	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.07E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.07E-04
59	ALL	481925.9	3667912	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.34E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.34E-04
60	ALL	481945.9	3667912	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.58E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.58E-04
61	ALL	482465.9	3667912	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.02E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.02E-03
62	ALL	482485.9	3667912	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.71E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.71E-03
63	ALL	482505.9	3667912	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.57E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.57E-03
64	ALL	482525.9	3667912	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.44E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.44E-03
65	ALL	482545.9	3667912	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.33E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.33E-03
66	ALL	482565.9	3667912	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.19E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.19E-03
67	ALL	482585.9	3667912	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.08E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.08E-03
68	ALL	482605.9	3667912	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.81E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.81E-04
69	ALL	482625.9	3667912	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.98E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.98E-04
70	ALL	482645.9	3667912	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.27E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.27E-04
71	ALL	482665.9	3667912	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.65E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.65E-04
72	ALL	481745.9	3667932	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.12E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.12E-04
73	ALL	481765.9	3667932	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.34E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.34E-04
74	ALL	481785.9	3667932	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.54E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.54E-04
75	ALL	481805.9	3667932	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.76E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.76E-04
76	ALL	481825.9	3667932	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.00E-04
77	ALL	481845.9	3667932	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.25E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.25E-04
78	ALL	481865.9	3667932	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.53E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.53E-04
79	ALL	481885.9	3667932	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.83E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.83E-04
80	ALL	481905.9	3667932	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.07E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.07E-04
81	ALL	481925.9	3667932	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.34E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.34E-04
82	ALL	481945.9	3667932	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.68E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.68E-04
83	ALL	481965.9	3667932	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.22E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.22E-04
84	ALL	482485.9	3667932	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.91E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.91E-03
85	ALL	482505.9	3667932	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.73E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.73E-03
86	ALL	482525.9	3667932	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.59E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.59E-03
87	ALL	482545.9	3667932	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.44E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.44E-03
88	ALL	482565.9	3667932	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.29E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.29E-03
89	ALL	482585.9	3667932	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.17E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.17E-03
90	ALL	482605.9	3667932	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.05E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.05E-03
91	ALL	482625.9	3667932	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.59E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.59E-04
92	ALL	482645.9	3667932	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.79E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.79E-04
93	ALL	482665.9	3667932	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.09E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.09E-04
94	ALL	482685.9	3667932	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.42E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.42E-04
95	ALL	481745.9	3667952	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.98E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.98E-04
96	ALL	481765.9	3667952	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.28E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.28E-04
97	ALL	481785.9	3667952	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.47E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.47E-04
98	ALL	481805.9	3667952	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.68E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.68E-04
99	ALL	481825.9	3667952	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.93E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.93E-04
100	ALL	481845.9	3667952	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.19E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.19E-04
101	ALL	481865.9	3667952	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.47E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.47E-04
102	ALL	481885.9	3667952	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.77E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.77E-04
103	ALL	481905.9	3667952	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.06E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.06E-04
104	ALL	481925.9	3667952	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.34E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.34E-04
105	ALL	481945.9	3667952	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.69E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.69E-04
106	ALL	481965.9	3667952	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.19E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.19E-04
107	ALL	482485.9	3667952	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.10E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.10E-03
108	ALL	482505.9	3667952	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.87E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.87E-03
109	ALL	482525.9	3667952	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.69E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.69E-03

110	ALL	482545.9	3667952	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.54E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.54E-03
111	ALL	482565.9	3667952	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.38E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.38E-03
112	ALL	482585.9	3667952	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.24E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.24E-03
113	ALL	482605.9	3667952	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.12E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.12E-03
114	ALL	482625.9	3667952	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.01E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.01E-03
115	ALL	482645.9	3667952	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.25E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.25E-04
116	ALL	482665.9	3667952	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.47E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.47E-04
117	ALL	482685.9	3667952	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.76E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.76E-04
118	ALL	482705.9	3667952	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.14E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.14E-04
119	ALL	481765.9	3667972	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.19E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.19E-04
120	ALL	481785.9	3667972	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.40E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.40E-04
121	ALL	481805.9	3667972	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.59E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.59E-04
122	ALL	481825.9	3667972	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.86E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.86E-04
123	ALL	481845.9	3667972	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.11E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.11E-04
124	ALL	481865.9	3667972	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.39E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.39E-04
125	ALL	481885.9	3667972	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.69E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.69E-04
126	ALL	481905.9	3667972	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.03E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.03E-04
127	ALL	481925.9	3667972	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.36E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.36E-04
128	ALL	481945.9	3667972	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.62E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.62E-04
129	ALL	482505.9	3667972	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.97E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.97E-03
130	ALL	482525.9	3667972	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.75E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.75E-03
131	ALL	482545.9	3667972	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.61E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.61E-03
132	ALL	482565.9	3667972	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.45E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.45E-03
133	ALL	482585.9	3667972	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.31E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.31E-03
134	ALL	482605.9	3667972	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.16E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.16E-03
135	ALL	482625.9	3667972	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.05E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.05E-03
136	ALL	482645.9	3667972	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.60E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.60E-04
137	ALL	482665.9	3667972	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.73E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.73E-04
138	ALL	482685.9	3667972	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.01E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.01E-04
139	ALL	482705.9	3667972	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.36E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.36E-04
140	ALL	482725.9	3667972	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.79E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.79E-04
141	ALL	482745.9	3667972	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.44E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.44E-04
142	ALL	481765.9	3667992	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.96E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.96E-04
143	ALL	481785.9	3667992	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.32E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.32E-04
144	ALL	481805.9	3667992	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.52E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.52E-04
145	ALL	481825.9	3667992	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.77E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.77E-04
146	ALL	481845.9	3667992	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.02E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.02E-04
147	ALL	481865.9	3667992	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.30E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.30E-04
148	ALL	481885.9	3667992	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.60E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.60E-04
149	ALL	481905.9	3667992	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.94E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.94E-04
150	ALL	482505.9	3667992	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.04E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.04E-03
151	ALL	482525.9	3667992	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.87E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.87E-03
152	ALL	482545.9	3667992	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.64E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.64E-03
153	ALL	482565.9	3667992	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.49E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.49E-03
154	ALL	482585.9	3667992	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.34E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.34E-03
155	ALL	482605.9	3667992	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.19E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.19E-03
156	ALL	482625.9	3667992	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.08E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.08E-03
157	ALL	482645.9	3667992	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.77E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.77E-04
158	ALL	482665.9	3667992	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.91E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.91E-04
159	ALL	482685.9	3667992	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.13E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.13E-04
160	ALL	482705.9	3667992	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.52E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.52E-04
161	ALL	482725.9	3667992	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.07E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.07E-04
162	ALL	481785.9	3668012	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.24E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.24E-04
163	ALL	481805.9	3668012	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.45E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.45E-04
164	ALL	481825.9	3668012	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.66E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.66E-04

165	ALL	481845.9	3668012	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.93E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.93E-04
166	ALL	481865.9	3668012	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.20E-04
167	ALL	482185.9	3668012	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.57E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.57E-03
168	ALL	482485.9	3668012	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.41E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.41E-03
169	ALL	482505.9	3668012	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.08E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.08E-03
170	ALL	482525.9	3668012	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.86E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.86E-03
171	ALL	482545.9	3668012	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.68E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.68E-03
172	ALL	482565.9	3668012	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.50E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.50E-03
173	ALL	482585.9	3668012	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.33E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.33E-03
174	ALL	482605.9	3668012	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.20E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.20E-03
175	ALL	482625.9	3668012	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.09E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.09E-03
176	ALL	482645.9	3668012	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.82E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.82E-04
177	ALL	482665.9	3668012	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.96E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.96E-04
178	ALL	482685.9	3668012	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.28E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.28E-04
179	ALL	482705.9	3668012	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.62E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.62E-04
180	ALL	482725.9	3668012	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.04E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.04E-04
181	ALL	481785.9	3668032	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.03E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.03E-04
182	ALL	481805.9	3668032	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.36E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.36E-04
183	ALL	481825.9	3668032	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.57E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.57E-04
184	ALL	482165.9	3668032	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.91E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.91E-03
185	ALL	482185.9	3668032	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.33E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.33E-03
186	ALL	482465.9	3668032	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.80E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.80E-03
187	ALL	482485.9	3668032	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.36E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.36E-03
188	ALL	482505.9	3668032	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.08E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.08E-03
189	ALL	482525.9	3668032	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.85E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.85E-03
190	ALL	482545.9	3668032	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.66E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.66E-03
191	ALL	482565.9	3668032	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.48E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.48E-03
192	ALL	482585.9	3668032	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.33E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.33E-03
193	ALL	482605.9	3668032	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.19E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.19E-03
194	ALL	482625.9	3668032	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.08E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.08E-03
195	ALL	482645.9	3668032	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.72E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.72E-04
196	ALL	482665.9	3668032	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.97E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.97E-04
197	ALL	482685.9	3668032	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.18E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.18E-04
198	ALL	482705.9	3668032	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.55E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.55E-04
199	ALL	481785.9	3668052	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.95E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.95E-04
200	ALL	482145.9	3668052	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.47E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.47E-03
201	ALL	482165.9	3668052	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.74E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.74E-03
202	ALL	482185.9	3668052	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.08E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.08E-03
203	ALL	482445.9	3668052	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.42E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.42E-03
204	ALL	482465.9	3668052	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.84E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.84E-03
205	ALL	482485.9	3668052	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.37E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.37E-03
206	ALL	482505.9	3668052	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.06E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.06E-03
207	ALL	482525.9	3668052	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.80E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.80E-03
208	ALL	482545.9	3668052	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.61E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.61E-03
209	ALL	482565.9	3668052	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.45E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.45E-03
210	ALL	482585.9	3668052	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.30E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.30E-03
211	ALL	482605.9	3668052	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.17E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.17E-03
212	ALL	482625.9	3668052	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.06E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.06E-03
213	ALL	482645.9	3668052	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.59E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.59E-04
214	ALL	482665.9	3668052	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.75E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.75E-04
215	ALL	482685.9	3668052	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.06E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.06E-04
216	ALL	482125.9	3668072	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.19E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.19E-03
217	ALL	482145.9	3668072	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.35E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.35E-03
218	ALL	482165.9	3668072	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.56E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.56E-03
219	ALL	482185.9	3668072	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.84E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.84E-03

220	ALL	482205.9	3668072	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.25E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.25E-03
221	ALL	482425.9	3668072	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.57E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.57E-03
222	ALL	482445.9	3668072	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.03E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.03E-03
223	ALL	482465.9	3668072	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.61E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.61E-03
224	ALL	482485.9	3668072	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.24E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.24E-03
225	ALL	482505.9	3668072	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.97E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.97E-03
226	ALL	482525.9	3668072	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.71E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.71E-03
227	ALL	482545.9	3668072	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.55E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.55E-03
228	ALL	482565.9	3668072	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.38E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.38E-03
229	ALL	482585.9	3668072	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.25E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.25E-03
230	ALL	482605.9	3668072	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.14E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.14E-03
231	ALL	482625.9	3668072	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.03E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.03E-03
232	ALL	482645.9	3668072	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.31E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.31E-04
233	ALL	482665.9	3668072	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.45E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.45E-04
234	ALL	482105.9	3668092	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.60E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.60E-04
235	ALL	482125.9	3668092	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.09E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.09E-03
236	ALL	482145.9	3668092	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.23E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.23E-03
237	ALL	482165.9	3668092	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.42E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.42E-03
238	ALL	482185.9	3668092	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.64E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.64E-03
239	ALL	482205.9	3668092	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.93E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.93E-03
240	ALL	482405.9	3668092	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.55E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.55E-03
241	ALL	482425.9	3668092	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.04E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.04E-03
242	ALL	482445.9	3668092	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.63E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.63E-03
243	ALL	482465.9	3668092	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.30E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.30E-03
244	ALL	482485.9	3668092	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.03E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.03E-03
245	ALL	482505.9	3668092	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.80E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.80E-03
246	ALL	482525.9	3668092	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.61E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.61E-03
247	ALL	482545.9	3668092	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.45E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.45E-03
248	ALL	482565.9	3668092	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.31E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.31E-03
249	ALL	482585.9	3668092	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.18E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.18E-03
250	ALL	482605.9	3668092	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.08E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.08E-03
251	ALL	482625.9	3668092	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.83E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.83E-04
252	ALL	482645.9	3668092	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.92E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.92E-04
253	ALL	482065.9	3668112	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.69E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.69E-04
254	ALL	482085.9	3668112	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.26E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.26E-04
255	ALL	482105.9	3668112	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.93E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.93E-04
256	ALL	482125.9	3668112	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.91E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.91E-04
257	ALL	482145.9	3668112	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.12E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.12E-03
258	ALL	482165.9	3668112	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.28E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.28E-03
259	ALL	482185.9	3668112	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.48E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.48E-03
260	ALL	482205.9	3668112	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.66E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.66E-03
261	ALL	482225.9	3668112	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.95E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.95E-03
262	ALL	482385.9	3668112	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.34E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.34E-03
263	ALL	482405.9	3668112	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.89E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.89E-03
264	ALL	482425.9	3668112	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.53E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.53E-03
265	ALL	482445.9	3668112	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.24E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.24E-03
266	ALL	482465.9	3668112	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.00E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.00E-03
267	ALL	482485.9	3668112	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.80E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.80E-03
268	ALL	482505.9	3668112	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.62E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.62E-03
269	ALL	482525.9	3668112	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.46E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.46E-03
270	ALL	482545.9	3668112	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.33E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.33E-03
271	ALL	482565.9	3668112	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.21E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.21E-03
272	ALL	482585.9	3668112	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.10E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.10E-03
273	ALL	482605.9	3668112	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.01E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.01E-03
274	ALL	482625.9	3668112	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.26E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.26E-04

275	ALL	482045.9	3668132	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.70E-04
276	ALL	482065.9	3668132	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.25E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.25E-04
277	ALL	482085.9	3668132	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.75E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.75E-04
278	ALL	482105.9	3668132	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.39E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.39E-04
279	ALL	482125.9	3668132	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.32E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.32E-04
280	ALL	482145.9	3668132	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.01E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.01E-03
281	ALL	482165.9	3668132	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.13E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.13E-03
282	ALL	482185.9	3668132	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.29E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.29E-03
283	ALL	482205.9	3668132	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.47E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.47E-03
284	ALL	482225.9	3668132	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.64E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.64E-03
285	ALL	482405.9	3668132	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.30E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.30E-03
286	ALL	482425.9	3668132	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.09E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.09E-03
287	ALL	482445.9	3668132	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.89E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.89E-03
288	ALL	482465.9	3668132	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.72E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.72E-03
289	ALL	482485.9	3668132	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.57E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.57E-03
290	ALL	482505.9	3668132	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.43E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.43E-03
291	ALL	482525.9	3668132	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.31E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.31E-03
292	ALL	482545.9	3668132	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.21E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.21E-03
293	ALL	482565.9	3668132	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.11E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.11E-03
294	ALL	482585.9	3668132	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.02E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.02E-03
295	ALL	482605.9	3668132	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.42E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.42E-04
296	ALL	482025.9	3668152	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.85E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.85E-04
297	ALL	482045.9	3668152	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.28E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.28E-04
298	ALL	482065.9	3668152	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.76E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.76E-04
299	ALL	482085.9	3668152	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.29E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.29E-04
300	ALL	482105.9	3668152	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.90E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.90E-04
301	ALL	482125.9	3668152	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.54E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.54E-04
302	ALL	482145.9	3668152	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.26E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.26E-04
303	ALL	482165.9	3668152	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.00E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.00E-03
304	ALL	482185.9	3668152	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.12E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.12E-03
305	ALL	482205.9	3668152	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.26E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.26E-03
306	ALL	482225.9	3668152	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.41E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.41E-03
307	ALL	482245.9	3668152	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.52E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.52E-03
308	ALL	482425.9	3668152	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.71E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.71E-03
309	ALL	482445.9	3668152	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.58E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.58E-03
310	ALL	482465.9	3668152	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.47E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.47E-03
311	ALL	482485.9	3668152	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.36E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.36E-03
312	ALL	482505.9	3668152	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.26E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.26E-03
313	ALL	482525.9	3668152	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.17E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.17E-03
314	ALL	482545.9	3668152	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.09E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.09E-03
315	ALL	482565.9	3668152	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.01E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.01E-03
316	ALL	482585.9	3668152	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.34E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.34E-04
317	ALL	481545.9	3668172	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.19E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.19E-05
318	ALL	481565.9	3668172	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.13E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.13E-05
319	ALL	481585.9	3668172	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.37E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.37E-05
320	ALL	482005.9	3668172	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.13E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.13E-04
321	ALL	482025.9	3668172	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.48E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.48E-04
322	ALL	482045.9	3668172	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.88E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.88E-04
323	ALL	482065.9	3668172	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.25E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.25E-04
324	ALL	482085.9	3668172	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.74E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.74E-04
325	ALL	482105.9	3668172	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.25E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.25E-04
326	ALL	482125.9	3668172	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.73E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.73E-04
327	ALL	482145.9	3668172	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.40E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.40E-04
328	ALL	482165.9	3668172	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.11E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.11E-04
329	ALL	482185.9	3668172	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.80E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.80E-04

330	ALL	482205.9	3668172	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.07E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.07E-03
331	ALL	482225.9	3668172	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.19E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.19E-03
332	ALL	482245.9	3668172	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.29E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.29E-03
333	ALL	482445.9	3668172	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.33E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.33E-03
334	ALL	482465.9	3668172	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.25E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.25E-03
335	ALL	482485.9	3668172	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.18E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.18E-03
336	ALL	482505.9	3668172	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.11E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.11E-03
337	ALL	482525.9	3668172	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.04E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.04E-03
338	ALL	482545.9	3668172	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.72E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.72E-04
339	ALL	482565.9	3668172	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.08E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.08E-04
340	ALL	481505.9	3668192	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.96E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.96E-05
341	ALL	481525.9	3668192	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.74E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.74E-05
342	ALL	481545.9	3668192	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.62E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.62E-05
343	ALL	481565.9	3668192	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.72E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.72E-05
344	ALL	481585.9	3668192	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.76E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.76E-05
345	ALL	481985.9	3668192	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.50E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.50E-04
346	ALL	482005.9	3668192	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.82E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.82E-04
347	ALL	482025.9	3668192	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.14E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.14E-04
348	ALL	482045.9	3668192	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.47E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.47E-04
349	ALL	482065.9	3668192	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.77E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.77E-04
350	ALL	482085.9	3668192	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.13E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.13E-04
351	ALL	482105.9	3668192	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.54E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.54E-04
352	ALL	482125.9	3668192	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.02E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.02E-04
353	ALL	482145.9	3668192	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.57E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.57E-04
354	ALL	482165.9	3668192	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.14E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.14E-04
355	ALL	482185.9	3668192	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.77E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.77E-04
356	ALL	482205.9	3668192	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.35E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.35E-04
357	ALL	482225.9	3668192	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.01E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.01E-03
358	ALL	482245.9	3668192	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.09E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.09E-03
359	ALL	482265.9	3668192	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.16E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.16E-03
360	ALL	482465.9	3668192	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.07E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.07E-03
361	ALL	482485.9	3668192	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.02E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.02E-03
362	ALL	482505.9	3668192	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.68E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.68E-04
363	ALL	482525.9	3668192	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.17E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.17E-04
364	ALL	482545.9	3668192	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.65E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.65E-04
365	ALL	481445.9	3668212	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.46E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.46E-05
366	ALL	481465.9	3668212	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.18E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.18E-05
367	ALL	481485.9	3668212	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.86E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.86E-05
368	ALL	481505.9	3668212	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.77E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.77E-05
369	ALL	481525.9	3668212	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.43E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.43E-05
370	ALL	481545.9	3668212	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.43E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.43E-05
371	ALL	481565.9	3668212	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.56E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.56E-05
372	ALL	481585.9	3668212	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.64E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.64E-05
373	ALL	481605.9	3668212	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.21E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.21E-05
374	ALL	481965.9	3668212	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.78E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.78E-04
375	ALL	481985.9	3668212	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.18E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.18E-04
376	ALL	482005.9	3668212	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.53E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.53E-04
377	ALL	482025.9	3668212	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.79E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.79E-04
378	ALL	482045.9	3668212	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.07E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.07E-04
379	ALL	482065.9	3668212	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.37E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.37E-04
380	ALL	482085.9	3668212	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.66E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.66E-04
381	ALL	482105.9	3668212	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.99E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.99E-04
382	ALL	482125.9	3668212	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.34E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.34E-04
383	ALL	482145.9	3668212	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.69E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.69E-04
384	ALL	482165.9	3668212	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.15E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.15E-04

385	ALL	482185.9	3668212	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.80E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.80E-04
386	ALL	482205.9	3668212	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.31E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.31E-04
387	ALL	482225.9	3668212	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.79E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.79E-04
388	ALL	482245.9	3668212	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.31E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.31E-04
389	ALL	482265.9	3668212	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.80E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.80E-04
390	ALL	482485.9	3668212	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.89E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.89E-04
391	ALL	482505.9	3668212	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.51E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.51E-04
392	ALL	482525.9	3668212	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.13E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.13E-04
393	ALL	481405.9	3668232	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.07E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.07E-04
394	ALL	481425.9	3668232	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.56E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.56E-05
395	ALL	481445.9	3668232	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.57E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.57E-05
396	ALL	481465.9	3668232	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.68E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.68E-05
397	ALL	481485.9	3668232	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.46E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.46E-05
398	ALL	481505.9	3668232	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.59E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.59E-05
399	ALL	481525.9	3668232	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.52E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.52E-05
400	ALL	481545.9	3668232	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.43E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.43E-05
401	ALL	481565.9	3668232	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.61E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.61E-05
402	ALL	481585.9	3668232	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.79E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.79E-05
403	ALL	481605.9	3668232	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.89E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.89E-05
404	ALL	481945.9	3668232	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.79E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.79E-04
405	ALL	481965.9	3668232	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.35E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.35E-04
406	ALL	481985.9	3668232	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.91E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.91E-04
407	ALL	482005.9	3668232	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.09E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.09E-04
408	ALL	482025.9	3668232	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.31E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.31E-04
409	ALL	482045.9	3668232	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.70E-04
410	ALL	482065.9	3668232	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.95E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.95E-04
411	ALL	482085.9	3668232	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.22E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.22E-04
412	ALL	482105.9	3668232	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.50E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.50E-04
413	ALL	482125.9	3668232	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.74E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.74E-04
414	ALL	482145.9	3668232	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.07E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.07E-04
415	ALL	482165.9	3668232	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.31E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.31E-04
416	ALL	482185.9	3668232	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.92E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.92E-04
417	ALL	482205.9	3668232	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.38E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.38E-04
418	ALL	482225.9	3668232	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.77E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.77E-04
419	ALL	482245.9	3668232	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.12E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.12E-04
420	ALL	482265.9	3668232	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.44E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.44E-04
421	ALL	482505.9	3668232	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.50E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.50E-04
422	ALL	481365.9	3668252	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.26E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.26E-04
423	ALL	481385.9	3668252	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.25E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.25E-04
424	ALL	481405.9	3668252	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.94E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.94E-05
425	ALL	481425.9	3668252	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.11E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.11E-05
426	ALL	481445.9	3668252	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.95E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.95E-05
427	ALL	481465.9	3668252	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.72E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.72E-05
428	ALL	481485.9	3668252	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.15E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.15E-05
429	ALL	481505.9	3668252	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.37E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.37E-05
430	ALL	481525.9	3668252	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.40E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.40E-05
431	ALL	481545.9	3668252	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.38E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.38E-05
432	ALL	481565.9	3668252	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.36E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.36E-05
433	ALL	481585.9	3668252	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.85E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.85E-05
434	ALL	481605.9	3668252	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.00E-05
435	ALL	481925.9	3668252	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.14E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.14E-04
436	ALL	481945.9	3668252	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.47E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.47E-04
437	ALL	481965.9	3668252	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.01E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.01E-04
438	ALL	481985.9	3668252	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.09E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.09E-04
439	ALL	482005.9	3668252	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.98E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.98E-04

440	ALL	482025.9	3668252	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.92E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.92E-04
441	ALL	482045.9	3668252	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.21E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.21E-04
442	ALL	482065.9	3668252	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.71E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.71E-04
443	ALL	482085.9	3668252	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.46E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.46E-04
444	ALL	482105.9	3668252	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.03E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.03E-04
445	ALL	482125.9	3668252	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.20E-04
446	ALL	482145.9	3668252	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.31E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.31E-04
447	ALL	482165.9	3668252	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.31E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.31E-04
448	ALL	482185.9	3668252	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.72E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.72E-04
449	ALL	482205.9	3668252	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.42E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.42E-04
450	ALL	482225.9	3668252	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.90E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.90E-04
451	ALL	482245.9	3668252	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.17E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.17E-04
452	ALL	481325.9	3668272	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.14E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.14E-04
453	ALL	481345.9	3668272	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.20E-04
454	ALL	481365.9	3668272	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.23E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.23E-04
455	ALL	481385.9	3668272	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.02E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.02E-04
456	ALL	481405.9	3668272	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.72E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.72E-05
457	ALL	481425.9	3668272	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.93E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.93E-05
458	ALL	481445.9	3668272	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.40E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.40E-05
459	ALL	481465.9	3668272	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.45E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.45E-05
460	ALL	481485.9	3668272	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.99E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.99E-05
461	ALL	481505.9	3668272	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.23E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.23E-05
462	ALL	481525.9	3668272	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.48E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.48E-05
463	ALL	481545.9	3668272	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.53E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.53E-05
464	ALL	481565.9	3668272	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.34E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.34E-05
465	ALL	481585.9	3668272	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.03E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.03E-05
466	ALL	481605.9	3668272	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.23E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.23E-05
467	ALL	481625.9	3668272	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.75E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.75E-05
468	ALL	481905.9	3668272	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.69E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.69E-04
469	ALL	481925.9	3668272	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.85E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.85E-04
470	ALL	481945.9	3668272	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.22E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.22E-04
471	ALL	481965.9	3668272	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.27E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.27E-04
472	ALL	481985.9	3668272	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.65E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.65E-04
473	ALL	482005.9	3668272	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.73E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.73E-04
474	ALL	482025.9	3668272	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.65E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.65E-04
475	ALL	482045.9	3668272	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.63E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.63E-04
476	ALL	482065.9	3668272	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.63E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.63E-04
477	ALL	482085.9	3668272	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.70E-04
478	ALL	482105.9	3668272	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.82E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.82E-04
479	ALL	482125.9	3668272	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.25E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.25E-04
480	ALL	482145.9	3668272	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.50E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.50E-04
481	ALL	482165.9	3668272	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.95E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.95E-04
482	ALL	482185.9	3668272	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.15E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.15E-04
483	ALL	482205.9	3668272	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.51E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.51E-04
484	ALL	482225.9	3668272	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.10E-04
485	ALL	481265.9	3668292	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.13E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.13E-05
486	ALL	481285.9	3668292	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.52E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.52E-05
487	ALL	481305.9	3668292	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.01E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.01E-04
488	ALL	481325.9	3668292	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.11E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.11E-04
489	ALL	481345.9	3668292	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.19E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.19E-04
490	ALL	481365.9	3668292	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.12E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.12E-04
491	ALL	481385.9	3668292	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.09E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.09E-04
492	ALL	481405.9	3668292	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.98E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.98E-05
493	ALL	481425.9	3668292	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.07E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.07E-05
494	ALL	481445.9	3668292	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.78E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.78E-05

495	ALL	481465.9	3668292	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.38E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.38E-05
496	ALL	481485.9	3668292	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.12E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.12E-05
497	ALL	481505.9	3668292	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.20E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.20E-05
498	ALL	481525.9	3668292	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.71E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.71E-05
499	ALL	481545.9	3668292	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.80E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.80E-05
500	ALL	481565.9	3668292	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.52E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.52E-05
501	ALL	481585.9	3668292	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.04E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.04E-05
502	ALL	481605.9	3668292	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.81E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.81E-05
503	ALL	481625.9	3668292	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.98E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.98E-05
504	ALL	481885.9	3668292	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.38E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.38E-04
505	ALL	481905.9	3668292	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.41E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.41E-04
506	ALL	481925.9	3668292	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.66E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.66E-04
507	ALL	481945.9	3668292	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.67E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.67E-04
508	ALL	481965.9	3668292	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.00E-04
509	ALL	481985.9	3668292	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.36E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.36E-04
510	ALL	482005.9	3668292	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.49E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.49E-04
511	ALL	482025.9	3668292	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.55E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.55E-04
512	ALL	482045.9	3668292	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.62E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.62E-04
513	ALL	482065.9	3668292	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.62E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.62E-04
514	ALL	482085.9	3668292	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.62E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.62E-04
515	ALL	482105.9	3668292	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.72E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.72E-04
516	ALL	482125.9	3668292	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.94E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.94E-04
517	ALL	482145.9	3668292	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.30E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.30E-04
518	ALL	482165.9	3668292	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.39E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.39E-04
519	ALL	482185.9	3668292	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.70E-04
520	ALL	482205.9	3668292	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.89E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.89E-04
521	ALL	481225.9	3668312	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.47E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.47E-05
522	ALL	481245.9	3668312	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.76E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.76E-05
523	ALL	481265.9	3668312	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.17E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.17E-05
524	ALL	481285.9	3668312	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.59E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.59E-05
525	ALL	481305.9	3668312	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.99E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.99E-05
526	ALL	481325.9	3668312	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.09E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.09E-04
527	ALL	481345.9	3668312	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.16E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.16E-04
528	ALL	481365.9	3668312	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.93E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.93E-05
529	ALL	481385.9	3668312	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.97E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.97E-05
530	ALL	481405.9	3668312	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.48E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.48E-05
531	ALL	481425.9	3668312	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.12E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.12E-05
532	ALL	481445.9	3668312	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.53E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.53E-05
533	ALL	481465.9	3668312	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.13E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.13E-05
534	ALL	481485.9	3668312	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.81E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.81E-05
535	ALL	481505.9	3668312	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.36E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.36E-05
536	ALL	481525.9	3668312	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.94E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.94E-05
537	ALL	481545.9	3668312	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.15E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.15E-05
538	ALL	481565.9	3668312	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.21E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.21E-05
539	ALL	481585.9	3668312	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.35E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.35E-05
540	ALL	481605.9	3668312	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.16E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.16E-05
541	ALL	481625.9	3668312	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.55E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.55E-05
542	ALL	481885.9	3668312	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.12E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.12E-04
543	ALL	481905.9	3668312	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.26E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.26E-04
544	ALL	481925.9	3668312	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.36E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.36E-04
545	ALL	481945.9	3668312	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.39E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.39E-04
546	ALL	481965.9	3668312	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.78E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.78E-04
547	ALL	481985.9	3668312	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.18E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.18E-04
548	ALL	482005.9	3668312	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.24E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.24E-04
549	ALL	482025.9	3668312	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.26E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.26E-04

550	ALL	482045.9	3668312	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.27E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.27E-04
551	ALL	482065.9	3668312	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.32E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.32E-04
552	ALL	482085.9	3668312	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.40E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.40E-04
553	ALL	482105.9	3668312	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.48E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.48E-04
554	ALL	482125.9	3668312	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.62E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.62E-04
555	ALL	482145.9	3668312	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.90E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.90E-04
556	ALL	482165.9	3668312	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.32E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.32E-04
557	ALL	482185.9	3668312	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.63E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.63E-04
558	ALL	482285.9	3668312	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.56E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.56E-04
559	ALL	482305.9	3668312	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.96E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.96E-04
560	ALL	482325.9	3668312	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.52E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.52E-04
561	ALL	482345.9	3668312	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.55E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.55E-04
562	ALL	482365.9	3668312	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.56E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.56E-04
563	ALL	482385.9	3668312	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.44E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.44E-04
564	ALL	482405.9	3668312	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.40E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.40E-04
565	ALL	482425.9	3668312	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.31E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.31E-04
566	ALL	482445.9	3668312	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.18E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.18E-04
567	ALL	482465.9	3668312	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.04E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.04E-04
568	ALL	482485.9	3668312	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.89E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.89E-04
569	ALL	482505.9	3668312	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.76E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.76E-04
570	ALL	482525.9	3668312	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.62E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.62E-04
571	ALL	482545.9	3668312	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.49E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.49E-04
572	ALL	482565.9	3668312	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.98E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.98E-04
573	ALL	482585.9	3668312	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.69E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.69E-04
574	ALL	482605.9	3668312	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.47E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.47E-04
575	ALL	482625.9	3668312	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.19E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.19E-04
576	ALL	482645.9	3668312	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.85E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.85E-04
577	ALL	482665.9	3668312	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.65E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.65E-04
578	ALL	482685.9	3668312	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.39E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.39E-04
579	ALL	482705.9	3668312	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.11E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.11E-04
580	ALL	482725.9	3668312	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.02E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.02E-04
581	ALL	482745.9	3668312	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.93E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.93E-04
582	ALL	482765.9	3668312	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.83E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.83E-04
583	ALL	482785.9	3668312	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.75E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.75E-04
584	ALL	482805.9	3668312	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.70E-04
585	ALL	482825.9	3668312	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.62E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.62E-04
586	ALL	482845.9	3668312	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.55E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.55E-04
587	ALL	482865.9	3668312	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.48E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.48E-04
588	ALL	481205.9	3668332	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.16E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.16E-05
589	ALL	481225.9	3668332	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.44E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.44E-05
590	ALL	481245.9	3668332	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.80E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.80E-05
591	ALL	481265.9	3668332	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.22E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.22E-05
592	ALL	481285.9	3668332	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.62E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.62E-05
593	ALL	481305.9	3668332	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.02E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.02E-04
594	ALL	481325.9	3668332	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.08E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.08E-04
595	ALL	481345.9	3668332	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.13E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.13E-04
596	ALL	481365.9	3668332	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.67E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.67E-05
597	ALL	481385.9	3668332	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.45E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.45E-05
598	ALL	481405.9	3668332	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.57E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.57E-05
599	ALL	481425.9	3668332	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.54E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.54E-05
600	ALL	481445.9	3668332	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.80E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.80E-05
601	ALL	481465.9	3668332	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.63E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.63E-05
602	ALL	481485.9	3668332	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.59E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.59E-05
603	ALL	481505.9	3668332	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.00E-05
604	ALL	481525.9	3668332	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.11E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.11E-05

605	ALL	481545.9	3668332	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.98E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.98E-05
606	ALL	481565.9	3668332	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.53E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.53E-05
607	ALL	481585.9	3668332	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.13E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.13E-05
608	ALL	481605.9	3668332	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.78E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.78E-05
609	ALL	481625.9	3668332	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.83E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.83E-05
610	ALL	481645.9	3668332	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.01E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.01E-04
611	ALL	481865.9	3668332	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.40E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.40E-05
612	ALL	481885.9	3668332	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.40E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.40E-05
613	ALL	481905.9	3668332	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.11E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.11E-04
614	ALL	481925.9	3668332	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.09E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.09E-04
615	ALL	481945.9	3668332	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.12E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.12E-04
616	ALL	481965.9	3668332	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.96E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.96E-05
617	ALL	481985.9	3668332	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.06E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.06E-04
618	ALL	482005.9	3668332	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.18E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.18E-04
619	ALL	482025.9	3668332	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.34E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.34E-04
620	ALL	482045.9	3668332	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.50E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.50E-04
621	ALL	482065.9	3668332	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.65E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.65E-04
622	ALL	482085.9	3668332	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.86E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.86E-04
623	ALL	482105.9	3668332	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.12E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.12E-04
624	ALL	482125.9	3668332	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.28E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.28E-04
625	ALL	482145.9	3668332	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.59E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.59E-04
626	ALL	482165.9	3668332	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.87E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.87E-04
627	ALL	482245.9	3668332	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.07E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.07E-04
628	ALL	482265.9	3668332	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.14E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.14E-04
629	ALL	482285.9	3668332	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.55E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.55E-04
630	ALL	482305.9	3668332	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.50E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.50E-04
631	ALL	482325.9	3668332	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.00E-04
632	ALL	482345.9	3668332	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.03E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.03E-04
633	ALL	482365.9	3668332	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.04E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.04E-04
634	ALL	482385.9	3668332	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.92E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.92E-04
635	ALL	482405.9	3668332	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.82E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.82E-04
636	ALL	482425.9	3668332	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.73E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.73E-04
637	ALL	482445.9	3668332	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.59E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.59E-04
638	ALL	482465.9	3668332	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.46E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.46E-04
639	ALL	482485.9	3668332	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.32E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.32E-04
640	ALL	482505.9	3668332	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.14E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.14E-04
641	ALL	482525.9	3668332	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.81E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.81E-04
642	ALL	482545.9	3668332	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.07E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.07E-04
643	ALL	482565.9	3668332	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.59E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.59E-04
644	ALL	482585.9	3668332	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.45E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.45E-04
645	ALL	482605.9	3668332	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.50E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.50E-04
646	ALL	482625.9	3668332	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.59E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.59E-04
647	ALL	482645.9	3668332	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.59E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.59E-04
648	ALL	482665.9	3668332	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.39E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.39E-04
649	ALL	482685.9	3668332	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.19E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.19E-04
650	ALL	482705.9	3668332	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.98E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.98E-04
651	ALL	482725.9	3668332	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.86E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.86E-04
652	ALL	482745.9	3668332	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.77E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.77E-04
653	ALL	482765.9	3668332	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.68E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.68E-04
654	ALL	482785.9	3668332	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.61E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.61E-04
655	ALL	482805.9	3668332	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.53E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.53E-04
656	ALL	482825.9	3668332	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.49E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.49E-04
657	ALL	482845.9	3668332	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.43E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.43E-04
658	ALL	482865.9	3668332	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.39E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.39E-04
659	ALL	482885.9	3668332	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.32E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.32E-04

660	ALL	481185.9	3668352	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.98E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.98E-05
661	ALL	481205.9	3668352	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.13E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.13E-05
662	ALL	481225.9	3668352	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.40E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.40E-05
663	ALL	481245.9	3668352	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.83E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.83E-05
664	ALL	481265.9	3668352	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.27E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.27E-05
665	ALL	481285.9	3668352	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.66E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.66E-05
666	ALL	481305.9	3668352	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.02E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.02E-04
667	ALL	481325.9	3668352	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.08E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.08E-04
668	ALL	481345.9	3668352	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.15E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.15E-04
669	ALL	481365.9	3668352	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.13E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.13E-04
670	ALL	481385.9	3668352	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.08E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.08E-05
671	ALL	481405.9	3668352	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.67E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.67E-05
672	ALL	481425.9	3668352	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.02E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.02E-04
673	ALL	481445.9	3668352	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.02E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.02E-04
674	ALL	481465.9	3668352	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.04E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.04E-04
675	ALL	481485.9	3668352	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.01E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.01E-04
676	ALL	481505.9	3668352	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.75E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.75E-05
677	ALL	481525.9	3668352	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.64E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.64E-05
678	ALL	481545.9	3668352	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.23E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.23E-05
679	ALL	481565.9	3668352	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.13E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.13E-05
680	ALL	481585.9	3668352	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.10E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.10E-05
681	ALL	481605.9	3668352	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.67E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.67E-05
682	ALL	481625.9	3668352	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.11E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.11E-04
683	ALL	481645.9	3668352	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.15E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.15E-04
684	ALL	481865.9	3668352	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.75E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.75E-05
685	ALL	481885.9	3668352	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.83E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.83E-05
686	ALL	481905.9	3668352	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.95E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.95E-05
687	ALL	481925.9	3668352	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.57E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.57E-05
688	ALL	481945.9	3668352	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.74E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.74E-05
689	ALL	481965.9	3668352	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.55E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.55E-05
690	ALL	481985.9	3668352	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.74E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.74E-05
691	ALL	482005.9	3668352	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.03E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.03E-05
692	ALL	482025.9	3668352	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.29E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.29E-05
693	ALL	482045.9	3668352	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.38E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.38E-05
694	ALL	482065.9	3668352	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.75E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.75E-05
695	ALL	482085.9	3668352	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.82E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.82E-05
696	ALL	482245.9	3668352	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.53E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.53E-04
697	ALL	482265.9	3668352	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.62E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.62E-04
698	ALL	482285.9	3668352	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.13E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.13E-04
699	ALL	482305.9	3668352	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.35E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.35E-04
700	ALL	482325.9	3668352	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.55E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.55E-04
701	ALL	482345.9	3668352	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.58E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.58E-04
702	ALL	482365.9	3668352	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.60E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.60E-04
703	ALL	482385.9	3668352	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.54E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.54E-04
704	ALL	482405.9	3668352	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.50E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.50E-04
705	ALL	482425.9	3668352	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.44E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.44E-04
706	ALL	482445.9	3668352	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.34E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.34E-04
707	ALL	482465.9	3668352	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.19E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.19E-04
708	ALL	482485.9	3668352	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.08E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.08E-04
709	ALL	482505.9	3668352	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.94E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.94E-04
710	ALL	482525.9	3668352	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.81E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.81E-04
711	ALL	482545.9	3668352	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.71E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.71E-04
712	ALL	482565.9	3668352	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.22E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.22E-04
713	ALL	482585.9	3668352	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.10E-04
714	ALL	482605.9	3668352	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.27E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.27E-04

715	ALL	482625.9	3668352	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.28E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.28E-04
716	ALL	482645.9	3668352	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.32E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.32E-04
717	ALL	482665.9	3668352	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.12E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.12E-04
718	ALL	482685.9	3668352	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.97E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.97E-04
719	ALL	482705.9	3668352	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.82E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.82E-04
720	ALL	482725.9	3668352	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.72E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.72E-04
721	ALL	482745.9	3668352	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.63E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.63E-04
722	ALL	482765.9	3668352	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.57E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.57E-04
723	ALL	482785.9	3668352	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.51E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.51E-04
724	ALL	482805.9	3668352	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.46E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.46E-04
725	ALL	482825.9	3668352	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.40E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.40E-04
726	ALL	482845.9	3668352	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.34E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.34E-04
727	ALL	482865.9	3668352	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.29E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.29E-04
728	ALL	482885.9	3668352	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.25E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.25E-04
729	ALL	482905.9	3668352	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.21E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.21E-04
730	ALL	482925.9	3668352	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.15E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.15E-04
731	ALL	481165.9	3668372	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.73E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.73E-05
732	ALL	481185.9	3668372	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.91E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.91E-05
733	ALL	481205.9	3668372	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.14E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.14E-05
734	ALL	481225.9	3668372	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.38E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.38E-05
735	ALL	481245.9	3668372	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.73E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.73E-05
736	ALL	481265.9	3668372	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.18E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.18E-05
737	ALL	481285.9	3668372	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.66E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.66E-05
738	ALL	481305.9	3668372	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.06E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.06E-04
739	ALL	481325.9	3668372	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.09E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.09E-04
740	ALL	481345.9	3668372	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.15E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.15E-04
741	ALL	481365.9	3668372	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.15E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.15E-04
742	ALL	481385.9	3668372	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.11E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.11E-05
743	ALL	481405.9	3668372	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.98E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.98E-05
744	ALL	481425.9	3668372	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.07E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.07E-04
745	ALL	481445.9	3668372	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.11E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.11E-04
746	ALL	481465.9	3668372	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.09E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.09E-04
747	ALL	481485.9	3668372	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.06E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.06E-04
748	ALL	481505.9	3668372	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.04E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.04E-04
749	ALL	481525.9	3668372	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.41E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.41E-05
750	ALL	481545.9	3668372	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.08E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.08E-04
751	ALL	481565.9	3668372	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.05E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.05E-04
752	ALL	481585.9	3668372	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.02E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.02E-04
753	ALL	481605.9	3668372	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.26E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.26E-04
754	ALL	481625.9	3668372	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.28E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.28E-04
755	ALL	481645.9	3668372	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.30E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.30E-04
756	ALL	481665.9	3668372	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.40E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.40E-04
757	ALL	481865.9	3668372	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.45E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.45E-05
758	ALL	481885.9	3668372	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.88E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.88E-05
759	ALL	481905.9	3668372	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.89E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.89E-05
760	ALL	481925.9	3668372	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.73E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.73E-05
761	ALL	481945.9	3668372	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.73E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.73E-05
762	ALL	481965.9	3668372	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.78E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.78E-05
763	ALL	481985.9	3668372	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.95E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.95E-05
764	ALL	482005.9	3668372	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.12E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.12E-05
765	ALL	482025.9	3668372	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.31E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.31E-05
766	ALL	482045.9	3668372	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.53E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.53E-05
767	ALL	482065.9	3668372	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.70E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.70E-05
768	ALL	482225.9	3668372	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.20E-04
769	ALL	482245.9	3668372	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.24E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.24E-04

770	ALL	482265.9	3668372	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.36E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.36E-04
771	ALL	482285.9	3668372	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.08E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.08E-04
772	ALL	482305.9	3668372	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.05E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.05E-04
773	ALL	482325.9	3668372	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.16E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.16E-04
774	ALL	482345.9	3668372	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.20E-04
775	ALL	482365.9	3668372	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.16E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.16E-04
776	ALL	482385.9	3668372	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.13E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.13E-04
777	ALL	482405.9	3668372	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.05E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.05E-04
778	ALL	482425.9	3668372	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.98E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.98E-04
779	ALL	482445.9	3668372	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.89E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.89E-04
780	ALL	482465.9	3668372	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.81E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.81E-04
781	ALL	482485.9	3668372	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.70E-04
782	ALL	482505.9	3668372	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.59E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.59E-04
783	ALL	482525.9	3668372	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.46E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.46E-04
784	ALL	482545.9	3668372	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.32E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.32E-04
785	ALL	482565.9	3668372	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.96E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.96E-04
786	ALL	482585.9	3668372	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.81E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.81E-04
787	ALL	482605.9	3668372	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.07E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.07E-04
788	ALL	482625.9	3668372	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.11E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.11E-04
789	ALL	482645.9	3668372	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.98E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.98E-04
790	ALL	482665.9	3668372	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.90E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.90E-04
791	ALL	482685.9	3668372	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.77E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.77E-04
792	ALL	482705.9	3668372	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.63E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.63E-04
793	ALL	482725.9	3668372	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.54E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.54E-04
794	ALL	482745.9	3668372	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.48E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.48E-04
795	ALL	482765.9	3668372	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.43E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.43E-04
796	ALL	482785.9	3668372	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.38E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.38E-04
797	ALL	482805.9	3668372	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.33E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.33E-04
798	ALL	482825.9	3668372	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.26E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.26E-04
799	ALL	482845.9	3668372	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.24E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.24E-04
800	ALL	482865.9	3668372	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.20E-04
801	ALL	482885.9	3668372	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.17E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.17E-04
802	ALL	482905.9	3668372	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.13E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.13E-04
803	ALL	482925.9	3668372	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.09E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.09E-04
804	ALL	481145.9	3668392	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.47E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.47E-05
805	ALL	481165.9	3668392	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.64E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.64E-05
806	ALL	481185.9	3668392	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.84E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.84E-05
807	ALL	481205.9	3668392	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.20E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.20E-05
808	ALL	481225.9	3668392	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.44E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.44E-05
809	ALL	481245.9	3668392	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.81E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.81E-05
810	ALL	481265.9	3668392	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.51E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.51E-05
811	ALL	481285.9	3668392	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.01E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.01E-04
812	ALL	481305.9	3668392	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.07E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.07E-04
813	ALL	481325.9	3668392	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.11E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.11E-04
814	ALL	481345.9	3668392	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.06E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.06E-04
815	ALL	481365.9	3668392	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.66E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.66E-05
816	ALL	481385.9	3668392	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.43E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.43E-05
817	ALL	481405.9	3668392	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.02E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.02E-04
818	ALL	481425.9	3668392	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.20E-04
819	ALL	481445.9	3668392	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.23E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.23E-04
820	ALL	481465.9	3668392	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.07E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.07E-04
821	ALL	481485.9	3668392	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.06E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.06E-04
822	ALL	481505.9	3668392	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.19E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.19E-04
823	ALL	481525.9	3668392	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.23E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.23E-04
824	ALL	481545.9	3668392	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.29E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.29E-04

825	ALL	481565.9	3668392	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.19E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.19E-04
826	ALL	481585.9	3668392	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.22E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.22E-04
827	ALL	481605.9	3668392	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.33E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.33E-04
828	ALL	481625.9	3668392	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.43E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.43E-04
829	ALL	481645.9	3668392	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.40E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.40E-04
830	ALL	481665.9	3668392	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.46E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.46E-04
831	ALL	481865.9	3668392	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.92E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.92E-05
832	ALL	481885.9	3668392	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.00E-05
833	ALL	481905.9	3668392	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.84E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.84E-05
834	ALL	481925.9	3668392	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.57E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.57E-05
835	ALL	481945.9	3668392	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.55E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.55E-05
836	ALL	481965.9	3668392	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.50E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.50E-05
837	ALL	481985.9	3668392	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.62E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.62E-05
838	ALL	482005.9	3668392	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.76E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.76E-05
839	ALL	482025.9	3668392	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.83E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.83E-05
840	ALL	482045.9	3668392	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.05E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.05E-05
841	ALL	482065.9	3668392	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.25E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.25E-05
842	ALL	482205.9	3668392	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.47E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.47E-05
843	ALL	482225.9	3668392	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.52E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.52E-05
844	ALL	482245.9	3668392	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.07E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.07E-04
845	ALL	482265.9	3668392	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.24E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.24E-04
846	ALL	482285.9	3668392	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.07E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.07E-04
847	ALL	482305.9	3668392	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.75E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.75E-04
848	ALL	482325.9	3668392	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.83E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.83E-04
849	ALL	482345.9	3668392	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.88E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.88E-04
850	ALL	482365.9	3668392	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.81E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.81E-04
851	ALL	482385.9	3668392	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.69E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.69E-04
852	ALL	482405.9	3668392	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.66E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.66E-04
853	ALL	482425.9	3668392	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.60E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.60E-04
854	ALL	482445.9	3668392	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.51E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.51E-04
855	ALL	482465.9	3668392	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.39E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.39E-04
856	ALL	482485.9	3668392	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.25E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.25E-04
857	ALL	482505.9	3668392	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.94E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.94E-04
858	ALL	482525.9	3668392	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.88E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.88E-04
859	ALL	482545.9	3668392	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.88E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.88E-04
860	ALL	482565.9	3668392	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.72E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.72E-04
861	ALL	482585.9	3668392	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.52E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.52E-04
862	ALL	482605.9	3668392	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.89E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.89E-04
863	ALL	482625.9	3668392	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.93E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.93E-04
864	ALL	482645.9	3668392	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.81E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.81E-04
865	ALL	482665.9	3668392	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.72E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.72E-04
866	ALL	482685.9	3668392	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.55E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.55E-04
867	ALL	482705.9	3668392	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.44E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.44E-04
868	ALL	482725.9	3668392	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.39E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.39E-04
869	ALL	482745.9	3668392	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.34E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.34E-04
870	ALL	482765.9	3668392	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.30E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.30E-04
871	ALL	482785.9	3668392	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.24E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.24E-04
872	ALL	482805.9	3668392	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.21E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.21E-04
873	ALL	482825.9	3668392	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.17E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.17E-04
874	ALL	482845.9	3668392	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.13E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.13E-04
875	ALL	482865.9	3668392	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.11E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.11E-04
876	ALL	482885.9	3668392	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.09E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.09E-04
877	ALL	482905.9	3668392	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.06E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.06E-04
878	ALL	482925.9	3668392	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.00E-04
879	ALL	481125.9	3668412	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.21E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.21E-05

880	ALL	481145.9	3668412	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.37E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.37E-05
881	ALL	481165.9	3668412	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.56E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.56E-05
882	ALL	481185.9	3668412	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.91E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.91E-05
883	ALL	481205.9	3668412	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.28E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.28E-05
884	ALL	481225.9	3668412	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.55E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.55E-05
885	ALL	481245.9	3668412	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.38E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.38E-05
886	ALL	481265.9	3668412	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.85E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.85E-05
887	ALL	481285.9	3668412	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.04E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.04E-04
888	ALL	481305.9	3668412	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.07E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.07E-04
889	ALL	481325.9	3668412	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.08E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.08E-04
890	ALL	481345.9	3668412	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.03E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.03E-04
891	ALL	481365.9	3668412	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.83E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.83E-05
892	ALL	481385.9	3668412	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.76E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.76E-05
893	ALL	481405.9	3668412	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.18E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.18E-04
894	ALL	481425.9	3668412	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.24E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.24E-04
895	ALL	481445.9	3668412	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.28E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.28E-04
896	ALL	481465.9	3668412	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.31E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.31E-04
897	ALL	481485.9	3668412	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.30E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.30E-04
898	ALL	481505.9	3668412	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.38E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.38E-04
899	ALL	481525.9	3668412	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.40E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.40E-04
900	ALL	481545.9	3668412	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.40E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.40E-04
901	ALL	481565.9	3668412	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.39E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.39E-04
902	ALL	481585.9	3668412	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.48E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.48E-04
903	ALL	481605.9	3668412	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.52E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.52E-04
904	ALL	481625.9	3668412	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.56E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.56E-04
905	ALL	481645.9	3668412	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.55E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.55E-04
906	ALL	481665.9	3668412	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.67E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.67E-04
907	ALL	481865.9	3668412	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.95E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.95E-05
908	ALL	481885.9	3668412	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.52E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.52E-05
909	ALL	481905.9	3668412	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.51E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.51E-05
910	ALL	481925.9	3668412	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.41E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.41E-05
911	ALL	481945.9	3668412	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.77E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.77E-05
912	ALL	481965.9	3668412	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.00E-05
913	ALL	481985.9	3668412	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.15E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.15E-05
914	ALL	482005.9	3668412	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.30E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.30E-05
915	ALL	482025.9	3668412	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.18E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.18E-05
916	ALL	482045.9	3668412	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.47E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.47E-05
917	ALL	482065.9	3668412	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.61E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.61E-05
918	ALL	482085.9	3668412	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.72E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.72E-05
919	ALL	482185.9	3668412	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.15E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.15E-05
920	ALL	482205.9	3668412	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.28E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.28E-05
921	ALL	482225.9	3668412	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.83E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.83E-05
922	ALL	482245.9	3668412	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.82E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.82E-05
923	ALL	482265.9	3668412	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.03E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.03E-04
924	ALL	482285.9	3668412	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.78E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.78E-04
925	ALL	482305.9	3668412	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.51E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.51E-04
926	ALL	482325.9	3668412	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.52E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.52E-04
927	ALL	482345.9	3668412	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.59E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.59E-04
928	ALL	482365.9	3668412	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.30E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.30E-04
929	ALL	482385.9	3668412	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.30E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.30E-04
930	ALL	482405.9	3668412	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.28E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.28E-04
931	ALL	482425.9	3668412	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.21E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.21E-04
932	ALL	482445.9	3668412	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.00E-04
933	ALL	482465.9	3668412	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.81E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.81E-04
934	ALL	482485.9	3668412	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.77E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.77E-04

935	ALL	482505.9	3668412	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.66E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.66E-04
936	ALL	482525.9	3668412	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.58E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.58E-04
937	ALL	482545.9	3668412	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.65E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.65E-04
938	ALL	482565.9	3668412	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.50E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.50E-04
939	ALL	482585.9	3668412	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.27E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.27E-04
940	ALL	482605.9	3668412	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.73E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.73E-04
941	ALL	482625.9	3668412	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.77E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.77E-04
942	ALL	482645.9	3668412	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.72E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.72E-04
943	ALL	482665.9	3668412	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.60E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.60E-04
944	ALL	482685.9	3668412	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.46E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.46E-04
945	ALL	482705.9	3668412	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.33E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.33E-04
946	ALL	482725.9	3668412	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.28E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.28E-04
947	ALL	482745.9	3668412	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.23E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.23E-04
948	ALL	482765.9	3668412	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.11E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.11E-04
949	ALL	482785.9	3668412	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.06E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.06E-04
950	ALL	482805.9	3668412	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.04E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.04E-04
951	ALL	482825.9	3668412	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.05E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.05E-04
952	ALL	482845.9	3668412	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.05E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.05E-04
953	ALL	482865.9	3668412	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.02E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.02E-04
954	ALL	482885.9	3668412	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.01E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.01E-04
955	ALL	482905.9	3668412	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.77E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.77E-05
956	ALL	481105.9	3668432	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.96E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.96E-05
957	ALL	481125.9	3668432	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.12E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.12E-05
958	ALL	481145.9	3668432	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.30E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.30E-05
959	ALL	481165.9	3668432	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.53E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.53E-05
960	ALL	481185.9	3668432	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.81E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.81E-05
961	ALL	481205.9	3668432	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.12E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.12E-05
962	ALL	481225.9	3668432	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.50E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.50E-05
963	ALL	481245.9	3668432	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.57E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.57E-05
964	ALL	481265.9	3668432	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.01E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.01E-04
965	ALL	481285.9	3668432	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.03E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.03E-04
966	ALL	481305.9	3668432	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.05E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.05E-04
967	ALL	481325.9	3668432	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.07E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.07E-04
968	ALL	481345.9	3668432	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.08E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.08E-04
969	ALL	481365.9	3668432	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.11E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.11E-04
970	ALL	481385.9	3668432	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.07E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.07E-04
971	ALL	481405.9	3668432	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.19E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.19E-04
972	ALL	481425.9	3668432	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.23E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.23E-04
973	ALL	481445.9	3668432	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.25E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.25E-04
974	ALL	481465.9	3668432	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.25E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.25E-04
975	ALL	481485.9	3668432	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.30E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.30E-04
976	ALL	481505.9	3668432	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.35E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.35E-04
977	ALL	481525.9	3668432	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.39E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.39E-04
978	ALL	481545.9	3668432	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.41E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.41E-04
979	ALL	481565.9	3668432	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.41E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.41E-04
980	ALL	481585.9	3668432	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.48E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.48E-04
981	ALL	481605.9	3668432	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.51E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.51E-04
982	ALL	481625.9	3668432	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.54E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.54E-04
983	ALL	481645.9	3668432	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.55E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.55E-04
984	ALL	481865.9	3668432	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.18E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.18E-05
985	ALL	481885.9	3668432	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.04E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.04E-05
986	ALL	481905.9	3668432	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.77E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.77E-05
987	ALL	481925.9	3668432	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.96E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.96E-05
988	ALL	481945.9	3668432	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.32E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.32E-05
989	ALL	481965.9	3668432	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.48E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.48E-05

990	ALL	481985.9	3668432	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.61E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.61E-05
991	ALL	482005.9	3668432	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.48E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.48E-05
992	ALL	482025.9	3668432	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.63E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.63E-05
993	ALL	482045.9	3668432	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.97E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.97E-05
994	ALL	482065.9	3668432	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.02E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.02E-05
995	ALL	482085.9	3668432	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.96E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.96E-05
996	ALL	482185.9	3668432	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.43E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.43E-05
997	ALL	482205.9	3668432	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.72E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.72E-05
998	ALL	482225.9	3668432	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.81E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.81E-05
999	ALL	482245.9	3668432	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.98E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.98E-05
1000	ALL	482265.9	3668432	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.42E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.42E-05
1001	ALL	482285.9	3668432	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.40E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.40E-04
1002	ALL	482305.9	3668432	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.25E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.25E-04
1003	ALL	482325.9	3668432	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.25E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.25E-04
1004	ALL	482345.9	3668432	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.34E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.34E-04
1005	ALL	482365.9	3668432	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.08E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.08E-04
1006	ALL	482385.9	3668432	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.13E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.13E-04
1007	ALL	482405.9	3668432	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.17E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.17E-04
1008	ALL	482425.9	3668432	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.13E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.13E-04
1009	ALL	482445.9	3668432	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.06E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.06E-04
1010	ALL	482465.9	3668432	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.00E-04
1011	ALL	482485.9	3668432	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.90E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.90E-04
1012	ALL	482505.9	3668432	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.60E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.60E-04
1013	ALL	482525.9	3668432	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.50E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.50E-04
1014	ALL	482545.9	3668432	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.45E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.45E-04
1015	ALL	482565.9	3668432	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.32E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.32E-04
1016	ALL	482585.9	3668432	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.02E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.02E-04
1017	ALL	482605.9	3668432	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.59E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.59E-04
1018	ALL	482625.9	3668432	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.63E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.63E-04
1019	ALL	482645.9	3668432	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.63E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.63E-04
1020	ALL	482665.9	3668432	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.51E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.51E-04
1021	ALL	482685.9	3668432	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.38E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.38E-04
1022	ALL	482705.9	3668432	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.26E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.26E-04
1023	ALL	482725.9	3668432	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.19E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.19E-04
1024	ALL	482745.9	3668432	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.07E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.07E-04
1025	ALL	482825.9	3668432	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.41E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.41E-05
1026	ALL	482845.9	3668432	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.59E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.59E-05
1027	ALL	482865.9	3668432	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.56E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.56E-05
1028	ALL	482885.9	3668432	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.43E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.43E-05
1029	ALL	481085.9	3668452	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.73E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.73E-05
1030	ALL	481105.9	3668452	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.88E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.88E-05
1031	ALL	481125.9	3668452	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.06E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.06E-05
1032	ALL	481145.9	3668452	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.24E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.24E-05
1033	ALL	481165.9	3668452	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.45E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.45E-05
1034	ALL	481185.9	3668452	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.68E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.68E-05
1035	ALL	481205.9	3668452	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.96E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.96E-05
1036	ALL	481225.9	3668452	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.22E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.22E-05
1037	ALL	481245.9	3668452	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.86E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.86E-05
1038	ALL	481265.9	3668452	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.00E-04
1039	ALL	481285.9	3668452	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.01E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.01E-04
1040	ALL	481305.9	3668452	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.03E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.03E-04
1041	ALL	481325.9	3668452	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.08E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.08E-04
1042	ALL	481345.9	3668452	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.10E-04
1043	ALL	481365.9	3668452	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.13E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.13E-04
1044	ALL	481385.9	3668452	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.16E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.16E-04

1045	ALL	481405.9	3668452	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.19E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.19E-04
1046	ALL	481425.9	3668452	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.21E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.21E-04
1047	ALL	481445.9	3668452	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.17E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.17E-04
1048	ALL	481465.9	3668452	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.20E-04
1049	ALL	481485.9	3668452	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.22E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.22E-04
1050	ALL	481505.9	3668452	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.29E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.29E-04
1051	ALL	481525.9	3668452	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.34E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.34E-04
1052	ALL	481545.9	3668452	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.38E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.38E-04
1053	ALL	481565.9	3668452	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.35E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.35E-04
1054	ALL	481585.9	3668452	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.39E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.39E-04
1055	ALL	481605.9	3668452	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.44E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.44E-04
1056	ALL	481625.9	3668452	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.49E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.49E-04
1057	ALL	481885.9	3668452	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.47E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.47E-05
1058	ALL	481905.9	3668452	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.48E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.48E-05
1059	ALL	481925.9	3668452	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.72E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.72E-05
1060	ALL	481945.9	3668452	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.86E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.86E-05
1061	ALL	481965.9	3668452	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.02E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.02E-05
1062	ALL	481985.9	3668452	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.87E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.87E-05
1063	ALL	482005.9	3668452	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.02E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.02E-05
1064	ALL	482025.9	3668452	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.28E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.28E-05
1065	ALL	482045.9	3668452	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.47E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.47E-05
1066	ALL	482065.9	3668452	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.48E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.48E-05
1067	ALL	482165.9	3668452	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.20E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.20E-05
1068	ALL	482185.9	3668452	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.87E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.87E-05
1069	ALL	482205.9	3668452	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.09E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.09E-05
1070	ALL	482225.9	3668452	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.36E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.36E-05
1071	ALL	482245.9	3668452	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.43E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.43E-05
1072	ALL	482265.9	3668452	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.63E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.63E-05
1073	ALL	482285.9	3668452	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.32E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.32E-04
1074	ALL	482305.9	3668452	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.98E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.98E-04
1075	ALL	482325.9	3668452	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.00E-04
1076	ALL	482345.9	3668452	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.10E-04
1077	ALL	482365.9	3668452	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.86E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.86E-04
1078	ALL	482385.9	3668452	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.91E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.91E-04
1079	ALL	482405.9	3668452	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.95E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.95E-04
1080	ALL	482425.9	3668452	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.80E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.80E-04
1081	ALL	482445.9	3668452	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.74E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.74E-04
1082	ALL	482465.9	3668452	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.48E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.48E-04
1083	ALL	482485.9	3668452	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.41E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.41E-04
1084	ALL	482505.9	3668452	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.36E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.36E-04
1085	ALL	482525.9	3668452	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.28E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.28E-04
1086	ALL	482545.9	3668452	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.27E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.27E-04
1087	ALL	482565.9	3668452	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.13E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.13E-04
1088	ALL	482585.9	3668452	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.83E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.83E-04
1089	ALL	482605.9	3668452	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.47E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.47E-04
1090	ALL	482625.9	3668452	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.51E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.51E-04
1091	ALL	482645.9	3668452	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.46E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.46E-04
1092	ALL	482665.9	3668452	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.29E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.29E-04
1093	ALL	482685.9	3668452	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.25E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.25E-04
1094	ALL	482705.9	3668452	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.16E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.16E-04
1095	ALL	482725.9	3668452	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.06E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.06E-04
1096	ALL	482745.9	3668452	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.47E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.47E-05
1097	ALL	482885.9	3668452	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.80E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.80E-05
1098	ALL	481065.9	3668472	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.51E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.51E-05
1099	ALL	481085.9	3668472	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.65E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.65E-05

1100	ALL	481105.9	3668472	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.81E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.81E-05
1101	ALL	481125.9	3668472	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.97E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.97E-05
1102	ALL	481145.9	3668472	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.15E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.15E-05
1103	ALL	481165.9	3668472	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.34E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.34E-05
1104	ALL	481185.9	3668472	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.63E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.63E-05
1105	ALL	481205.9	3668472	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.87E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.87E-05
1106	ALL	481225.9	3668472	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.06E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.06E-05
1107	ALL	481245.9	3668472	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.47E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.47E-05
1108	ALL	481265.9	3668472	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.00E-05
1109	ALL	481285.9	3668472	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.50E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.50E-05
1110	ALL	481305.9	3668472	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.57E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.57E-05
1111	ALL	481325.9	3668472	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.57E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.57E-05
1112	ALL	481345.9	3668472	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.00E-04
1113	ALL	481365.9	3668472	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.03E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.03E-04
1114	ALL	481385.9	3668472	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.07E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.07E-04
1115	ALL	481405.9	3668472	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.10E-04
1116	ALL	481425.9	3668472	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.13E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.13E-04
1117	ALL	481445.9	3668472	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.13E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.13E-04
1118	ALL	481465.9	3668472	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.14E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.14E-04
1119	ALL	481485.9	3668472	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.19E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.19E-04
1120	ALL	481505.9	3668472	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.23E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.23E-04
1121	ALL	481525.9	3668472	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.31E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.31E-04
1122	ALL	481545.9	3668472	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.21E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.21E-04
1123	ALL	481565.9	3668472	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.23E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.23E-04
1124	ALL	481585.9	3668472	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.28E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.28E-04
1125	ALL	481605.9	3668472	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.34E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.34E-04
1126	ALL	481625.9	3668472	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.35E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.35E-04
1127	ALL	481885.9	3668472	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.13E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.13E-05
1128	ALL	481905.9	3668472	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.27E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.27E-05
1129	ALL	481925.9	3668472	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.32E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.32E-05
1130	ALL	481945.9	3668472	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.51E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.51E-05
1131	ALL	481965.9	3668472	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.38E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.38E-05
1132	ALL	481985.9	3668472	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.53E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.53E-05
1133	ALL	482005.9	3668472	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.70E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.70E-05
1134	ALL	482025.9	3668472	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.89E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.89E-05
1135	ALL	482045.9	3668472	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.93E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.93E-05
1136	ALL	482065.9	3668472	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.00E-05
1137	ALL	482145.9	3668472	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.39E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.39E-05
1138	ALL	482165.9	3668472	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.71E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.71E-05
1139	ALL	482185.9	3668472	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.13E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.13E-05
1140	ALL	482205.9	3668472	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.60E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.60E-05
1141	ALL	482225.9	3668472	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.88E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.88E-05
1142	ALL	482245.9	3668472	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.91E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.91E-05
1143	ALL	482265.9	3668472	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.10E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.10E-05
1144	ALL	482285.9	3668472	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.16E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.16E-04
1145	ALL	482305.9	3668472	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.75E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.75E-04
1146	ALL	482325.9	3668472	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.75E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.75E-04
1147	ALL	482345.9	3668472	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.90E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.90E-04
1148	ALL	482365.9	3668472	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.66E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.66E-04
1149	ALL	482385.9	3668472	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.67E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.67E-04
1150	ALL	482405.9	3668472	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.67E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.67E-04
1151	ALL	482425.9	3668472	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.49E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.49E-04
1152	ALL	482445.9	3668472	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.32E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.32E-04
1153	ALL	482465.9	3668472	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.27E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.27E-04
1154	ALL	482485.9	3668472	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.20E-04

1155	ALL	482505.9	3668472	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.15E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.15E-04
1156	ALL	482525.9	3668472	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.07E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.07E-04
1157	ALL	482545.9	3668472	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.10E-04
1158	ALL	482565.9	3668472	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.95E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.95E-04
1159	ALL	482585.9	3668472	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.59E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.59E-04
1160	ALL	482605.9	3668472	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.30E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.30E-04
1161	ALL	482625.9	3668472	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.36E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.36E-04
1162	ALL	482645.9	3668472	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.32E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.32E-04
1163	ALL	482665.9	3668472	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.23E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.23E-04
1164	ALL	482685.9	3668472	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.11E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.11E-04
1165	ALL	482705.9	3668472	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.05E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.05E-04
1166	ALL	482725.9	3668472	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.25E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.25E-05
1167	ALL	481045.9	3668492	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.31E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.31E-05
1168	ALL	481065.9	3668492	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.43E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.43E-05
1169	ALL	481085.9	3668492	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.58E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.58E-05
1170	ALL	481105.9	3668492	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.73E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.73E-05
1171	ALL	481125.9	3668492	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.89E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.89E-05
1172	ALL	481145.9	3668492	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.05E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.05E-05
1173	ALL	481165.9	3668492	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.25E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.25E-05
1174	ALL	481185.9	3668492	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.51E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.51E-05
1175	ALL	481205.9	3668492	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.80E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.80E-05
1176	ALL	481225.9	3668492	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.96E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.96E-05
1177	ALL	481245.9	3668492	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.15E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.15E-05
1178	ALL	481265.9	3668492	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.45E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.45E-05
1179	ALL	481285.9	3668492	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.69E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.69E-05
1180	ALL	481305.9	3668492	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.87E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.87E-05
1181	ALL	481325.9	3668492	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.08E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.08E-05
1182	ALL	481345.9	3668492	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.36E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.36E-05
1183	ALL	481365.9	3668492	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.35E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.35E-05
1184	ALL	481385.9	3668492	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.63E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.63E-05
1185	ALL	481405.9	3668492	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.86E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.86E-05
1186	ALL	481425.9	3668492	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.02E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.02E-04
1187	ALL	481445.9	3668492	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.06E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.06E-04
1188	ALL	481465.9	3668492	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.11E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.11E-04
1189	ALL	481485.9	3668492	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.15E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.15E-04
1190	ALL	481505.9	3668492	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.15E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.15E-04
1191	ALL	481525.9	3668492	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.11E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.11E-04
1192	ALL	481545.9	3668492	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.13E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.13E-04
1193	ALL	481565.9	3668492	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.16E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.16E-04
1194	ALL	481585.9	3668492	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.20E-04
1195	ALL	481605.9	3668492	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.26E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.26E-04
1196	ALL	481885.9	3668492	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.96E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.96E-05
1197	ALL	481905.9	3668492	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.02E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.02E-05
1198	ALL	481925.9	3668492	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.12E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.12E-05
1199	ALL	481945.9	3668492	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.01E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.01E-05
1200	ALL	481965.9	3668492	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.11E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.11E-05
1201	ALL	481985.9	3668492	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.23E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.23E-05
1202	ALL	482005.9	3668492	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.36E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.36E-05
1203	ALL	482025.9	3668492	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.46E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.46E-05
1204	ALL	482045.9	3668492	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.54E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.54E-05
1205	ALL	482125.9	3668492	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.93E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.93E-05
1206	ALL	482145.9	3668492	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.99E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.99E-05
1207	ALL	482165.9	3668492	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.23E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.23E-05
1208	ALL	482185.9	3668492	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.65E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.65E-05
1209	ALL	482205.9	3668492	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.20E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.20E-05

1210	ALL	482225.9	3668492	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.41E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.41E-05
1211	ALL	482245.9	3668492	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.51E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.51E-05
1212	ALL	482265.9	3668492	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.59E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.59E-05
1213	ALL	482285.9	3668492	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.31E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.31E-05
1214	ALL	482305.9	3668492	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.49E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.49E-04
1215	ALL	482325.9	3668492	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.55E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.55E-04
1216	ALL	482345.9	3668492	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.69E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.69E-04
1217	ALL	482365.9	3668492	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.96E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.96E-04
1218	ALL	482385.9	3668492	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.96E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.96E-04
1219	ALL	482405.9	3668492	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.94E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.94E-04
1220	ALL	482425.9	3668492	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.91E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.91E-04
1221	ALL	482445.9	3668492	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.90E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.90E-04
1222	ALL	482465.9	3668492	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.87E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.87E-04
1223	ALL	482485.9	3668492	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.85E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.85E-04
1224	ALL	482505.9	3668492	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.80E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.80E-04
1225	ALL	482525.9	3668492	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.78E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.78E-04
1226	ALL	482545.9	3668492	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.92E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.92E-04
1227	ALL	482565.9	3668492	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.79E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.79E-04
1228	ALL	482585.9	3668492	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.40E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.40E-04
1229	ALL	482605.9	3668492	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.15E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.15E-04
1230	ALL	482625.9	3668492	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.20E-04
1231	ALL	482645.9	3668492	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.18E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.18E-04
1232	ALL	482665.9	3668492	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.16E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.16E-04
1233	ALL	482685.9	3668492	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.04E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.04E-04
1234	ALL	482705.9	3668492	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.06E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.06E-05
1235	ALL	481025.9	3668512	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.14E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.14E-05
1236	ALL	481045.9	3668512	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.25E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.25E-05
1237	ALL	481065.9	3668512	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.37E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.37E-05
1238	ALL	481085.9	3668512	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.51E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.51E-05
1239	ALL	481105.9	3668512	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.66E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.66E-05
1240	ALL	481125.9	3668512	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.81E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.81E-05
1241	ALL	481145.9	3668512	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.00E-05
1242	ALL	481165.9	3668512	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.15E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.15E-05
1243	ALL	481185.9	3668512	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.38E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.38E-05
1244	ALL	481205.9	3668512	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.58E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.58E-05
1245	ALL	481225.9	3668512	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.80E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.80E-05
1246	ALL	481245.9	3668512	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.97E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.97E-05
1247	ALL	481265.9	3668512	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.17E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.17E-05
1248	ALL	481285.9	3668512	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.41E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.41E-05
1249	ALL	481305.9	3668512	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.52E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.52E-05
1250	ALL	481325.9	3668512	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.65E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.65E-05
1251	ALL	481345.9	3668512	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.86E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.86E-05
1252	ALL	481365.9	3668512	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.07E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.07E-05
1253	ALL	481385.9	3668512	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.30E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.30E-05
1254	ALL	481405.9	3668512	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.57E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.57E-05
1255	ALL	481425.9	3668512	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.96E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.96E-05
1256	ALL	481445.9	3668512	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.02E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.02E-04
1257	ALL	481465.9	3668512	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.07E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.07E-04
1258	ALL	481485.9	3668512	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.02E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.02E-04
1259	ALL	481505.9	3668512	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.02E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.02E-04
1260	ALL	481525.9	3668512	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.04E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.04E-04
1261	ALL	481545.9	3668512	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.07E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.07E-04
1262	ALL	481565.9	3668512	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.10E-04
1263	ALL	481585.9	3668512	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.16E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.16E-04
1264	ALL	481905.9	3668512	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.83E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.83E-05

1265	ALL	481925.9	3668512	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.78E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.78E-05
1266	ALL	481945.9	3668512	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.81E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.81E-05
1267	ALL	481965.9	3668512	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.86E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.86E-05
1268	ALL	481985.9	3668512	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.99E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.99E-05
1269	ALL	482005.9	3668512	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.07E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.07E-05
1270	ALL	482025.9	3668512	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.13E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.13E-05
1271	ALL	482105.9	3668512	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.47E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.47E-05
1272	ALL	482125.9	3668512	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.61E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.61E-05
1273	ALL	482145.9	3668512	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.74E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.74E-05
1274	ALL	482165.9	3668512	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.82E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.82E-05
1275	ALL	482185.9	3668512	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.08E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.08E-05
1276	ALL	482205.9	3668512	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.83E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.83E-05
1277	ALL	482225.9	3668512	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.99E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.99E-05
1278	ALL	482245.9	3668512	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.14E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.14E-05
1279	ALL	482265.9	3668512	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.18E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.18E-05
1280	ALL	482285.9	3668512	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.97E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.97E-05
1281	ALL	482305.9	3668512	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.20E-04
1282	ALL	482325.9	3668512	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.35E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.35E-04
1283	ALL	482345.9	3668512	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.49E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.49E-04
1284	ALL	482365.9	3668512	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.87E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.87E-04
1285	ALL	482385.9	3668512	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.86E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.86E-04
1286	ALL	482405.9	3668512	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.82E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.82E-04
1287	ALL	482425.9	3668512	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.85E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.85E-04
1288	ALL	482445.9	3668512	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.87E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.87E-04
1289	ALL	482465.9	3668512	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.86E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.86E-04
1290	ALL	482485.9	3668512	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.84E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.84E-04
1291	ALL	482505.9	3668512	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.78E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.78E-04
1292	ALL	482525.9	3668512	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.77E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.77E-04
1293	ALL	482545.9	3668512	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.74E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.74E-04
1294	ALL	482565.9	3668512	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.63E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.63E-04
1295	ALL	482585.9	3668512	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.21E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.21E-04
1296	ALL	482605.9	3668512	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.02E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.02E-04
1297	ALL	482625.9	3668512	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.06E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.06E-04
1298	ALL	482645.9	3668512	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.07E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.07E-04
1299	ALL	482665.9	3668512	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.04E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.04E-04
1300	ALL	482685.9	3668512	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.54E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.54E-05
1301	ALL	482705.9	3668512	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.31E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.31E-05
1302	ALL	482885.9	3668512	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.13E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.13E-05
1303	ALL	482905.9	3668512	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.11E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.11E-05
1304	ALL	482925.9	3668512	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.05E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.05E-05
1305	ALL	481045.9	3668532	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.20E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.20E-05
1306	ALL	481065.9	3668532	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.31E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.31E-05
1307	ALL	481085.9	3668532	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.45E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.45E-05
1308	ALL	481105.9	3668532	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.59E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.59E-05
1309	ALL	481125.9	3668532	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.74E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.74E-05
1310	ALL	481145.9	3668532	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.90E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.90E-05
1311	ALL	481165.9	3668532	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.08E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.08E-05
1312	ALL	481185.9	3668532	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.23E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.23E-05
1313	ALL	481205.9	3668532	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.44E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.44E-05
1314	ALL	481225.9	3668532	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.63E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.63E-05
1315	ALL	481245.9	3668532	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.79E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.79E-05
1316	ALL	481265.9	3668532	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.98E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.98E-05
1317	ALL	481285.9	3668532	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.11E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.11E-05
1318	ALL	481305.9	3668532	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.26E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.26E-05
1319	ALL	481325.9	3668532	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.45E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.45E-05

1320	ALL	481345.9	3668532	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.65E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.65E-05
1321	ALL	481365.9	3668532	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.85E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.85E-05
1322	ALL	481385.9	3668532	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.10E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.10E-05
1323	ALL	481405.9	3668532	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.42E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.42E-05
1324	ALL	481425.9	3668532	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.62E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.62E-05
1325	ALL	481445.9	3668532	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.55E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.55E-05
1326	ALL	481465.9	3668532	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.53E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.53E-05
1327	ALL	481485.9	3668532	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.67E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.67E-05
1328	ALL	481505.9	3668532	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.80E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.80E-05
1329	ALL	481525.9	3668532	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.00E-04
1330	ALL	481545.9	3668532	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.03E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.03E-04
1331	ALL	481565.9	3668532	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.06E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.06E-04
1332	ALL	481905.9	3668532	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.64E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.64E-05
1333	ALL	481925.9	3668532	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.53E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.53E-05
1334	ALL	481945.9	3668532	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.55E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.55E-05
1335	ALL	481965.9	3668532	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.66E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.66E-05
1336	ALL	481985.9	3668532	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.69E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.69E-05
1337	ALL	482005.9	3668532	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.79E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.79E-05
1338	ALL	482105.9	3668532	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.24E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.24E-05
1339	ALL	482125.9	3668532	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.37E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.37E-05
1340	ALL	482145.9	3668532	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.49E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.49E-05
1341	ALL	482165.9	3668532	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.57E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.57E-05
1342	ALL	482185.9	3668532	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.73E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.73E-05
1343	ALL	482205.9	3668532	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.44E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.44E-05
1344	ALL	482225.9	3668532	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.63E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.63E-05
1345	ALL	482245.9	3668532	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.79E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.79E-05
1346	ALL	482265.9	3668532	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.83E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.83E-05
1347	ALL	482285.9	3668532	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.06E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.06E-05
1348	ALL	482305.9	3668532	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.74E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.74E-04
1349	ALL	482325.9	3668532	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.19E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.19E-04
1350	ALL	482345.9	3668532	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.31E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.31E-04
1351	ALL	482365.9	3668532	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.85E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.85E-04
1352	ALL	482385.9	3668532	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.81E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.81E-04
1353	ALL	482405.9	3668532	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.82E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.82E-04
1354	ALL	482425.9	3668532	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.80E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.80E-04
1355	ALL	482445.9	3668532	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.75E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.75E-04
1356	ALL	482465.9	3668532	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.71E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.71E-04
1357	ALL	482485.9	3668532	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.71E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.71E-04
1358	ALL	482505.9	3668532	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.66E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.66E-04
1359	ALL	482525.9	3668532	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.64E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.64E-04
1360	ALL	482545.9	3668532	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.54E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.54E-04
1361	ALL	482565.9	3668532	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.48E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.48E-04
1362	ALL	482585.9	3668532	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.03E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.03E-04
1363	ALL	482605.9	3668532	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.22E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.22E-05
1364	ALL	482625.9	3668532	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.49E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.49E-05
1365	ALL	482645.9	3668532	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.53E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.53E-05
1366	ALL	482665.9	3668532	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.28E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.28E-05
1367	ALL	482685.9	3668532	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.44E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.44E-05
1368	ALL	482705.9	3668532	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.61E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.61E-05
1369	ALL	482845.9	3668532	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.89E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.89E-05
1370	ALL	482865.9	3668532	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.83E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.83E-05
1371	ALL	482885.9	3668532	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.77E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.77E-05
1372	ALL	482905.9	3668532	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.72E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.72E-05
1373	ALL	482925.9	3668532	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.68E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.68E-05
1374	ALL	482945.9	3668532	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.64E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.64E-05

1375	ALL	481045.9	3668552	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.14E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.14E-05
1376	ALL	481065.9	3668552	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.26E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.26E-05
1377	ALL	481085.9	3668552	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.39E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.39E-05
1378	ALL	481105.9	3668552	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.54E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.54E-05
1379	ALL	481125.9	3668552	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.68E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.68E-05
1380	ALL	481145.9	3668552	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.82E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.82E-05
1381	ALL	481165.9	3668552	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.01E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.01E-05
1382	ALL	481185.9	3668552	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.14E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.14E-05
1383	ALL	481205.9	3668552	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.29E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.29E-05
1384	ALL	481225.9	3668552	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.51E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.51E-05
1385	ALL	481245.9	3668552	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.64E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.64E-05
1386	ALL	481265.9	3668552	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.80E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.80E-05
1387	ALL	481285.9	3668552	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.95E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.95E-05
1388	ALL	481305.9	3668552	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.09E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.09E-05
1389	ALL	481325.9	3668552	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.27E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.27E-05
1390	ALL	481345.9	3668552	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.47E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.47E-05
1391	ALL	481365.9	3668552	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.61E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.61E-05
1392	ALL	481385.9	3668552	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.89E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.89E-05
1393	ALL	481405.9	3668552	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.93E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.93E-05
1394	ALL	481425.9	3668552	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.98E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.98E-05
1395	ALL	481445.9	3668552	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.08E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.08E-05
1396	ALL	481465.9	3668552	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.19E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.19E-05
1397	ALL	481485.9	3668552	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.31E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.31E-05
1398	ALL	481505.9	3668552	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.47E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.47E-05
1399	ALL	481525.9	3668552	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.65E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.65E-05
1400	ALL	481905.9	3668552	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.30E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.30E-05
1401	ALL	481925.9	3668552	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.33E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.33E-05
1402	ALL	481945.9	3668552	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.35E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.35E-05
1403	ALL	481965.9	3668552	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.37E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.37E-05
1404	ALL	481985.9	3668552	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.49E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.49E-05
1405	ALL	482085.9	3668552	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.76E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.76E-05
1406	ALL	482105.9	3668552	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.87E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.87E-05
1407	ALL	482125.9	3668552	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.16E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.16E-05
1408	ALL	482145.9	3668552	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.27E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.27E-05
1409	ALL	482165.9	3668552	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.35E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.35E-05
1410	ALL	482185.9	3668552	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.46E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.46E-05
1411	ALL	482205.9	3668552	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.05E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.05E-05
1412	ALL	482225.9	3668552	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.35E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.35E-05
1413	ALL	482245.9	3668552	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.50E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.50E-05
1414	ALL	482265.9	3668552	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.54E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.54E-05
1415	ALL	482285.9	3668552	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.94E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.94E-05
1416	ALL	482305.9	3668552	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.22E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.22E-04
1417	ALL	482325.9	3668552	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.88E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.88E-04
1418	ALL	482345.9	3668552	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.03E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.03E-04
1419	ALL	482365.9	3668552	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.78E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.78E-04
1420	ALL	482385.9	3668552	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.67E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.67E-04
1421	ALL	482405.9	3668552	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.63E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.63E-04
1422	ALL	482425.9	3668552	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.62E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.62E-04
1423	ALL	482445.9	3668552	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.61E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.61E-04
1424	ALL	482465.9	3668552	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.60E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.60E-04
1425	ALL	482485.9	3668552	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.58E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.58E-04
1426	ALL	482505.9	3668552	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.52E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.52E-04
1427	ALL	482525.9	3668552	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.48E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.48E-04
1428	ALL	482545.9	3668552	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.38E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.38E-04
1429	ALL	482565.9	3668552	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.35E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.35E-04

1430	ALL	482585.9	3668552	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.97E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.97E-05
1431	ALL	482605.9	3668552	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.30E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.30E-05
1432	ALL	482625.9	3668552	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.56E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.56E-05
1433	ALL	482645.9	3668552	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.64E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.64E-05
1434	ALL	482665.9	3668552	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.50E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.50E-05
1435	ALL	482685.9	3668552	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.66E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.66E-05
1436	ALL	482785.9	3668552	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.63E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.63E-05
1437	ALL	482805.9	3668552	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.60E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.60E-05
1438	ALL	482825.9	3668552	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.56E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.56E-05
1439	ALL	482845.9	3668552	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.52E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.52E-05
1440	ALL	482865.9	3668552	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.47E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.47E-05
1441	ALL	482885.9	3668552	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.42E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.42E-05
1442	ALL	482905.9	3668552	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.38E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.38E-05
1443	ALL	482925.9	3668552	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.34E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.34E-05
1444	ALL	482945.9	3668552	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.31E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.31E-05
1445	ALL	482965.9	3668552	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.26E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.26E-05
1446	ALL	481065.9	3668572	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.22E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.22E-05
1447	ALL	481085.9	3668572	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.34E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.34E-05
1448	ALL	481105.9	3668572	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.47E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.47E-05
1449	ALL	481125.9	3668572	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.62E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.62E-05
1450	ALL	481145.9	3668572	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.75E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.75E-05
1451	ALL	481165.9	3668572	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.90E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.90E-05
1452	ALL	481185.9	3668572	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.05E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.05E-05
1453	ALL	481205.9	3668572	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.19E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.19E-05
1454	ALL	481225.9	3668572	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.37E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.37E-05
1455	ALL	481245.9	3668572	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.51E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.51E-05
1456	ALL	481265.9	3668572	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.65E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.65E-05
1457	ALL	481285.9	3668572	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.79E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.79E-05
1458	ALL	481305.9	3668572	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.90E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.90E-05
1459	ALL	481325.9	3668572	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.04E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.04E-05
1460	ALL	481345.9	3668572	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.26E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.26E-05
1461	ALL	481365.9	3668572	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.35E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.35E-05
1462	ALL	481385.9	3668572	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.42E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.42E-05
1463	ALL	481405.9	3668572	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.52E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.52E-05
1464	ALL	481425.9	3668572	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.67E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.67E-05
1465	ALL	481445.9	3668572	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.78E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.78E-05
1466	ALL	481465.9	3668572	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.91E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.91E-05
1467	ALL	481485.9	3668572	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.04E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.04E-05
1468	ALL	481505.9	3668572	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.14E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.14E-05
1469	ALL	481905.9	3668572	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.09E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.09E-05
1470	ALL	481925.9	3668572	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.11E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.11E-05
1471	ALL	481945.9	3668572	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.17E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.17E-05
1472	ALL	481965.9	3668572	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.16E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.16E-05
1473	ALL	481985.9	3668572	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.19E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.19E-05
1474	ALL	482085.9	3668572	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.58E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.58E-05
1475	ALL	482105.9	3668572	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.65E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.65E-05
1476	ALL	482125.9	3668572	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.96E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.96E-05
1477	ALL	482145.9	3668572	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.06E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.06E-05
1478	ALL	482165.9	3668572	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.16E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.16E-05
1479	ALL	482185.9	3668572	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.23E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.23E-05
1480	ALL	482205.9	3668572	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.70E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.70E-05
1481	ALL	482225.9	3668572	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.08E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.08E-05
1482	ALL	482245.9	3668572	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.30E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.30E-05
1483	ALL	482265.9	3668572	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.32E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.32E-05
1484	ALL	482285.9	3668572	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.44E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.44E-05

1485	ALL	482305.9	3668572	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.88E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.88E-05
1486	ALL	482325.9	3668572	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.67E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.67E-04
1487	ALL	482345.9	3668572	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.69E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.69E-04
1488	ALL	482365.9	3668572	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.99E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.99E-04
1489	ALL	482385.9	3668572	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.55E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.55E-04
1490	ALL	482405.9	3668572	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.48E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.48E-04
1491	ALL	482425.9	3668572	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.41E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.41E-04
1492	ALL	482445.9	3668572	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.31E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.31E-04
1493	ALL	482465.9	3668572	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.29E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.29E-04
1494	ALL	482485.9	3668572	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.25E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.25E-04
1495	ALL	482505.9	3668572	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.22E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.22E-04
1496	ALL	482525.9	3668572	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.30E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.30E-04
1497	ALL	482545.9	3668572	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.26E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.26E-04
1498	ALL	482565.9	3668572	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.21E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.21E-04
1499	ALL	482585.9	3668572	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.89E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.89E-05
1500	ALL	482605.9	3668572	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.61E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.61E-05
1501	ALL	482625.9	3668572	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.86E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.86E-05
1502	ALL	482645.9	3668572	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.64E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.64E-05
1503	ALL	482665.9	3668572	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.52E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.52E-05
1504	ALL	482685.9	3668572	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.07E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.07E-05
1505	ALL	482745.9	3668572	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.47E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.47E-05
1506	ALL	482765.9	3668572	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.41E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.41E-05
1507	ALL	482785.9	3668572	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.36E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.36E-05
1508	ALL	482805.9	3668572	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.30E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.30E-05
1509	ALL	482825.9	3668572	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.23E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.23E-05
1510	ALL	482845.9	3668572	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.18E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.18E-05
1511	ALL	482865.9	3668572	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.14E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.14E-05
1512	ALL	482885.9	3668572	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.10E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.10E-05
1513	ALL	482905.9	3668572	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.06E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.06E-05
1514	ALL	482925.9	3668572	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.02E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.02E-05
1515	ALL	482945.9	3668572	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.99E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.99E-05
1516	ALL	482965.9	3668572	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.95E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.95E-05
1517	ALL	481065.9	3668592	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.16E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.16E-05
1518	ALL	481085.9	3668592	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.28E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.28E-05
1519	ALL	481105.9	3668592	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.40E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.40E-05
1520	ALL	481125.9	3668592	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.55E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.55E-05
1521	ALL	481145.9	3668592	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.68E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.68E-05
1522	ALL	481165.9	3668592	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.81E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.81E-05
1523	ALL	481185.9	3668592	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.96E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.96E-05
1524	ALL	481205.9	3668592	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.07E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.07E-05
1525	ALL	481225.9	3668592	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.21E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.21E-05
1526	ALL	481245.9	3668592	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.37E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.37E-05
1527	ALL	481265.9	3668592	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.47E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.47E-05
1528	ALL	481285.9	3668592	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.59E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.59E-05
1529	ALL	481305.9	3668592	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.70E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.70E-05
1530	ALL	481325.9	3668592	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.80E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.80E-05
1531	ALL	481345.9	3668592	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.02E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.02E-05
1532	ALL	481365.9	3668592	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.10E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.10E-05
1533	ALL	481385.9	3668592	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.17E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.17E-05
1534	ALL	481405.9	3668592	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.26E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.26E-05
1535	ALL	481425.9	3668592	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.40E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.40E-05
1536	ALL	481445.9	3668592	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.53E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.53E-05
1537	ALL	481465.9	3668592	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.60E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.60E-05
1538	ALL	481485.9	3668592	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.62E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.62E-05
1539	ALL	481925.9	3668592	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.96E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.96E-05

1540	ALL	481945.9	3668592	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.99E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.99E-05
1541	ALL	481965.9	3668592	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.01E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.01E-05
1542	ALL	481985.9	3668592	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.05E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.05E-05
1543	ALL	482085.9	3668592	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.36E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.36E-05
1544	ALL	482105.9	3668592	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.47E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.47E-05
1545	ALL	482125.9	3668592	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.76E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.76E-05
1546	ALL	482145.9	3668592	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.87E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.87E-05
1547	ALL	482165.9	3668592	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.98E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.98E-05
1548	ALL	482185.9	3668592	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.04E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.04E-05
1549	ALL	482205.9	3668592	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.31E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.31E-05
1550	ALL	482225.9	3668592	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.90E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.90E-05
1551	ALL	482245.9	3668592	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.07E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.07E-05
1552	ALL	482265.9	3668592	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.23E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.23E-05
1553	ALL	482285.9	3668592	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.26E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.26E-05
1554	ALL	482305.9	3668592	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.14E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.14E-05
1555	ALL	482325.9	3668592	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.52E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.52E-04
1556	ALL	482345.9	3668592	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.55E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.55E-04
1557	ALL	482365.9	3668592	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.84E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.84E-04
1558	ALL	482385.9	3668592	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.41E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.41E-04
1559	ALL	482405.9	3668592	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.39E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.39E-04
1560	ALL	482425.9	3668592	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.41E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.41E-04
1561	ALL	482445.9	3668592	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.33E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.33E-04
1562	ALL	482465.9	3668592	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.29E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.29E-04
1563	ALL	482485.9	3668592	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.26E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.26E-04
1564	ALL	482505.9	3668592	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.22E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.22E-04
1565	ALL	482525.9	3668592	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.21E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.21E-04
1566	ALL	482545.9	3668592	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.15E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.15E-04
1567	ALL	482565.9	3668592	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.11E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.11E-04
1568	ALL	482585.9	3668592	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.41E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.41E-05
1569	ALL	482605.9	3668592	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.15E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.15E-05
1570	ALL	482625.9	3668592	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.38E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.38E-05
1571	ALL	482645.9	3668592	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.13E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.13E-05
1572	ALL	482665.9	3668592	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.99E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.99E-05
1573	ALL	482685.9	3668592	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.76E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.76E-05
1574	ALL	482705.9	3668592	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.38E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.38E-05
1575	ALL	482725.9	3668592	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.30E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.30E-05
1576	ALL	482745.9	3668592	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.19E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.19E-05
1577	ALL	482765.9	3668592	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.16E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.16E-05
1578	ALL	482785.9	3668592	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.08E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.08E-05
1579	ALL	482805.9	3668592	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.98E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.98E-05
1580	ALL	482825.9	3668592	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.91E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.91E-05
1581	ALL	482845.9	3668592	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.83E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.83E-05
1582	ALL	482865.9	3668592	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.80E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.80E-05
1583	ALL	482885.9	3668592	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.77E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.77E-05
1584	ALL	482905.9	3668592	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.72E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.72E-05
1585	ALL	482925.9	3668592	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.71E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.71E-05
1586	ALL	482945.9	3668592	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.70E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.70E-05
1587	ALL	481065.9	3668612	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.08E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.08E-05
1588	ALL	481085.9	3668612	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.23E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.23E-05
1589	ALL	481105.9	3668612	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.34E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.34E-05
1590	ALL	481125.9	3668612	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.47E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.47E-05
1591	ALL	481145.9	3668612	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.60E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.60E-05
1592	ALL	481165.9	3668612	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.71E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.71E-05
1593	ALL	481185.9	3668612	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.84E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.84E-05
1594	ALL	481205.9	3668612	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.95E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.95E-05

1595	ALL	481225.9	3668612	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.07E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.07E-05
1596	ALL	481245.9	3668612	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.20E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.20E-05
1597	ALL	481265.9	3668612	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.30E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.30E-05
1598	ALL	481285.9	3668612	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.40E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.40E-05
1599	ALL	481305.9	3668612	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.49E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.49E-05
1600	ALL	481325.9	3668612	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.58E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.58E-05
1601	ALL	481345.9	3668612	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.67E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.67E-05
1602	ALL	481365.9	3668612	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.86E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.86E-05
1603	ALL	481385.9	3668612	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.95E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.95E-05
1604	ALL	481405.9	3668612	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.04E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.04E-05
1605	ALL	481425.9	3668612	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.13E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.13E-05
1606	ALL	481445.9	3668612	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.13E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.13E-05
1607	ALL	481465.9	3668612	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.20E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.20E-05
1608	ALL	481925.9	3668612	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.82E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.82E-05
1609	ALL	481945.9	3668612	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.87E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.87E-05
1610	ALL	481965.9	3668612	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.87E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.87E-05
1611	ALL	481985.9	3668612	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.89E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.89E-05
1612	ALL	482005.9	3668612	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.92E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.92E-05
1613	ALL	482085.9	3668612	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.21E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.21E-05
1614	ALL	482105.9	3668612	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.31E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.31E-05
1615	ALL	482125.9	3668612	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.53E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.53E-05
1616	ALL	482145.9	3668612	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.70E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.70E-05
1617	ALL	482165.9	3668612	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.81E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.81E-05
1618	ALL	482185.9	3668612	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.87E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.87E-05
1619	ALL	482205.9	3668612	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.99E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.99E-05
1620	ALL	482225.9	3668612	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.74E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.74E-05
1621	ALL	482245.9	3668612	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.96E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.96E-05
1622	ALL	482265.9	3668612	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.17E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.17E-05
1623	ALL	482285.9	3668612	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.13E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.13E-05
1624	ALL	482305.9	3668612	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.71E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.71E-05
1625	ALL	482325.9	3668612	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.27E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.27E-04
1626	ALL	482345.9	3668612	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.43E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.43E-04
1627	ALL	482365.9	3668612	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.54E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.54E-04
1628	ALL	482385.9	3668612	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.35E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.35E-04
1629	ALL	482405.9	3668612	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.30E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.30E-04
1630	ALL	482425.9	3668612	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.26E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.26E-04
1631	ALL	482445.9	3668612	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.22E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.22E-04
1632	ALL	482465.9	3668612	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.20E-04
1633	ALL	482485.9	3668612	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.17E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.17E-04
1634	ALL	482505.9	3668612	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.14E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.14E-04
1635	ALL	482525.9	3668612	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.12E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.12E-04
1636	ALL	482545.9	3668612	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.08E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.08E-04
1637	ALL	482565.9	3668612	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.05E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.05E-04
1638	ALL	482585.9	3668612	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.11E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.11E-05
1639	ALL	482605.9	3668612	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.81E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.81E-05
1640	ALL	482625.9	3668612	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.08E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.08E-05
1641	ALL	482645.9	3668612	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.00E-05
1642	ALL	482665.9	3668612	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.79E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.79E-05
1643	ALL	482685.9	3668612	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.31E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.31E-05
1644	ALL	482705.9	3668612	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.12E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.12E-05
1645	ALL	482725.9	3668612	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.07E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.07E-05
1646	ALL	482745.9	3668612	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.02E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.02E-05
1647	ALL	482765.9	3668612	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.89E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.89E-05
1648	ALL	482785.9	3668612	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.80E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.80E-05
1649	ALL	482805.9	3668612	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.75E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.75E-05

1650	ALL	482825.9	3668612	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.63E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.63E-05
1651	ALL	482845.9	3668612	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.53E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.53E-05
1652	ALL	482865.9	3668612	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.48E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.48E-05
1653	ALL	482885.9	3668612	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.42E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.42E-05
1654	ALL	482905.9	3668612	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.40E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.40E-05
1655	ALL	482925.9	3668612	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.40E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.40E-05
1656	ALL	482945.9	3668612	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.41E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.41E-05
1657	ALL	481085.9	3668632	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.16E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.16E-05
1658	ALL	481105.9	3668632	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.27E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.27E-05
1659	ALL	481125.9	3668632	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.38E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.38E-05
1660	ALL	481145.9	3668632	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.51E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.51E-05
1661	ALL	481165.9	3668632	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.61E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.61E-05
1662	ALL	481185.9	3668632	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.71E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.71E-05
1663	ALL	481205.9	3668632	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.83E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.83E-05
1664	ALL	481225.9	3668632	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.92E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.92E-05
1665	ALL	481245.9	3668632	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.02E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.02E-05
1666	ALL	481265.9	3668632	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.12E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.12E-05
1667	ALL	481285.9	3668632	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.20E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.20E-05
1668	ALL	481305.9	3668632	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.28E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.28E-05
1669	ALL	481325.9	3668632	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.35E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.35E-05
1670	ALL	481345.9	3668632	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.43E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.43E-05
1671	ALL	481365.9	3668632	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.60E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.60E-05
1672	ALL	481385.9	3668632	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.69E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.69E-05
1673	ALL	481405.9	3668632	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.70E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.70E-05
1674	ALL	481425.9	3668632	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.75E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.75E-05
1675	ALL	481445.9	3668632	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.85E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.85E-05
1676	ALL	481465.9	3668632	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.95E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.95E-05
1677	ALL	481485.9	3668632	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.07E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.07E-05
1678	ALL	481925.9	3668632	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.68E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.68E-05
1679	ALL	481945.9	3668632	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.71E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.71E-05
1680	ALL	481965.9	3668632	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.75E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.75E-05
1681	ALL	481985.9	3668632	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.77E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.77E-05
1682	ALL	482005.9	3668632	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.77E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.77E-05
1683	ALL	482105.9	3668632	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.17E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.17E-05
1684	ALL	482125.9	3668632	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.29E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.29E-05
1685	ALL	482145.9	3668632	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.54E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.54E-05
1686	ALL	482165.9	3668632	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.65E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.65E-05
1687	ALL	482185.9	3668632	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.73E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.73E-05
1688	ALL	482205.9	3668632	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.80E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.80E-05
1689	ALL	482225.9	3668632	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.35E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.35E-05
1690	ALL	482245.9	3668632	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.84E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.84E-05
1691	ALL	482265.9	3668632	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.07E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.07E-05
1692	ALL	482285.9	3668632	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.05E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.05E-05
1693	ALL	482305.9	3668632	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.23E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.23E-05
1694	ALL	482325.9	3668632	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.71E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.71E-05
1695	ALL	482345.9	3668632	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.30E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.30E-04
1696	ALL	482365.9	3668632	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.35E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.35E-04
1697	ALL	482385.9	3668632	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.25E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.25E-04
1698	ALL	482405.9	3668632	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.11E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.11E-04
1699	ALL	482425.9	3668632	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.12E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.12E-04
1700	ALL	482445.9	3668632	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.12E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.12E-04
1701	ALL	482465.9	3668632	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.11E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.11E-04
1702	ALL	482485.9	3668632	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.10E-04
1703	ALL	482505.9	3668632	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.06E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.06E-04
1704	ALL	482525.9	3668632	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.06E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.06E-04

1705	ALL	482545.9	3668632	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.03E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.03E-04
1706	ALL	482565.9	3668632	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.01E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.01E-04
1707	ALL	482585.9	3668632	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.99E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.99E-05
1708	ALL	482605.9	3668632	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.60E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.60E-05
1709	ALL	482625.9	3668632	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.88E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.88E-05
1710	ALL	482645.9	3668632	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.74E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.74E-05
1711	ALL	482665.9	3668632	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.55E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.55E-05
1712	ALL	482685.9	3668632	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.02E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.02E-05
1713	ALL	482705.9	3668632	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.07E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.07E-05
1714	ALL	482725.9	3668632	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.95E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.95E-05
1715	ALL	482745.9	3668632	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.79E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.79E-05
1716	ALL	482765.9	3668632	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.68E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.68E-05
1717	ALL	482785.9	3668632	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.58E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.58E-05
1718	ALL	482805.9	3668632	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.39E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.39E-05
1719	ALL	481085.9	3668652	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.06E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.06E-05
1720	ALL	481105.9	3668652	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.19E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.19E-05
1721	ALL	481125.9	3668652	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.29E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.29E-05
1722	ALL	481145.9	3668652	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.40E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.40E-05
1723	ALL	481165.9	3668652	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.50E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.50E-05
1724	ALL	481185.9	3668652	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.59E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.59E-05
1725	ALL	481205.9	3668652	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.68E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.68E-05
1726	ALL	481225.9	3668652	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.76E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.76E-05
1727	ALL	481245.9	3668652	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.84E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.84E-05
1728	ALL	481265.9	3668652	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.93E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.93E-05
1729	ALL	481285.9	3668652	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.00E-05
1730	ALL	481305.9	3668652	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.07E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.07E-05
1731	ALL	481325.9	3668652	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.13E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.13E-05
1732	ALL	481345.9	3668652	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.21E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.21E-05
1733	ALL	481365.9	3668652	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.28E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.28E-05
1734	ALL	481385.9	3668652	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.35E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.35E-05
1735	ALL	481405.9	3668652	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.44E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.44E-05
1736	ALL	481425.9	3668652	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.52E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.52E-05
1737	ALL	481445.9	3668652	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.63E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.63E-05
1738	ALL	481465.9	3668652	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.74E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.74E-05
1739	ALL	481485.9	3668652	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.86E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.86E-05
1740	ALL	481925.9	3668652	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.55E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.55E-05
1741	ALL	481945.9	3668652	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.57E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.57E-05
1742	ALL	481965.9	3668652	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.60E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.60E-05
1743	ALL	481985.9	3668652	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.63E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.63E-05
1744	ALL	482005.9	3668652	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.65E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.65E-05
1745	ALL	482105.9	3668652	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.04E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.04E-05
1746	ALL	482125.9	3668652	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.12E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.12E-05
1747	ALL	482145.9	3668652	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.40E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.40E-05
1748	ALL	482165.9	3668652	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.50E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.50E-05
1749	ALL	482185.9	3668652	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.61E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.61E-05
1750	ALL	482205.9	3668652	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.66E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.66E-05
1751	ALL	482225.9	3668652	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.95E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.95E-05
1752	ALL	482245.9	3668652	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.74E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.74E-05
1753	ALL	482265.9	3668652	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.95E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.95E-05
1754	ALL	482285.9	3668652	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.11E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.11E-05
1755	ALL	482305.9	3668652	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.08E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.08E-05
1756	ALL	482325.9	3668652	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.22E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.22E-05
1757	ALL	482345.9	3668652	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.23E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.23E-04
1758	ALL	482365.9	3668652	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.25E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.25E-04
1759	ALL	482385.9	3668652	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.21E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.21E-04

1760	ALL	482405.9	3668652	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.03E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.03E-04
1761	ALL	482425.9	3668652	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.02E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.02E-04
1762	ALL	482445.9	3668652	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.96E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.96E-05
1763	ALL	482465.9	3668652	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.83E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.83E-05
1764	ALL	482485.9	3668652	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.85E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.85E-05
1765	ALL	482505.9	3668652	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.69E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.69E-05
1766	ALL	482525.9	3668652	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.88E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.88E-05
1767	ALL	482545.9	3668652	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.75E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.75E-05
1768	ALL	482565.9	3668652	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.53E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.53E-05
1769	ALL	482585.9	3668652	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.82E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.82E-05
1770	ALL	482605.9	3668652	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.43E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.43E-05
1771	ALL	482625.9	3668652	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.68E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.68E-05
1772	ALL	482645.9	3668652	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.65E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.65E-05
1773	ALL	482665.9	3668652	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.43E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.43E-05
1774	ALL	482685.9	3668652	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.17E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.17E-05
1775	ALL	482705.9	3668652	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.92E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.92E-05
1776	ALL	482725.9	3668652	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.67E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.67E-05
1777	ALL	482745.9	3668652	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.57E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.57E-05
1778	ALL	482765.9	3668652	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.44E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.44E-05
1779	ALL	482785.9	3668652	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.20E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.20E-05
1780	ALL	481105.9	3668672	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.10E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.10E-05
1781	ALL	481125.9	3668672	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.19E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.19E-05
1782	ALL	481145.9	3668672	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.27E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.27E-05
1783	ALL	481165.9	3668672	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.37E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.37E-05
1784	ALL	481185.9	3668672	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.45E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.45E-05
1785	ALL	481205.9	3668672	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.52E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.52E-05
1786	ALL	481225.9	3668672	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.60E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.60E-05
1787	ALL	481245.9	3668672	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.66E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.66E-05
1788	ALL	481265.9	3668672	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.74E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.74E-05
1789	ALL	481285.9	3668672	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.80E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.80E-05
1790	ALL	481305.9	3668672	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.86E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.86E-05
1791	ALL	481325.9	3668672	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.92E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.92E-05
1792	ALL	481345.9	3668672	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.99E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.99E-05
1793	ALL	481365.9	3668672	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.06E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.06E-05
1794	ALL	481385.9	3668672	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.14E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.14E-05
1795	ALL	481405.9	3668672	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.24E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.24E-05
1796	ALL	481425.9	3668672	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.35E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.35E-05
1797	ALL	481445.9	3668672	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.45E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.45E-05
1798	ALL	481465.9	3668672	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.54E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.54E-05
1799	ALL	481485.9	3668672	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.65E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.65E-05
1800	ALL	481505.9	3668672	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.79E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.79E-05
1801	ALL	481945.9	3668672	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.45E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.45E-05
1802	ALL	481965.9	3668672	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.48E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.48E-05
1803	ALL	481985.9	3668672	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.50E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.50E-05
1804	ALL	482005.9	3668672	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.54E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.54E-05
1805	ALL	482105.9	3668672	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.89E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.89E-05
1806	ALL	482125.9	3668672	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.99E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.99E-05
1807	ALL	482145.9	3668672	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.22E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.22E-05
1808	ALL	482165.9	3668672	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.38E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.38E-05
1809	ALL	482185.9	3668672	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.50E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.50E-05
1810	ALL	482205.9	3668672	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.54E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.54E-05
1811	ALL	482225.9	3668672	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.65E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.65E-05
1812	ALL	482245.9	3668672	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.53E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.53E-05
1813	ALL	482265.9	3668672	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.87E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.87E-05
1814	ALL	482285.9	3668672	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.17E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.17E-05

1815	ALL	482305.9	3668672	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.05E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.05E-05
1816	ALL	482325.9	3668672	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.83E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.83E-05
1817	ALL	482345.9	3668672	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.14E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.14E-04
1818	ALL	482365.9	3668672	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.15E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.15E-04
1819	ALL	482385.9	3668672	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.22E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.22E-04
1820	ALL	482405.9	3668672	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.04E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.04E-04
1821	ALL	482425.9	3668672	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.01E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.01E-04
1822	ALL	482445.9	3668672	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.92E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.92E-05
1823	ALL	482465.9	3668672	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.83E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.83E-05
1824	ALL	482485.9	3668672	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.78E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.78E-05
1825	ALL	482505.9	3668672	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.62E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.62E-05
1826	ALL	482525.9	3668672	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.50E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.50E-05
1827	ALL	482545.9	3668672	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.28E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.28E-05
1828	ALL	482565.9	3668672	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.07E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.07E-05
1829	ALL	482585.9	3668672	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.59E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.59E-05
1830	ALL	482605.9	3668672	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.24E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.24E-05
1831	ALL	482625.9	3668672	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.52E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.52E-05
1832	ALL	482645.9	3668672	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.16E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.16E-05
1833	ALL	482665.9	3668672	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.96E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.96E-05
1834	ALL	482685.9	3668672	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.79E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.79E-05
1835	ALL	482705.9	3668672	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.64E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.64E-05
1836	ALL	482725.9	3668672	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.44E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.44E-05
1837	ALL	482745.9	3668672	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.39E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.39E-05
1838	ALL	481105.9	3668692	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.98E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.98E-05
1839	ALL	481125.9	3668692	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.07E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.07E-05
1840	ALL	481145.9	3668692	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.15E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.15E-05
1841	ALL	481165.9	3668692	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.23E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.23E-05
1842	ALL	481185.9	3668692	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.30E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.30E-05
1843	ALL	481205.9	3668692	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.36E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.36E-05
1844	ALL	481225.9	3668692	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.43E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.43E-05
1845	ALL	481245.9	3668692	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.48E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.48E-05
1846	ALL	481265.9	3668692	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.54E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.54E-05
1847	ALL	481285.9	3668692	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.60E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.60E-05
1848	ALL	481365.9	3668692	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.87E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.87E-05
1849	ALL	481385.9	3668692	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.98E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.98E-05
1850	ALL	481405.9	3668692	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.07E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.07E-05
1851	ALL	481425.9	3668692	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.16E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.16E-05
1852	ALL	481445.9	3668692	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.25E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.25E-05
1853	ALL	481465.9	3668692	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.35E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.35E-05
1854	ALL	481485.9	3668692	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.46E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.46E-05
1855	ALL	481505.9	3668692	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.59E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.59E-05
1856	ALL	481945.9	3668692	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.35E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.35E-05
1857	ALL	481965.9	3668692	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.37E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.37E-05
1858	ALL	481985.9	3668692	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.41E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.41E-05
1859	ALL	482005.9	3668692	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.43E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.43E-05
1860	ALL	482105.9	3668692	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.80E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.80E-05
1861	ALL	482125.9	3668692	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.84E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.84E-05
1862	ALL	482145.9	3668692	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.03E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.03E-05
1863	ALL	482165.9	3668692	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.28E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.28E-05
1864	ALL	482185.9	3668692	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.38E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.38E-05
1865	ALL	482205.9	3668692	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.44E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.44E-05
1866	ALL	482225.9	3668692	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.49E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.49E-05
1867	ALL	482245.9	3668692	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.15E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.15E-05
1868	ALL	482265.9	3668692	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.87E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.87E-05
1869	ALL	482285.9	3668692	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.19E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.19E-05

1870	ALL	482305.9	3668692	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.14E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.14E-05
1871	ALL	482325.9	3668692	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.26E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.26E-05
1872	ALL	482345.9	3668692	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.83E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.83E-05
1873	ALL	482365.9	3668692	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.06E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.06E-04
1874	ALL	482385.9	3668692	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.14E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.14E-04
1875	ALL	482405.9	3668692	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.80E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.80E-05
1876	ALL	482425.9	3668692	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.61E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.61E-05
1877	ALL	482445.9	3668692	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.45E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.45E-05
1878	ALL	482465.9	3668692	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.33E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.33E-05
1879	ALL	482485.9	3668692	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.22E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.22E-05
1880	ALL	482505.9	3668692	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.13E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.13E-05
1881	ALL	482525.9	3668692	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.93E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.93E-05
1882	ALL	482545.9	3668692	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.83E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.83E-05
1883	ALL	482565.9	3668692	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.44E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.44E-05
1884	ALL	482585.9	3668692	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.63E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.63E-05
1885	ALL	482605.9	3668692	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.29E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.29E-05
1886	ALL	482625.9	3668692	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.35E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.35E-05
1887	ALL	482645.9	3668692	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.95E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.95E-05
1888	ALL	482665.9	3668692	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.70E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.70E-05
1889	ALL	482685.9	3668692	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.51E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.51E-05
1890	ALL	482705.9	3668692	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.48E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.48E-05
1891	ALL	482725.9	3668692	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.35E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.35E-05
1892	ALL	481125.9	3668712	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.95E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.95E-05
1893	ALL	481145.9	3668712	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.01E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.01E-05
1894	ALL	481165.9	3668712	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.08E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.08E-05
1895	ALL	481185.9	3668712	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.14E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.14E-05
1896	ALL	481205.9	3668712	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.20E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.20E-05
1897	ALL	481225.9	3668712	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.25E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.25E-05
1898	ALL	481245.9	3668712	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.31E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.31E-05
1899	ALL	481365.9	3668712	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.70E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.70E-05
1900	ALL	481385.9	3668712	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.80E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.80E-05
1901	ALL	481405.9	3668712	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.89E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.89E-05
1902	ALL	481425.9	3668712	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.98E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.98E-05
1903	ALL	481445.9	3668712	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.07E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.07E-05
1904	ALL	481465.9	3668712	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.19E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.19E-05
1905	ALL	481485.9	3668712	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.30E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.30E-05
1906	ALL	481505.9	3668712	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.42E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.42E-05
1907	ALL	481525.9	3668712	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.74E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.74E-05
1908	ALL	481945.9	3668712	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.27E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.27E-05
1909	ALL	481965.9	3668712	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.29E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.29E-05
1910	ALL	481985.9	3668712	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.32E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.32E-05
1911	ALL	482005.9	3668712	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.35E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.35E-05
1912	ALL	482025.9	3668712	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.38E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.38E-05
1913	ALL	482125.9	3668712	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.75E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.75E-05
1914	ALL	482145.9	3668712	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.87E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.87E-05
1915	ALL	482165.9	3668712	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.18E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.18E-05
1916	ALL	482185.9	3668712	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.26E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.26E-05
1917	ALL	482205.9	3668712	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.36E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.36E-05
1918	ALL	482225.9	3668712	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.40E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.40E-05
1919	ALL	482245.9	3668712	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.77E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.77E-05
1920	ALL	482265.9	3668712	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.85E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.85E-05
1921	ALL	482285.9	3668712	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.09E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.09E-05
1922	ALL	482305.9	3668712	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.35E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.35E-05
1923	ALL	482325.9	3668712	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.25E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.25E-05
1924	ALL	482345.9	3668712	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.85E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.85E-05

1925	ALL	482365.9	3668712	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.52E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.52E-05
1926	ALL	482385.9	3668712	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.06E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.06E-04
1927	ALL	482405.9	3668712	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.17E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.17E-05
1928	ALL	482425.9	3668712	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.96E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.96E-05
1929	ALL	482445.9	3668712	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.78E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.78E-05
1930	ALL	482465.9	3668712	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.68E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.68E-05
1931	ALL	482485.9	3668712	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.59E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.59E-05
1932	ALL	482505.9	3668712	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.55E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.55E-05
1933	ALL	482525.9	3668712	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.47E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.47E-05
1934	ALL	482545.9	3668712	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.34E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.34E-05
1935	ALL	482565.9	3668712	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.67E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.67E-05
1936	ALL	482585.9	3668712	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.85E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.85E-05
1937	ALL	482605.9	3668712	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.52E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.52E-05
1938	ALL	482625.9	3668712	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.23E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.23E-05
1939	ALL	482645.9	3668712	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.96E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.96E-05
1940	ALL	482665.9	3668712	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.67E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.67E-05
1941	ALL	482685.9	3668712	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.54E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.54E-05
1942	ALL	482705.9	3668712	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.40E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.40E-05
1943	ALL	482725.9	3668712	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.28E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.28E-05
1944	ALL	481125.9	3668732	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.82E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.82E-05
1945	ALL	481145.9	3668732	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.88E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.88E-05
1946	ALL	481165.9	3668732	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.93E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.93E-05
1947	ALL	481185.9	3668732	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.99E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.99E-05
1948	ALL	481205.9	3668732	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.03E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.03E-05
1949	ALL	481385.9	3668732	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.64E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.64E-05
1950	ALL	481405.9	3668732	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.73E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.73E-05
1951	ALL	481425.9	3668732	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.83E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.83E-05
1952	ALL	481445.9	3668732	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.94E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.94E-05
1953	ALL	481465.9	3668732	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.04E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.04E-05
1954	ALL	481485.9	3668732	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.15E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.15E-05
1955	ALL	481505.9	3668732	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.30E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.30E-05
1956	ALL	481965.9	3668732	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.21E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.21E-05
1957	ALL	481985.9	3668732	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.24E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.24E-05
1958	ALL	482005.9	3668732	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.27E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.27E-05
1959	ALL	482025.9	3668732	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.30E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.30E-05
1960	ALL	482125.9	3668732	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.69E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.69E-05
1961	ALL	482145.9	3668732	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.75E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.75E-05
1962	ALL	482165.9	3668732	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.03E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.03E-05
1963	ALL	482185.9	3668732	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.18E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.18E-05
1964	ALL	482205.9	3668732	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.30E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.30E-05
1965	ALL	482225.9	3668732	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.33E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.33E-05
1966	ALL	482245.9	3668732	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.45E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.45E-05
1967	ALL	482265.9	3668732	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.61E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.61E-05
1968	ALL	482285.9	3668732	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.08E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.08E-05
1969	ALL	482305.9	3668732	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.52E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.52E-05
1970	ALL	482325.9	3668732	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.32E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.32E-05
1971	ALL	482345.9	3668732	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.23E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.23E-05
1972	ALL	482365.9	3668732	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.98E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.98E-05
1973	ALL	482385.9	3668732	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.47E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.47E-05
1974	ALL	482405.9	3668732	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.20E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.20E-05
1975	ALL	482425.9	3668732	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.51E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.51E-05
1976	ALL	482445.9	3668732	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.53E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.53E-05
1977	ALL	482465.9	3668732	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.61E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.61E-05
1978	ALL	482485.9	3668732	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.55E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.55E-05
1979	ALL	482505.9	3668732	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.61E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.61E-05

1980	ALL	482525.9	3668732	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.60E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.60E-05
1981	ALL	482545.9	3668732	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.82E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.82E-05
1982	ALL	482565.9	3668732	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.24E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.24E-05
1983	ALL	482585.9	3668732	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.87E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.87E-05
1984	ALL	482605.9	3668732	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.54E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.54E-05
1985	ALL	482625.9	3668732	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.21E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.21E-05
1986	ALL	482645.9	3668732	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.86E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.86E-05
1987	ALL	482665.9	3668732	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.57E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.57E-05
1988	ALL	482685.9	3668732	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.39E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.39E-05
1989	ALL	482705.9	3668732	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.20E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.20E-05
1990	ALL	482725.9	3668732	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.07E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.07E-05
1991	ALL	482745.9	3668732	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.98E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.98E-05
1992	ALL	481145.9	3668752	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.74E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.74E-05
1993	ALL	481165.9	3668752	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.78E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.78E-05
1994	ALL	481405.9	3668752	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.59E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.59E-05
1995	ALL	481425.9	3668752	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.68E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.68E-05
1996	ALL	481445.9	3668752	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.80E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.80E-05
1997	ALL	481465.9	3668752	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.90E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.90E-05
1998	ALL	481485.9	3668752	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.01E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.01E-05
1999	ALL	481505.9	3668752	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.38E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.38E-05
2000	ALL	481965.9	3668752	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.14E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.14E-05
2001	ALL	481985.9	3668752	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.17E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.17E-05
2002	ALL	482005.9	3668752	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.19E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.19E-05
2003	ALL	482025.9	3668752	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.22E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.22E-05
2004	ALL	482125.9	3668752	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.66E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.66E-05
2005	ALL	482145.9	3668752	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.72E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.72E-05
2006	ALL	482165.9	3668752	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.86E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.86E-05
2007	ALL	482185.9	3668752	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.13E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.13E-05
2008	ALL	482205.9	3668752	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.25E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.25E-05
2009	ALL	482225.9	3668752	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.31E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.31E-05
2010	ALL	482245.9	3668752	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.37E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.37E-05
2011	ALL	482265.9	3668752	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.20E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.20E-05
2012	ALL	482285.9	3668752	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.25E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.25E-05
2013	ALL	482305.9	3668752	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.61E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.61E-05
2014	ALL	482325.9	3668752	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.57E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.57E-05
2015	ALL	482345.9	3668752	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.57E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.57E-05
2016	ALL	482365.9	3668752	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.49E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.49E-05
2017	ALL	482385.9	3668752	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.48E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.48E-05
2018	ALL	482405.9	3668752	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.47E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.47E-05
2019	ALL	482425.9	3668752	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.50E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.50E-05
2020	ALL	482445.9	3668752	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.47E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.47E-05
2021	ALL	482465.9	3668752	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.52E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.52E-05
2022	ALL	482485.9	3668752	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.53E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.53E-05
2023	ALL	482505.9	3668752	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.51E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.51E-05
2024	ALL	482525.9	3668752	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.52E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.52E-05
2025	ALL	482545.9	3668752	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.66E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.66E-05
2026	ALL	482565.9	3668752	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.46E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.46E-05
2027	ALL	482585.9	3668752	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.92E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.92E-05
2028	ALL	482605.9	3668752	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.39E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.39E-05
2029	ALL	482625.9	3668752	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.79E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.79E-05
2030	ALL	482645.9	3668752	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.48E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.48E-05
2031	ALL	482665.9	3668752	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.28E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.28E-05
2032	ALL	482685.9	3668752	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.08E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.08E-05
2033	ALL	482705.9	3668752	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.97E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.97E-05
2034	ALL	482725.9	3668752	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.85E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.85E-05

2035	ALL	482745.9	3668752	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.74E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.74E-05
2036	ALL	482765.9	3668752	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.67E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.67E-05
2037	ALL	481405.9	3668772	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.46E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.46E-05
2038	ALL	481425.9	3668772	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.55E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.55E-05
2039	ALL	481445.9	3668772	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.66E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.66E-05
2040	ALL	481465.9	3668772	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.77E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.77E-05
2041	ALL	481485.9	3668772	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.98E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.98E-05
2042	ALL	481965.9	3668772	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.07E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.07E-05
2043	ALL	481985.9	3668772	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.10E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.10E-05
2044	ALL	482005.9	3668772	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.12E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.12E-05
2045	ALL	482025.9	3668772	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.15E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.15E-05
2046	ALL	482125.9	3668772	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.64E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.64E-05
2047	ALL	482145.9	3668772	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.70E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.70E-05
2048	ALL	482165.9	3668772	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.75E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.75E-05
2049	ALL	482185.9	3668772	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.09E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.09E-05
2050	ALL	482205.9	3668772	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.23E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.23E-05
2051	ALL	482225.9	3668772	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.38E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.38E-05
2052	ALL	482245.9	3668772	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.39E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.39E-05
2053	ALL	482265.9	3668772	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.83E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.83E-05
2054	ALL	482285.9	3668772	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.11E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.11E-05
2055	ALL	482305.9	3668772	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.46E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.46E-05
2056	ALL	482325.9	3668772	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.98E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.98E-05
2057	ALL	482345.9	3668772	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.06E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.06E-05
2058	ALL	482365.9	3668772	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.04E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.04E-05
2059	ALL	482385.9	3668772	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.94E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.94E-05
2060	ALL	482405.9	3668772	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.16E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.16E-05
2061	ALL	482425.9	3668772	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.16E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.16E-05
2062	ALL	482445.9	3668772	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.21E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.21E-05
2063	ALL	482465.9	3668772	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.37E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.37E-05
2064	ALL	482485.9	3668772	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.27E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.27E-05
2065	ALL	482505.9	3668772	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.23E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.23E-05
2066	ALL	482525.9	3668772	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.25E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.25E-05
2067	ALL	482545.9	3668772	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.11E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.11E-05
2068	ALL	482565.9	3668772	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.88E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.88E-05
2069	ALL	482585.9	3668772	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.55E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.55E-05
2070	ALL	482605.9	3668772	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.05E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.05E-05
2071	ALL	482625.9	3668772	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.51E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.51E-05
2072	ALL	482645.9	3668772	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.09E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.09E-05
2073	ALL	482665.9	3668772	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.88E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.88E-05
2074	ALL	482685.9	3668772	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.75E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.75E-05
2075	ALL	482705.9	3668772	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.64E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.64E-05
2076	ALL	482725.9	3668772	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.60E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.60E-05
2077	ALL	482745.9	3668772	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.53E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.53E-05
2078	ALL	482765.9	3668772	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.44E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.44E-05
2079	ALL	482785.9	3668772	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.37E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.37E-05
2080	ALL	481425.9	3668792	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.45E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.45E-05
2081	ALL	481445.9	3668792	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.53E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.53E-05
2082	ALL	481465.9	3668792	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.65E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.65E-05
2083	ALL	481965.9	3668792	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.01E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.01E-05
2084	ALL	481985.9	3668792	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.03E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.03E-05
2085	ALL	482005.9	3668792	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.06E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.06E-05
2086	ALL	482025.9	3668792	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.08E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.08E-05
2087	ALL	482045.9	3668792	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.12E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.12E-05
2088	ALL	482145.9	3668792	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.69E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.69E-05
2089	ALL	482165.9	3668792	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.76E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.76E-05

2090	ALL	482185.9	3668792	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.98E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.98E-05
2091	ALL	482205.9	3668792	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.17E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.17E-05
2092	ALL	482225.9	3668792	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.35E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.35E-05
2093	ALL	482245.9	3668792	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.60E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.60E-05
2094	ALL	482265.9	3668792	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.99E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.99E-05
2095	ALL	482285.9	3668792	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.54E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.54E-05
2096	ALL	482305.9	3668792	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.13E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.13E-05
2097	ALL	482325.9	3668792	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.60E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.60E-05
2098	ALL	482345.9	3668792	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.32E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.32E-05
2099	ALL	482365.9	3668792	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.02E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.02E-05
2100	ALL	482385.9	3668792	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.44E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.44E-05
2101	ALL	482405.9	3668792	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.16E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.16E-05
2102	ALL	482425.9	3668792	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.44E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.44E-05
2103	ALL	482445.9	3668792	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.66E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.66E-05
2104	ALL	482465.9	3668792	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.92E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.92E-05
2105	ALL	482485.9	3668792	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.77E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.77E-05
2106	ALL	482505.9	3668792	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.74E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.74E-05
2107	ALL	482525.9	3668792	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.76E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.76E-05
2108	ALL	482545.9	3668792	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.78E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.78E-05
2109	ALL	482565.9	3668792	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.31E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.31E-05
2110	ALL	482585.9	3668792	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.89E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.89E-05
2111	ALL	482605.9	3668792	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.08E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.08E-05
2112	ALL	482625.9	3668792	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.77E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.77E-05
2113	ALL	482645.9	3668792	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.65E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.65E-05
2114	ALL	482665.9	3668792	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.57E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.57E-05
2115	ALL	482685.9	3668792	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.54E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.54E-05
2116	ALL	482705.9	3668792	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.45E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.45E-05
2117	ALL	482725.9	3668792	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.27E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.27E-05
2118	ALL	482745.9	3668792	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.31E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.31E-05
2119	ALL	482765.9	3668792	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.25E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.25E-05
2120	ALL	482785.9	3668792	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.20E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.20E-05
2121	ALL	482805.9	3668792	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.06E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.06E-05
2122	ALL	481445.9	3668812	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.76E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.76E-05
2123	ALL	481465.9	3668812	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.79E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.79E-05
2124	ALL	481985.9	3668812	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.97E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.97E-05
2125	ALL	482005.9	3668812	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.00E-05
2126	ALL	482025.9	3668812	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.02E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.02E-05
2127	ALL	482045.9	3668812	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.05E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.05E-05
2128	ALL	482145.9	3668812	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.61E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.61E-05
2129	ALL	482165.9	3668812	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.72E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.72E-05
2130	ALL	482185.9	3668812	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.83E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.83E-05
2131	ALL	482205.9	3668812	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.89E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.89E-05
2132	ALL	482225.9	3668812	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.14E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.14E-05
2133	ALL	482245.9	3668812	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.31E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.31E-05
2134	ALL	482265.9	3668812	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.62E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.62E-05
2135	ALL	482285.9	3668812	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.12E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.12E-05
2136	ALL	482305.9	3668812	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.66E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.66E-05
2137	ALL	482325.9	3668812	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.08E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.08E-05
2138	ALL	482345.9	3668812	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.38E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.38E-05
2139	ALL	482365.9	3668812	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.17E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.17E-05
2140	ALL	482385.9	3668812	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.04E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.04E-05
2141	ALL	482405.9	3668812	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.56E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.56E-05
2142	ALL	482425.9	3668812	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.18E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.18E-05
2143	ALL	482445.9	3668812	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.36E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.36E-05
2144	ALL	482465.9	3668812	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.61E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.61E-05

2145	ALL	482485.9	3668812	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.46E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.46E-05
2146	ALL	482505.9	3668812	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.11E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.11E-05
2147	ALL	482525.9	3668812	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.81E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.81E-05
2148	ALL	482545.9	3668812	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.58E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.58E-05
2149	ALL	482565.9	3668812	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.31E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.31E-05
2150	ALL	482585.9	3668812	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.07E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.07E-05
2151	ALL	482605.9	3668812	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.92E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.92E-05
2152	ALL	482625.9	3668812	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.69E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.69E-05
2153	ALL	482645.9	3668812	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.60E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.60E-05
2154	ALL	482665.9	3668812	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.53E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.53E-05
2155	ALL	482685.9	3668812	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.43E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.43E-05
2156	ALL	482705.9	3668812	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.23E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.23E-05
2157	ALL	482725.9	3668812	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.03E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.03E-05
2158	ALL	482745.9	3668812	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.06E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.06E-05
2159	ALL	482765.9	3668812	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.11E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.11E-05
2160	ALL	482785.9	3668812	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.05E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.05E-05
2161	ALL	482805.9	3668812	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.02E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.02E-05
2162	ALL	482825.9	3668812	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.93E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.93E-05
2163	ALL	481445.9	3668832	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.67E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.67E-05
2164	ALL	481985.9	3668832	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.92E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.92E-05
2165	ALL	482005.9	3668832	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.94E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.94E-05
2166	ALL	482025.9	3668832	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.97E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.97E-05
2167	ALL	482045.9	3668832	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.99E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.99E-05
2168	ALL	482145.9	3668832	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.52E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.52E-05
2169	ALL	482165.9	3668832	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.62E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.62E-05
2170	ALL	482185.9	3668832	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.70E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.70E-05
2171	ALL	482205.9	3668832	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.75E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.75E-05
2172	ALL	482225.9	3668832	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.02E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.02E-05
2173	ALL	482245.9	3668832	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.15E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.15E-05
2174	ALL	482265.9	3668832	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.30E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.30E-05
2175	ALL	482285.9	3668832	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.60E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.60E-05
2176	ALL	482305.9	3668832	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.71E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.71E-05
2177	ALL	482325.9	3668832	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.94E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.94E-05
2178	ALL	482345.9	3668832	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.04E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.04E-05
2179	ALL	482365.9	3668832	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.46E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.46E-05
2180	ALL	482385.9	3668832	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.65E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.65E-05
2181	ALL	482405.9	3668832	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.17E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.17E-05
2182	ALL	482425.9	3668832	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.99E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.99E-05
2183	ALL	482445.9	3668832	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.10E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.10E-05
2184	ALL	482465.9	3668832	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.36E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.36E-05
2185	ALL	482485.9	3668832	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.19E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.19E-05
2186	ALL	482505.9	3668832	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.08E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.08E-05
2187	ALL	482525.9	3668832	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.83E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.83E-05
2188	ALL	482545.9	3668832	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.50E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.50E-05
2189	ALL	482565.9	3668832	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.35E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.35E-05
2190	ALL	482585.9	3668832	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.21E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.21E-05
2191	ALL	482605.9	3668832	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.95E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.95E-05
2192	ALL	482625.9	3668832	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.72E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.72E-05
2193	ALL	482645.9	3668832	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.52E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.52E-05
2194	ALL	482665.9	3668832	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.33E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.33E-05
2195	ALL	482685.9	3668832	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.27E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.27E-05
2196	ALL	482705.9	3668832	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.23E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.23E-05
2197	ALL	482725.9	3668832	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.03E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.03E-05
2198	ALL	482745.9	3668832	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.86E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.86E-05
2199	ALL	482765.9	3668832	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.89E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.89E-05

2200	ALL	482785.9	3668832	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.92E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.92E-05
2201	ALL	482805.9	3668832	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.86E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.86E-05
2202	ALL	482825.9	3668832	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.83E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.83E-05
2203	ALL	482845.9	3668832	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.81E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.81E-05
2204	ALL	481985.9	3668852	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.87E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.87E-05
2205	ALL	482005.9	3668852	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.90E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.90E-05
2206	ALL	482025.9	3668852	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.93E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.93E-05
2207	ALL	482045.9	3668852	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.95E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.95E-05
2208	ALL	482145.9	3668852	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.44E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.44E-05
2209	ALL	482165.9	3668852	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.56E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.56E-05
2210	ALL	482185.9	3668852	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.63E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.63E-05
2211	ALL	482205.9	3668852	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.70E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.70E-05
2212	ALL	482225.9	3668852	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.82E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.82E-05
2213	ALL	482245.9	3668852	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.00E-05
2214	ALL	482265.9	3668852	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.18E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.18E-05
2215	ALL	482285.9	3668852	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.39E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.39E-05
2216	ALL	482305.9	3668852	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.65E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.65E-05
2217	ALL	482325.9	3668852	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.89E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.89E-05
2218	ALL	482345.9	3668852	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.96E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.96E-05
2219	ALL	482365.9	3668852	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.23E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.23E-05
2220	ALL	482385.9	3668852	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.28E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.28E-05
2221	ALL	482405.9	3668852	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.68E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.68E-05
2222	ALL	482425.9	3668852	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.78E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.78E-05
2223	ALL	482445.9	3668852	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.86E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.86E-05
2224	ALL	482465.9	3668852	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.09E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.09E-05
2225	ALL	482485.9	3668852	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.95E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.95E-05
2226	ALL	482505.9	3668852	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.05E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.05E-05
2227	ALL	482525.9	3668852	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.91E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.91E-05
2228	ALL	482545.9	3668852	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.65E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.65E-05
2229	ALL	482565.9	3668852	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.32E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.32E-05
2230	ALL	482585.9	3668852	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.89E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.89E-05
2231	ALL	482605.9	3668852	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.74E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.74E-05
2232	ALL	482625.9	3668852	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.45E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.45E-05
2233	ALL	482645.9	3668852	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.28E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.28E-05
2234	ALL	482665.9	3668852	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.21E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.21E-05
2235	ALL	482685.9	3668852	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.19E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.19E-05
2236	ALL	482705.9	3668852	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.46E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.46E-05
2237	ALL	482725.9	3668852	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.47E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.47E-05
2238	ALL	482745.9	3668852	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.86E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.86E-05
2239	ALL	482765.9	3668852	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.71E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.71E-05
2240	ALL	482785.9	3668852	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.72E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.72E-05
2241	ALL	482805.9	3668852	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.74E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.74E-05
2242	ALL	482825.9	3668852	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.73E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.73E-05
2243	ALL	482845.9	3668852	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.70E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.70E-05
2244	ALL	482865.9	3668852	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.65E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.65E-05
2245	ALL	482885.9	3668852	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.60E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.60E-05
2246	ALL	482905.9	3668852	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.56E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.56E-05
2247	ALL	482925.9	3668852	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.53E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.53E-05
2248	ALL	482945.9	3668852	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.51E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.51E-05
2249	ALL	482965.9	3668852	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.49E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.49E-05
2250	ALL	482985.9	3668852	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.46E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.46E-05
2251	ALL	483005.9	3668852	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.42E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.42E-05
2252	ALL	483025.9	3668852	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.39E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.39E-05
2253	ALL	483045.9	3668852	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.38E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.38E-05
2254	ALL	483065.9	3668852	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.37E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.37E-05

2255	ALL	483085.9	3668852	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.38E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.38E-05
2256	ALL	483105.9	3668852	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.38E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.38E-05
2257	ALL	483125.9	3668852	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.38E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.38E-05
2258	ALL	483145.9	3668852	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.38E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.38E-05
2259	ALL	481985.9	3668872	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.83E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.83E-05
2260	ALL	482005.9	3668872	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.85E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.85E-05
2261	ALL	482025.9	3668872	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.88E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.88E-05
2262	ALL	482045.9	3668872	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.91E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.91E-05
2263	ALL	482065.9	3668872	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.96E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.96E-05
2264	ALL	482125.9	3668872	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.28E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.28E-05
2265	ALL	482145.9	3668872	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.34E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.34E-05
2266	ALL	482165.9	3668872	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.43E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.43E-05
2267	ALL	482185.9	3668872	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.56E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.56E-05
2268	ALL	482205.9	3668872	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.68E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.68E-05
2269	ALL	482225.9	3668872	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.81E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.81E-05
2270	ALL	482245.9	3668872	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.95E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.95E-05
2271	ALL	482265.9	3668872	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.17E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.17E-05
2272	ALL	482285.9	3668872	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.52E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.52E-05
2273	ALL	482305.9	3668872	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.87E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.87E-05
2274	ALL	482325.9	3668872	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.04E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.04E-05
2275	ALL	482345.9	3668872	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.95E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.95E-05
2276	ALL	482365.9	3668872	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.94E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.94E-05
2277	ALL	482385.9	3668872	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.96E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.96E-05
2278	ALL	482405.9	3668872	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.39E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.39E-05
2279	ALL	482425.9	3668872	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.57E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.57E-05
2280	ALL	482445.9	3668872	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.65E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.65E-05
2281	ALL	482465.9	3668872	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.88E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.88E-05
2282	ALL	482485.9	3668872	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.68E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.68E-05
2283	ALL	482505.9	3668872	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.79E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.79E-05
2284	ALL	482525.9	3668872	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.52E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.52E-05
2285	ALL	482545.9	3668872	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.23E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.23E-05
2286	ALL	482565.9	3668872	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.00E-05
2287	ALL	482585.9	3668872	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.78E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.78E-05
2288	ALL	482605.9	3668872	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.63E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.63E-05
2289	ALL	482625.9	3668872	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.36E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.36E-05
2290	ALL	482645.9	3668872	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.33E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.33E-05
2291	ALL	482665.9	3668872	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.32E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.32E-05
2292	ALL	482685.9	3668872	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.31E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.31E-05
2293	ALL	482705.9	3668872	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.30E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.30E-05
2294	ALL	482725.9	3668872	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.30E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.30E-05
2295	ALL	482745.9	3668872	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.28E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.28E-05
2296	ALL	482765.9	3668872	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.76E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.76E-05
2297	ALL	482785.9	3668872	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.58E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.58E-05
2298	ALL	482805.9	3668872	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.60E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.60E-05
2299	ALL	482825.9	3668872	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.61E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.61E-05
2300	ALL	482845.9	3668872	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.57E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.57E-05
2301	ALL	482865.9	3668872	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.54E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.54E-05
2302	ALL	482885.9	3668872	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.51E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.51E-05
2303	ALL	482905.9	3668872	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.48E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.48E-05
2304	ALL	482925.9	3668872	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.45E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.45E-05
2305	ALL	482945.9	3668872	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.43E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.43E-05
2306	ALL	482965.9	3668872	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.40E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.40E-05
2307	ALL	482985.9	3668872	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.37E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.37E-05
2308	ALL	483005.9	3668872	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.33E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.33E-05
2309	ALL	483025.9	3668872	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.30E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.30E-05

2310	ALL	483045.9	3668872	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.28E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.28E-05
2311	ALL	483065.9	3668872	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.27E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.27E-05
2312	ALL	483085.9	3668872	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.27E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.27E-05
2313	ALL	483105.9	3668872	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.28E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.28E-05
2314	ALL	483125.9	3668872	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.28E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.28E-05
2315	ALL	483145.9	3668872	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.29E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.29E-05
2316	ALL	483165.9	3668872	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.29E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.29E-05
2317	ALL	483185.9	3668872	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.29E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.29E-05
2318	ALL	482005.9	3668892	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.81E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.81E-05
2319	ALL	482025.9	3668892	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.85E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.85E-05
2320	ALL	482045.9	3668892	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.87E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.87E-05
2321	ALL	482065.9	3668892	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.92E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.92E-05
2322	ALL	482125.9	3668892	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.22E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.22E-05
2323	ALL	482145.9	3668892	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.25E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.25E-05
2324	ALL	482165.9	3668892	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.29E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.29E-05
2325	ALL	482185.9	3668892	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.55E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.55E-05
2326	ALL	482205.9	3668892	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.61E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.61E-05
2327	ALL	482225.9	3668892	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.70E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.70E-05
2328	ALL	482245.9	3668892	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.67E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.67E-05
2329	ALL	482265.9	3668892	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.82E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.82E-05
2330	ALL	482285.9	3668892	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.94E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.94E-05
2331	ALL	482305.9	3668892	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.02E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.02E-05
2332	ALL	482325.9	3668892	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.16E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.16E-05
2333	ALL	482345.9	3668892	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.02E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.02E-05
2334	ALL	482365.9	3668892	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.56E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.56E-05
2335	ALL	482385.9	3668892	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.63E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.63E-05
2336	ALL	482405.9	3668892	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.05E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.05E-05
2337	ALL	482425.9	3668892	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.33E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.33E-05
2338	ALL	482445.9	3668892	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.43E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.43E-05
2339	ALL	482465.9	3668892	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.63E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.63E-05
2340	ALL	482485.9	3668892	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.54E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.54E-05
2341	ALL	482505.9	3668892	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.56E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.56E-05
2342	ALL	482525.9	3668892	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.23E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.23E-05
2343	ALL	482545.9	3668892	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.03E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.03E-05
2344	ALL	482565.9	3668892	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.96E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.96E-05
2345	ALL	482585.9	3668892	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.91E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.91E-05
2346	ALL	482605.9	3668892	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.83E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.83E-05
2347	ALL	482625.9	3668892	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.23E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.23E-05
2348	ALL	482645.9	3668892	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.19E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.19E-05
2349	ALL	482665.9	3668892	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.17E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.17E-05
2350	ALL	482685.9	3668892	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.17E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.17E-05
2351	ALL	482705.9	3668892	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.16E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.16E-05
2352	ALL	482725.9	3668892	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.16E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.16E-05
2353	ALL	482745.9	3668892	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.16E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.16E-05
2354	ALL	482765.9	3668892	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.16E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.16E-05
2355	ALL	482785.9	3668892	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.93E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.93E-05
2356	ALL	482805.9	3668892	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.54E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.54E-05
2357	ALL	482825.9	3668892	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.48E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.48E-05
2358	ALL	482845.9	3668892	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.41E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.41E-05
2359	ALL	482865.9	3668892	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.39E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.39E-05
2360	ALL	482885.9	3668892	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.37E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.37E-05
2361	ALL	482905.9	3668892	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.35E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.35E-05
2362	ALL	482925.9	3668892	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.34E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.34E-05
2363	ALL	482945.9	3668892	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.34E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.34E-05
2364	ALL	482965.9	3668892	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.29E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.29E-05

2365	ALL	482985.9	3668892	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.26E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.26E-05
2366	ALL	483005.9	3668892	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.22E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.22E-05
2367	ALL	483025.9	3668892	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.19E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.19E-05
2368	ALL	483045.9	3668892	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.18E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.18E-05
2369	ALL	483065.9	3668892	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.17E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.17E-05
2370	ALL	483085.9	3668892	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.17E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.17E-05
2371	ALL	483105.9	3668892	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.17E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.17E-05
2372	ALL	483125.9	3668892	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.17E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.17E-05
2373	ALL	483145.9	3668892	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.18E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.18E-05
2374	ALL	483165.9	3668892	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.19E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.19E-05
2375	ALL	483185.9	3668892	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.20E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.20E-05
2376	ALL	483205.9	3668892	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.20E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.20E-05
2377	ALL	483225.9	3668892	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.20E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.20E-05
2378	ALL	482005.9	3668912	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.78E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.78E-05
2379	ALL	482025.9	3668912	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.82E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.82E-05
2380	ALL	482045.9	3668912	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.85E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.85E-05
2381	ALL	482125.9	3668912	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.17E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.17E-05
2382	ALL	482145.9	3668912	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.19E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.19E-05
2383	ALL	482165.9	3668912	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.23E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.23E-05
2384	ALL	482185.9	3668912	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.48E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.48E-05
2385	ALL	482205.9	3668912	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.52E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.52E-05
2386	ALL	482225.9	3668912	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.60E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.60E-05
2387	ALL	482245.9	3668912	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.58E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.58E-05
2388	ALL	482265.9	3668912	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.69E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.69E-05
2389	ALL	482285.9	3668912	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.87E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.87E-05
2390	ALL	482305.9	3668912	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.99E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.99E-05
2391	ALL	482325.9	3668912	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.23E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.23E-05
2392	ALL	482345.9	3668912	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.05E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.05E-05
2393	ALL	482365.9	3668912	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.41E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.41E-05
2394	ALL	482385.9	3668912	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.36E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.36E-05
2395	ALL	482405.9	3668912	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.68E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.68E-05
2396	ALL	482425.9	3668912	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.13E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.13E-05
2397	ALL	482445.9	3668912	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.20E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.20E-05
2398	ALL	482465.9	3668912	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.10E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.10E-05
2399	ALL	482485.9	3668912	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.97E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.97E-05
2400	ALL	482505.9	3668912	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.94E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.94E-05
2401	ALL	482525.9	3668912	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.74E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.74E-05
2402	ALL	482545.9	3668912	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.73E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.73E-05
2403	ALL	482565.9	3668912	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.75E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.75E-05
2404	ALL	482585.9	3668912	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.71E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.71E-05
2405	ALL	482605.9	3668912	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.66E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.66E-05
2406	ALL	482625.9	3668912	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.07E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.07E-05
2407	ALL	482645.9	3668912	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.05E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.05E-05
2408	ALL	482665.9	3668912	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.02E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.02E-05
2409	ALL	482685.9	3668912	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.03E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.03E-05
2410	ALL	482705.9	3668912	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.03E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.03E-05
2411	ALL	482725.9	3668912	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.02E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.02E-05
2412	ALL	482745.9	3668912	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.03E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.03E-05
2413	ALL	482765.9	3668912	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.00E-05
2414	ALL	482785.9	3668912	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.62E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.62E-05
2415	ALL	482805.9	3668912	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.50E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.50E-05
2416	ALL	482825.9	3668912	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.44E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.44E-05
2417	ALL	482845.9	3668912	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.43E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.43E-05
2418	ALL	482865.9	3668912	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.40E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.40E-05
2419	ALL	482885.9	3668912	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.33E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.33E-05

2420	ALL	482905.9	3668912	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.24E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.24E-05
2421	ALL	482925.9	3668912	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.25E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.25E-05
2422	ALL	482945.9	3668912	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.26E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.26E-05
2423	ALL	482965.9	3668912	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.23E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.23E-05
2424	ALL	482985.9	3668912	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.21E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.21E-05
2425	ALL	483005.9	3668912	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.19E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.19E-05
2426	ALL	483025.9	3668912	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.18E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.18E-05
2427	ALL	483045.9	3668912	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.19E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.19E-05
2428	ALL	483065.9	3668912	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.20E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.20E-05
2429	ALL	483085.9	3668912	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.20E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.20E-05
2430	ALL	483105.9	3668912	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.16E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.16E-05
2431	ALL	483125.9	3668912	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.12E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.12E-05
2432	ALL	483145.9	3668912	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.08E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.08E-05
2433	ALL	483165.9	3668912	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.10E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.10E-05
2434	ALL	483185.9	3668912	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.11E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.11E-05
2435	ALL	483205.9	3668912	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.11E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.11E-05
2436	ALL	483225.9	3668912	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.11E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.11E-05
2437	ALL	482125.9	3668932	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.11E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.11E-05
2438	ALL	482145.9	3668932	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.13E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.13E-05
2439	ALL	482165.9	3668932	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.17E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.17E-05
2440	ALL	482185.9	3668932	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.41E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.41E-05
2441	ALL	482205.9	3668932	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.44E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.44E-05
2442	ALL	482225.9	3668932	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.51E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.51E-05
2443	ALL	482245.9	3668932	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.49E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.49E-05
2444	ALL	482265.9	3668932	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.61E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.61E-05
2445	ALL	482285.9	3668932	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.82E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.82E-05
2446	ALL	482305.9	3668932	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.97E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.97E-05
2447	ALL	482325.9	3668932	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.14E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.14E-05
2448	ALL	482345.9	3668932	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.93E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.93E-05
2449	ALL	482365.9	3668932	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.16E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.16E-05
2450	ALL	482385.9	3668932	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.11E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.11E-05
2451	ALL	482405.9	3668932	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.44E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.44E-05
2452	ALL	482425.9	3668932	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.08E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.08E-05
2453	ALL	482445.9	3668932	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.81E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.81E-05
2454	ALL	482465.9	3668932	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.72E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.72E-05
2455	ALL	482485.9	3668932	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.67E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.67E-05
2456	ALL	482505.9	3668932	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.60E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.60E-05
2457	ALL	482525.9	3668932	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.50E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.50E-05
2458	ALL	482545.9	3668932	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.53E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.53E-05
2459	ALL	482565.9	3668932	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.53E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.53E-05
2460	ALL	482585.9	3668932	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.53E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.53E-05
2461	ALL	482605.9	3668932	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.50E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.50E-05
2462	ALL	482625.9	3668932	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.92E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.92E-05
2463	ALL	482645.9	3668932	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.91E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.91E-05
2464	ALL	482665.9	3668932	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.90E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.90E-05
2465	ALL	482685.9	3668932	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.89E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.89E-05
2466	ALL	482705.9	3668932	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.89E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.89E-05
2467	ALL	482725.9	3668932	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.89E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.89E-05
2468	ALL	482745.9	3668932	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.88E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.88E-05
2469	ALL	482765.9	3668932	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.88E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.88E-05
2470	ALL	482785.9	3668932	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.52E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.52E-05
2471	ALL	482805.9	3668932	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.47E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.47E-05
2472	ALL	482825.9	3668932	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.39E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.39E-05
2473	ALL	482845.9	3668932	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.34E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.34E-05
2474	ALL	482865.9	3668932	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.35E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.35E-05

2475	ALL	482885.9	3668932	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.36E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.36E-05
2476	ALL	482905.9	3668932	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.18E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.18E-05
2477	ALL	482925.9	3668932	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.18E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.18E-05
2478	ALL	482945.9	3668932	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.20E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.20E-05
2479	ALL	482965.9	3668932	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.18E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.18E-05
2480	ALL	482985.9	3668932	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.19E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.19E-05
2481	ALL	483005.9	3668932	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.19E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.19E-05
2482	ALL	483025.9	3668932	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.17E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.17E-05
2483	ALL	483045.9	3668932	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.15E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.15E-05
2484	ALL	483065.9	3668932	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.13E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.13E-05
2485	ALL	483085.9	3668932	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.12E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.12E-05
2486	ALL	483105.9	3668932	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.11E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.11E-05
2487	ALL	483125.9	3668932	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.10E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.10E-05
2488	ALL	483145.9	3668932	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.03E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.03E-05
2489	ALL	483165.9	3668932	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.02E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.02E-05
2490	ALL	483185.9	3668932	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.03E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.03E-05
2491	ALL	483205.9	3668932	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.02E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.02E-05
2492	ALL	482125.9	3668952	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.05E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.05E-05
2493	ALL	482145.9	3668952	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.07E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.07E-05
2494	ALL	482165.9	3668952	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.12E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.12E-05
2495	ALL	482185.9	3668952	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.33E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.33E-05
2496	ALL	482205.9	3668952	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.37E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.37E-05
2497	ALL	482225.9	3668952	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.43E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.43E-05
2498	ALL	482245.9	3668952	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.41E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.41E-05
2499	ALL	482265.9	3668952	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.55E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.55E-05
2500	ALL	482285.9	3668952	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.71E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.71E-05
2501	ALL	482305.9	3668952	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.82E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.82E-05
2502	ALL	482325.9	3668952	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.98E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.98E-05
2503	ALL	482345.9	3668952	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.78E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.78E-05
2504	ALL	482365.9	3668952	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.97E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.97E-05
2505	ALL	482385.9	3668952	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.85E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.85E-05
2506	ALL	482405.9	3668952	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.16E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.16E-05
2507	ALL	482425.9	3668952	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.81E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.81E-05
2508	ALL	482445.9	3668952	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.60E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.60E-05
2509	ALL	482465.9	3668952	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.50E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.50E-05
2510	ALL	482485.9	3668952	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.45E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.45E-05
2511	ALL	482505.9	3668952	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.45E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.45E-05
2512	ALL	482525.9	3668952	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.31E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.31E-05
2513	ALL	482545.9	3668952	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.31E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.31E-05
2514	ALL	482565.9	3668952	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.33E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.33E-05
2515	ALL	482585.9	3668952	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.33E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.33E-05
2516	ALL	482605.9	3668952	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.32E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.32E-05
2517	ALL	482625.9	3668952	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.75E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.75E-05
2518	ALL	482645.9	3668952	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.73E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.73E-05
2519	ALL	482665.9	3668952	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.73E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.73E-05
2520	ALL	482685.9	3668952	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.74E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.74E-05
2521	ALL	482705.9	3668952	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.75E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.75E-05
2522	ALL	482725.9	3668952	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.76E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.76E-05
2523	ALL	482745.9	3668952	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.75E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.75E-05
2524	ALL	482765.9	3668952	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.66E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.66E-05
2525	ALL	482785.9	3668952	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.52E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.52E-05
2526	ALL	482805.9	3668952	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.46E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.46E-05
2527	ALL	482825.9	3668952	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.31E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.31E-05
2528	ALL	482845.9	3668952	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.26E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.26E-05
2529	ALL	482865.9	3668952	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.30E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.30E-05

2530	ALL	482885.9	3668952	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.27E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.27E-05
2531	ALL	482905.9	3668952	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.11E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.11E-05
2532	ALL	482925.9	3668952	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.15E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.15E-05
2533	ALL	482945.9	3668952	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.15E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.15E-05
2534	ALL	482965.9	3668952	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.13E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.13E-05
2535	ALL	482985.9	3668952	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.11E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.11E-05
2536	ALL	483005.9	3668952	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.12E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.12E-05
2537	ALL	483025.9	3668952	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.11E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.11E-05
2538	ALL	483045.9	3668952	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.09E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.09E-05
2539	ALL	483065.9	3668952	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.06E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.06E-05
2540	ALL	483085.9	3668952	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.04E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.04E-05
2541	ALL	483105.9	3668952	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.03E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.03E-05
2542	ALL	483125.9	3668952	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.97E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.97E-05
2543	ALL	483145.9	3668952	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.97E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.97E-05
2544	ALL	483165.9	3668952	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.97E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.97E-05
2545	ALL	483185.9	3668952	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.95E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.95E-05
2546	ALL	482125.9	3668972	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.00E-05
2547	ALL	482145.9	3668972	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.02E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.02E-05
2548	ALL	482165.9	3668972	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.08E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.08E-05
2549	ALL	482185.9	3668972	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.26E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.26E-05
2550	ALL	482205.9	3668972	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.30E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.30E-05
2551	ALL	482225.9	3668972	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.35E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.35E-05
2552	ALL	482245.9	3668972	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.45E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.45E-05
2553	ALL	482265.9	3668972	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.50E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.50E-05
2554	ALL	482285.9	3668972	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.59E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.59E-05
2555	ALL	482305.9	3668972	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.69E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.69E-05
2556	ALL	482325.9	3668972	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.83E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.83E-05
2557	ALL	482345.9	3668972	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.66E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.66E-05
2558	ALL	482365.9	3668972	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.76E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.76E-05
2559	ALL	482385.9	3668972	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.62E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.62E-05
2560	ALL	482405.9	3668972	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.92E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.92E-05
2561	ALL	482425.9	3668972	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.58E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.58E-05
2562	ALL	482445.9	3668972	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.38E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.38E-05
2563	ALL	482465.9	3668972	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.29E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.29E-05
2564	ALL	482485.9	3668972	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.25E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.25E-05
2565	ALL	482505.9	3668972	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.22E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.22E-05
2566	ALL	482525.9	3668972	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.12E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.12E-05
2567	ALL	482545.9	3668972	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.13E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.13E-05
2568	ALL	482565.9	3668972	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.13E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.13E-05
2569	ALL	482585.9	3668972	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.15E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.15E-05
2570	ALL	482605.9	3668972	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.15E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.15E-05
2571	ALL	482625.9	3668972	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.59E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.59E-05
2572	ALL	482645.9	3668972	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.56E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.56E-05
2573	ALL	482665.9	3668972	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.58E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.58E-05
2574	ALL	482685.9	3668972	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.61E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.61E-05
2575	ALL	482705.9	3668972	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.63E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.63E-05
2576	ALL	482725.9	3668972	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.65E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.65E-05
2577	ALL	482745.9	3668972	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.65E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.65E-05
2578	ALL	482765.9	3668972	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.54E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.54E-05
2579	ALL	482785.9	3668972	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.47E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.47E-05
2580	ALL	482805.9	3668972	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.45E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.45E-05
2581	ALL	482825.9	3668972	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.16E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.16E-05
2582	ALL	482845.9	3668972	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.21E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.21E-05
2583	ALL	482865.9	3668972	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.23E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.23E-05
2584	ALL	482885.9	3668972	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.21E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.21E-05

2585	ALL	482905.9	3668972	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.07E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.07E-05
2586	ALL	482925.9	3668972	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.13E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.13E-05
2587	ALL	482945.9	3668972	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.10E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.10E-05
2588	ALL	482965.9	3668972	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.09E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.09E-05
2589	ALL	482985.9	3668972	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.04E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.04E-05
2590	ALL	483005.9	3668972	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.07E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.07E-05
2591	ALL	483025.9	3668972	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.02E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.02E-05
2592	ALL	483045.9	3668972	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.99E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.99E-05
2593	ALL	483065.9	3668972	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.97E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.97E-05
2594	ALL	483085.9	3668972	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.96E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.96E-05
2595	ALL	483105.9	3668972	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.95E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.95E-05
2596	ALL	483125.9	3668972	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.92E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.92E-05
2597	ALL	483145.9	3668972	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.92E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.92E-05
2598	ALL	483165.9	3668972	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.90E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.90E-05
2599	ALL	482125.9	3668992	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.95E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.95E-05
2600	ALL	482145.9	3668992	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.01E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.01E-05
2601	ALL	482165.9	3668992	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.05E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.05E-05
2602	ALL	482185.9	3668992	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.19E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.19E-05
2603	ALL	482205.9	3668992	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.24E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.24E-05
2604	ALL	482225.9	3668992	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.27E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.27E-05
2605	ALL	482245.9	3668992	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.37E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.37E-05
2606	ALL	482265.9	3668992	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.46E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.46E-05
2607	ALL	482285.9	3668992	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.49E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.49E-05
2608	ALL	482305.9	3668992	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.54E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.54E-05
2609	ALL	482325.9	3668992	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.70E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.70E-05
2610	ALL	482345.9	3668992	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.53E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.53E-05
2611	ALL	482365.9	3668992	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.68E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.68E-05
2612	ALL	482385.9	3668992	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.40E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.40E-05
2613	ALL	482405.9	3668992	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.69E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.69E-05
2614	ALL	482425.9	3668992	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.34E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.34E-05
2615	ALL	482445.9	3668992	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.18E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.18E-05
2616	ALL	482465.9	3668992	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.10E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.10E-05
2617	ALL	482485.9	3668992	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.05E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.05E-05
2618	ALL	482505.9	3668992	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.92E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.92E-05
2619	ALL	482525.9	3668992	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.85E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.85E-05
2620	ALL	482545.9	3668992	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.97E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.97E-05
2621	ALL	482565.9	3668992	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.96E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.96E-05
2622	ALL	482585.9	3668992	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.96E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.96E-05
2623	ALL	482605.9	3668992	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.96E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.96E-05
2624	ALL	482625.9	3668992	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.41E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.41E-05
2625	ALL	482645.9	3668992	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.41E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.41E-05
2626	ALL	482665.9	3668992	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.44E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.44E-05
2627	ALL	482685.9	3668992	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.49E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.49E-05
2628	ALL	482705.9	3668992	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.54E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.54E-05
2629	ALL	482725.9	3668992	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.54E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.54E-05
2630	ALL	482745.9	3668992	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.57E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.57E-05
2631	ALL	482765.9	3668992	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.46E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.46E-05
2632	ALL	482785.9	3668992	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.46E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.46E-05
2633	ALL	482805.9	3668992	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.41E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.41E-05
2634	ALL	482825.9	3668992	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.09E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.09E-05
2635	ALL	482845.9	3668992	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.16E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.16E-05
2636	ALL	482865.9	3668992	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.16E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.16E-05
2637	ALL	482885.9	3668992	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.14E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.14E-05
2638	ALL	482905.9	3668992	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.07E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.07E-05
2639	ALL	482925.9	3668992	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.11E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.11E-05

2640	ALL	482945.9	3668992	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.07E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.07E-05
2641	ALL	482965.9	3668992	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.04E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.04E-05
2642	ALL	482985.9	3668992	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.00E-05
2643	ALL	483005.9	3668992	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.02E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.02E-05
2644	ALL	483025.9	3668992	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.98E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.98E-05
2645	ALL	483045.9	3668992	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.96E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.96E-05
2646	ALL	483065.9	3668992	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.93E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.93E-05
2647	ALL	483085.9	3668992	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.91E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.91E-05
2648	ALL	483105.9	3668992	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.89E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.89E-05
2649	ALL	483125.9	3668992	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.89E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.89E-05
2650	ALL	483145.9	3668992	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.86E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.86E-05
2651	ALL	482125.9	3669012	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.90E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.90E-05
2652	ALL	482145.9	3669012	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.96E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.96E-05
2653	ALL	482165.9	3669012	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.01E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.01E-05
2654	ALL	482185.9	3669012	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.13E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.13E-05
2655	ALL	482205.9	3669012	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.18E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.18E-05
2656	ALL	482225.9	3669012	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.30E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.30E-05
2657	ALL	482245.9	3669012	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.29E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.29E-05
2658	ALL	482265.9	3669012	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.39E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.39E-05
2659	ALL	482285.9	3669012	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.36E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.36E-05
2660	ALL	482305.9	3669012	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.42E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.42E-05
2661	ALL	482325.9	3669012	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.57E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.57E-05
2662	ALL	482345.9	3669012	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.40E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.40E-05
2663	ALL	482365.9	3669012	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.56E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.56E-05
2664	ALL	482385.9	3669012	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.22E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.22E-05
2665	ALL	482405.9	3669012	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.44E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.44E-05
2666	ALL	482425.9	3669012	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.16E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.16E-05
2667	ALL	482445.9	3669012	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.04E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.04E-05
2668	ALL	482465.9	3669012	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.94E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.94E-05
2669	ALL	482485.9	3669012	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.58E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.58E-05
2670	ALL	482505.9	3669012	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.61E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.61E-05
2671	ALL	482525.9	3669012	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.69E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.69E-05
2672	ALL	482545.9	3669012	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.85E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.85E-05
2673	ALL	482565.9	3669012	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.82E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.82E-05
2674	ALL	482585.9	3669012	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.85E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.85E-05
2675	ALL	482605.9	3669012	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.86E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.86E-05
2676	ALL	482625.9	3669012	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.30E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.30E-05
2677	ALL	482645.9	3669012	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.35E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.35E-05
2678	ALL	482665.9	3669012	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.36E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.36E-05
2679	ALL	482685.9	3669012	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.39E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.39E-05
2680	ALL	482705.9	3669012	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.41E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.41E-05
2681	ALL	482725.9	3669012	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.43E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.43E-05
2682	ALL	482745.9	3669012	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.49E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.49E-05
2683	ALL	482765.9	3669012	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.39E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.39E-05
2684	ALL	482785.9	3669012	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.39E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.39E-05
2685	ALL	482805.9	3669012	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.37E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.37E-05
2686	ALL	482825.9	3669012	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.05E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.05E-05
2687	ALL	482845.9	3669012	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.11E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.11E-05
2688	ALL	482865.9	3669012	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.12E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.12E-05
2689	ALL	482885.9	3669012	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.08E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.08E-05
2690	ALL	482905.9	3669012	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.03E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.03E-05
2691	ALL	482925.9	3669012	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.07E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.07E-05
2692	ALL	482945.9	3669012	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.05E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.05E-05
2693	ALL	482965.9	3669012	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.98E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.98E-05
2694	ALL	482985.9	3669012	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.94E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.94E-05

2695	ALL	483005.9	3669012	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.97E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.97E-05
2696	ALL	483025.9	3669012	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.94E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.94E-05
2697	ALL	483045.9	3669012	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.93E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.93E-05
2698	ALL	483065.9	3669012	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.90E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.90E-05
2699	ALL	483085.9	3669012	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.87E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.87E-05
2700	ALL	483105.9	3669012	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.86E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.86E-05
2701	ALL	483125.9	3669012	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.83E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.83E-05
2702	ALL	482125.9	3669032	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.85E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.85E-05
2703	ALL	482145.9	3669032	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.91E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.91E-05
2704	ALL	482165.9	3669032	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.98E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.98E-05
2705	ALL	482185.9	3669032	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.07E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.07E-05
2706	ALL	482205.9	3669032	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.12E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.12E-05
2707	ALL	482225.9	3669032	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.22E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.22E-05
2708	ALL	482245.9	3669032	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.22E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.22E-05
2709	ALL	482265.9	3669032	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.33E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.33E-05
2710	ALL	482285.9	3669032	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.25E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.25E-05
2711	ALL	482305.9	3669032	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.30E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.30E-05
2712	ALL	482325.9	3669032	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.44E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.44E-05
2713	ALL	482345.9	3669032	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.27E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.27E-05
2714	ALL	482365.9	3669032	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.41E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.41E-05
2715	ALL	482385.9	3669032	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.07E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.07E-05
2716	ALL	482405.9	3669032	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.29E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.29E-05
2717	ALL	482425.9	3669032	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.01E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.01E-05
2718	ALL	482445.9	3669032	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.89E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.89E-05
2719	ALL	482465.9	3669032	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.81E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.81E-05
2720	ALL	482485.9	3669032	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.49E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.49E-05
2721	ALL	482505.9	3669032	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.52E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.52E-05
2722	ALL	482525.9	3669032	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.58E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.58E-05
2723	ALL	482545.9	3669032	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.68E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.68E-05
2724	ALL	482565.9	3669032	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.66E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.66E-05
2725	ALL	482585.9	3669032	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.70E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.70E-05
2726	ALL	482605.9	3669032	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.70E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.70E-05
2727	ALL	482625.9	3669032	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.22E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.22E-05
2728	ALL	482645.9	3669032	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.28E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.28E-05
2729	ALL	482665.9	3669032	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.34E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.34E-05
2730	ALL	482685.9	3669032	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.36E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.36E-05
2731	ALL	482705.9	3669032	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.36E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.36E-05
2732	ALL	482725.9	3669032	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.37E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.37E-05
2733	ALL	482745.9	3669032	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.37E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.37E-05
2734	ALL	482765.9	3669032	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.32E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.32E-05
2735	ALL	482785.9	3669032	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.31E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.31E-05
2736	ALL	482805.9	3669032	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.30E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.30E-05
2737	ALL	482825.9	3669032	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.01E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.01E-05
2738	ALL	482845.9	3669032	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.08E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.08E-05
2739	ALL	482865.9	3669032	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.07E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.07E-05
2740	ALL	482885.9	3669032	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.03E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.03E-05
2741	ALL	482905.9	3669032	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.98E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.98E-05
2742	ALL	482925.9	3669032	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.02E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.02E-05
2743	ALL	482945.9	3669032	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.00E-05
2744	ALL	482965.9	3669032	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.93E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.93E-05
2745	ALL	482985.9	3669032	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.90E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.90E-05
2746	ALL	483005.9	3669032	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.92E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.92E-05
2747	ALL	483025.9	3669032	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.88E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.88E-05
2748	ALL	483045.9	3669032	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.87E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.87E-05
2749	ALL	483065.9	3669032	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.85E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.85E-05

2750	ALL	483085.9	3669032	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.83E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.83E-05
2751	ALL	483105.9	3669032	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.79E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.79E-05
2752	ALL	482125.9	3669052	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.81E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.81E-05
2753	ALL	482145.9	3669052	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.86E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.86E-05
2754	ALL	482165.9	3669052	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.95E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.95E-05
2755	ALL	482185.9	3669052	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.02E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.02E-05
2756	ALL	482205.9	3669052	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.06E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.06E-05
2757	ALL	482225.9	3669052	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.15E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.15E-05
2758	ALL	482245.9	3669052	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.15E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.15E-05
2759	ALL	482265.9	3669052	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.27E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.27E-05
2760	ALL	482285.9	3669052	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.16E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.16E-05
2761	ALL	482305.9	3669052	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.21E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.21E-05
2762	ALL	482325.9	3669052	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.33E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.33E-05
2763	ALL	482345.9	3669052	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.18E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.18E-05
2764	ALL	482365.9	3669052	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.30E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.30E-05
2765	ALL	482385.9	3669052	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.92E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.92E-05
2766	ALL	482405.9	3669052	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.13E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.13E-05
2767	ALL	482425.9	3669052	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.87E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.87E-05
2768	ALL	482445.9	3669052	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.76E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.76E-05
2769	ALL	482465.9	3669052	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.70E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.70E-05
2770	ALL	482485.9	3669052	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.53E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.53E-05
2771	ALL	482505.9	3669052	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.51E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.51E-05
2772	ALL	482525.9	3669052	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.51E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.51E-05
2773	ALL	482545.9	3669052	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.52E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.52E-05
2774	ALL	482565.9	3669052	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.50E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.50E-05
2775	ALL	482585.9	3669052	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.53E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.53E-05
2776	ALL	482605.9	3669052	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.53E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.53E-05
2777	ALL	482625.9	3669052	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.13E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.13E-05
2778	ALL	482645.9	3669052	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.20E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.20E-05
2779	ALL	482665.9	3669052	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.21E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.21E-05
2780	ALL	482685.9	3669052	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.23E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.23E-05
2781	ALL	482705.9	3669052	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.24E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.24E-05
2782	ALL	482725.9	3669052	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.25E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.25E-05
2783	ALL	482745.9	3669052	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.21E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.21E-05
2784	ALL	482765.9	3669052	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.25E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.25E-05
2785	ALL	482785.9	3669052	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.24E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.24E-05
2786	ALL	482805.9	3669052	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.24E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.24E-05
2787	ALL	482825.9	3669052	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.10E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.10E-05
2788	ALL	482845.9	3669052	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.07E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.07E-05
2789	ALL	482865.9	3669052	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.03E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.03E-05
2790	ALL	482885.9	3669052	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.99E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.99E-05
2791	ALL	482905.9	3669052	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.92E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.92E-05
2792	ALL	482925.9	3669052	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.98E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.98E-05
2793	ALL	482945.9	3669052	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.95E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.95E-05
2794	ALL	482965.9	3669052	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.90E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.90E-05
2795	ALL	482985.9	3669052	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.87E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.87E-05
2796	ALL	483005.9	3669052	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.88E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.88E-05
2797	ALL	483025.9	3669052	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.86E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.86E-05
2798	ALL	483045.9	3669052	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.81E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.81E-05
2799	ALL	483065.9	3669052	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.78E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.78E-05
2800	ALL	483085.9	3669052	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.78E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.78E-05
2801	ALL	482125.9	3669072	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.78E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.78E-05
2802	ALL	482145.9	3669072	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.81E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.81E-05
2803	ALL	482165.9	3669072	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.92E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.92E-05
2804	ALL	482185.9	3669072	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.96E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.96E-05

2805	ALL	482205.9	3669072	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.01E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.01E-05
2806	ALL	482225.9	3669072	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.02E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.02E-05
2807	ALL	482245.9	3669072	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.10E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.10E-05
2808	ALL	482265.9	3669072	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.23E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.23E-05
2809	ALL	482285.9	3669072	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.06E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.06E-05
2810	ALL	482305.9	3669072	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.08E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.08E-05
2811	ALL	482325.9	3669072	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.21E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.21E-05
2812	ALL	482345.9	3669072	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.08E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.08E-05
2813	ALL	482365.9	3669072	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.22E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.22E-05
2814	ALL	482385.9	3669072	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.77E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.77E-05
2815	ALL	482405.9	3669072	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.00E-05
2816	ALL	482425.9	3669072	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.73E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.73E-05
2817	ALL	482445.9	3669072	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.65E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.65E-05
2818	ALL	482465.9	3669072	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.57E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.57E-05
2819	ALL	482485.9	3669072	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.41E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.41E-05
2820	ALL	482505.9	3669072	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.32E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.32E-05
2821	ALL	482525.9	3669072	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.33E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.33E-05
2822	ALL	482545.9	3669072	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.35E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.35E-05
2823	ALL	482565.9	3669072	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.34E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.34E-05
2824	ALL	482585.9	3669072	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.30E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.30E-05
2825	ALL	482605.9	3669072	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.38E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.38E-05
2826	ALL	482625.9	3669072	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.00E-05
2827	ALL	482645.9	3669072	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.06E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.06E-05
2828	ALL	482665.9	3669072	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.11E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.11E-05
2829	ALL	482685.9	3669072	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.13E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.13E-05
2830	ALL	482705.9	3669072	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.14E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.14E-05
2831	ALL	482725.9	3669072	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.15E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.15E-05
2832	ALL	482745.9	3669072	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.17E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.17E-05
2833	ALL	482765.9	3669072	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.18E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.18E-05
2834	ALL	482785.9	3669072	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.12E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.12E-05
2835	ALL	482805.9	3669072	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.10E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.10E-05
2836	ALL	482825.9	3669072	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.10E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.10E-05
2837	ALL	482845.9	3669072	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.04E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.04E-05
2838	ALL	482865.9	3669072	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.00E-05
2839	ALL	482885.9	3669072	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.97E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.97E-05
2840	ALL	482905.9	3669072	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.95E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.95E-05
2841	ALL	482925.9	3669072	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.93E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.93E-05
2842	ALL	482945.9	3669072	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.90E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.90E-05
2843	ALL	482965.9	3669072	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.88E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.88E-05
2844	ALL	482985.9	3669072	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.83E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.83E-05
2845	ALL	483005.9	3669072	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.80E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.80E-05
2846	ALL	483025.9	3669072	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.78E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.78E-05
2847	ALL	483045.9	3669072	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.76E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.76E-05
2848	ALL	483065.9	3669072	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.74E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.74E-05
2849	ALL	482125.9	3669092	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.72E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.72E-05
2850	ALL	482145.9	3669092	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.75E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.75E-05
2851	ALL	482165.9	3669092	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.87E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.87E-05
2852	ALL	482185.9	3669092	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.92E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.92E-05
2853	ALL	482205.9	3669092	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.94E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.94E-05
2854	ALL	482225.9	3669092	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.96E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.96E-05
2855	ALL	482245.9	3669092	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.05E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.05E-05
2856	ALL	482265.9	3669092	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.31E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.31E-05
2857	ALL	482285.9	3669092	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.94E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.94E-05
2858	ALL	482305.9	3669092	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.03E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.03E-05
2859	ALL	482325.9	3669092	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.10E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.10E-05

2860	ALL	482345.9	3669092	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.96E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.96E-05
2861	ALL	482365.9	3669092	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.10E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.10E-05
2862	ALL	482385.9	3669092	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.63E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.63E-05
2863	ALL	482405.9	3669092	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.88E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.88E-05
2864	ALL	482425.9	3669092	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.59E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.59E-05
2865	ALL	482445.9	3669092	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.54E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.54E-05
2866	ALL	482465.9	3669092	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.48E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.48E-05
2867	ALL	482485.9	3669092	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.37E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.37E-05
2868	ALL	482505.9	3669092	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.19E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.19E-05
2869	ALL	482525.9	3669092	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.20E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.20E-05
2870	ALL	482545.9	3669092	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.19E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.19E-05
2871	ALL	482565.9	3669092	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.19E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.19E-05
2872	ALL	482585.9	3669092	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.18E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.18E-05
2873	ALL	482605.9	3669092	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.22E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.22E-05
2874	ALL	482625.9	3669092	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.91E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.91E-05
2875	ALL	482645.9	3669092	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.95E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.95E-05
2876	ALL	482665.9	3669092	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.03E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.03E-05
2877	ALL	482685.9	3669092	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.04E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.04E-05
2878	ALL	482705.9	3669092	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.05E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.05E-05
2879	ALL	482725.9	3669092	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.04E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.04E-05
2880	ALL	482745.9	3669092	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.08E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.08E-05
2881	ALL	482765.9	3669092	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.13E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.13E-05
2882	ALL	482785.9	3669092	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.95E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.95E-05
2883	ALL	482805.9	3669092	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.92E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.92E-05
2884	ALL	482825.9	3669092	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.93E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.93E-05
2885	ALL	482845.9	3669092	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.91E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.91E-05
2886	ALL	482865.9	3669092	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.88E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.88E-05
2887	ALL	482885.9	3669092	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.86E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.86E-05
2888	ALL	482905.9	3669092	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.84E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.84E-05
2889	ALL	482925.9	3669092	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.82E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.82E-05
2890	ALL	482945.9	3669092	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.80E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.80E-05
2891	ALL	482965.9	3669092	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.78E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.78E-05
2892	ALL	482985.9	3669092	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.76E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.76E-05
2893	ALL	483005.9	3669092	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.74E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.74E-05
2894	ALL	483025.9	3669092	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.76E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.76E-05
2895	ALL	483045.9	3669092	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.75E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.75E-05
2896	ALL	482125.9	3669112	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.68E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.68E-05
2897	ALL	482145.9	3669112	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.71E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.71E-05
2898	ALL	482165.9	3669112	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.77E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.77E-05
2899	ALL	482185.9	3669112	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.83E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.83E-05
2900	ALL	482205.9	3669112	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.87E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.87E-05
2901	ALL	482225.9	3669112	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.91E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.91E-05
2902	ALL	482245.9	3669112	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.97E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.97E-05
2903	ALL	482265.9	3669112	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.23E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.23E-05
2904	ALL	482285.9	3669112	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.51E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.51E-05
2905	ALL	482305.9	3669112	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.69E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.69E-05
2906	ALL	482325.9	3669112	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.88E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.88E-05
2907	ALL	482345.9	3669112	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.99E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.99E-05
2908	ALL	482365.9	3669112	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.21E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.21E-05
2909	ALL	482385.9	3669112	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.51E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.51E-05
2910	ALL	482405.9	3669112	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.58E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.58E-05
2911	ALL	482425.9	3669112	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.41E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.41E-05
2912	ALL	482445.9	3669112	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.34E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.34E-05
2913	ALL	482465.9	3669112	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.29E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.29E-05
2914	ALL	482485.9	3669112	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.22E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.22E-05

2915	ALL	482505.9	3669112	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.17E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.17E-05
2916	ALL	482525.9	3669112	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.14E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.14E-05
2917	ALL	482545.9	3669112	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.13E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.13E-05
2918	ALL	482565.9	3669112	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.13E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.13E-05
2919	ALL	482585.9	3669112	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.13E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.13E-05
2920	ALL	482605.9	3669112	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.13E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.13E-05
2921	ALL	482625.9	3669112	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.07E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.07E-05
2922	ALL	482645.9	3669112	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.08E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.08E-05
2923	ALL	482665.9	3669112	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.09E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.09E-05
2924	ALL	482685.9	3669112	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.11E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.11E-05
2925	ALL	482705.9	3669112	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.10E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.10E-05
2926	ALL	482725.9	3669112	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.11E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.11E-05
2927	ALL	482745.9	3669112	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.09E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.09E-05
2928	ALL	482765.9	3669112	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.11E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.11E-05
2929	ALL	482785.9	3669112	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.00E-05
2930	ALL	482805.9	3669112	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.94E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.94E-05
2931	ALL	482105.9	3669132	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.61E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.61E-05
2932	ALL	482217	3667991	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.69E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.69E-03
2933	ALL	482229.5	3668012	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.09E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.09E-03
2934	ALL	482236.6	3668031	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.89E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.89E-03
2935	ALL	482242	3668048	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.60E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.60E-03
2936	ALL	482250.7	3668068	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.29E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.29E-03
2937	ALL	482258.5	3668087	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.91E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.91E-03
2938	ALL	482269.5	3668107	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.51E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.51E-03
2939	ALL	482275	3668126	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.76E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.76E-03
2940	ALL	482282	3668146	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.11E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.11E-03
2941	ALL	482285.2	3668166	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.61E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.61E-03
2942	ALL	482279.7	3668187	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.26E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.26E-03
2943	ALL	482184.3	3668008	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.56E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.56E-03
2944	ALL	482281.4	3668219	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.53E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.53E-04
2945	ALL	482169.5	3668350	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.85E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.85E-04
2946	ALL	482099.1	3668347	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.22E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.22E-04
2947	ALL	482075.6	3668388	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.38E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.38E-05
2948	ALL	482092.4	3668419	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.31E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.31E-05
2949	ALL	482069.7	3668475	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.81E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.81E-05
2950	ALL	481993.4	3668560	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.35E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.35E-05
2951	ALL	482077.3	3668909	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.92E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.92E-05
2952	ALL	481998.4	3668921	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.77E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.77E-05
2953	ALL	481850	3668379	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.36E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.36E-05
2954	ALL	481874.3	3668301	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.41E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.41E-04
2955	ALL	481931.4	3668239	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.31E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.31E-04
2956	ALL	482131	3668051	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.31E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.31E-03
2957	ALL	482373.3	3668116	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.54E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.54E-03
2958	ALL	482494.1	3667985	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.19E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.19E-03
2959	ALL	482458.2	3667914	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.27E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.27E-03
2960	ALL	482582.7	3667817	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.88E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.88E-04
2961	ALL	482756.4	3667982	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.25E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.25E-04
2962	ALL	482507.3	3668238	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.23E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.23E-04
2963	ALL	482301.6	3668297	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.90E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.90E-04
2964	ALL	482254.4	3668321	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.58E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.58E-04
2965	ALL	482067.6	3668561	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.60E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.60E-05
2966	ALL	482129.9	3668802	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.56E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.56E-05
2967	ALL	482105.3	3669133	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.61E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.61E-05
2968	ALL	483039.4	3669106	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.74E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.74E-05
2969	ALL	483256.4	3668899	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.13E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.13E-05

2970	ALL	483120.6	3668833	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.48E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.48E-05
2971	ALL	482863.9	3668835	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.74E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.74E-05
2972	ALL	482724.3	3668704	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.34E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.34E-05
2973	ALL	482814.9	3668633	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.33E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.33E-05
2974	ALL	482945.1	3668616	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.36E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.36E-05
2975	ALL	482979	3668567	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.89E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.89E-05
2976	ALL	482916.8	3668497	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.34E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.34E-05
2977	ALL	482694.1	3668589	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.57E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.57E-05
2978	ALL	482711.1	3668514	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.09E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.09E-05
2979	ALL	482775.2	3668418	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.05E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.05E-04
2980	ALL	482886.6	3668459	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.58E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.58E-05
2981	ALL	482945.1	3668365	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.06E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.06E-04
2982	ALL	482860.1	3668295	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.62E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.62E-04
2983	ALL	481786.4	3668055	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.95E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.95E-04
2984	ALL	481722.3	3667900	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.00E-04
2985	ALL	481922.3	3667810	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.47E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.47E-04
2986	ALL	481984.6	3667963	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.44E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.44E-04
2987	ALL	481582.6	3668150	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.07E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.07E-05
2988	ALL	481677	3668399	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.72E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.72E-04
2989	ALL	481614.7	3668497	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.18E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.18E-04
2990	ALL	481473.2	3668604	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.36E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.36E-05
2991	ALL	481529.8	3668716	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.91E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.91E-05
2992	ALL	481454.3	3668846	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.93E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.93E-05
2993	ALL	481337.3	3668670	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.98E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.98E-05
2994	ALL	481137.3	3668776	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.54E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.54E-05
2995	ALL	481016.5	3668502	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.11E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.11E-05
2996	ALL	481209	3668317	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.25E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.25E-05

Appendix C

Climate Action Plan Consistency Checklist

CLIMATE ACTION PLAN CONSISTENCY REVIEW CHECKLIST

INTRODUCTION

The City of San Marcos (City) adopted an updated Climate Action Plan (CAP) in December, 2020. The CAP outlines strategies and measures that the City will undertake to achieve its proportional share of State greenhouse gas (GHG) emissions reduction targets. The purpose of the CAP Consistency Checklist (Checklist), in conjunction with the CAP, is to provide a streamlined review process for all proposed development projects that are subject to discretionary review and/or trigger environmental review pursuant to the California Environmental Quality Act (CEQA).

Analysis of GHG emissions and potential climate change impacts from new development is required under CEQA. The City's CAP is a qualified greenhouse gas (GHG) emissions reduction plan in accordance with State CEQA Guidelines Section 15183.5. Pursuant to CEQA Guidelines Sections 15064(h)(3), 15130(d), and 15183(b), a project's incremental contribution to a cumulative GHG emissions effect may be determined not to be cumulatively considerable if it complies with the requirements of a CAP.

The purpose of this Checklist is to implement GHG reduction measures from the CAP that apply to new discretionary development projects. New development would demonstrate consistency with relevant CAP strategies and would not conflict with the City's ability to achieve the identified GHG reduction targets through implementation of applicable measures. Projects that are consistent with the CAP, as determined through the use of this Checklist, may rely on the CAP for the cumulative impact analysis of GHG emissions. Projects that are not consistent with the CAP must prepare a comprehensive project-specific analysis of GHG emissions, including quantification of existing and projected GHG emissions and incorporation of the measures in this Checklist to the extent feasible. Cumulative GHG impacts would be significant for any project that is not consistent with the CAP.

This Checklist may be updated periodically to incorporate new GHG reduction techniques or to comply with later amendments to the CAP or local, State, or federal law. Comprehensive updates to this Checklist will be coordinated with each CAP update. Administrative updates to the Checklist may occur regularly, as necessary for the purpose of keeping the Checklist up-to-date and implementable. Updates to the CAP Checklist associated with an update to the City's CAP would also require City Council approval and shall comply with CEQA.

APPLICABILITY AND PROCEDURES

This Checklist is required only for discretionary projects[1] that are subject to and not exempt from CEQA. Projects that are exempt from CEQA are deemed to be consistent with the City's CAP, and no further review is necessary, with the exception of a Class 32 "In-Fill Development Projects" categorical exemption (State CEQA Guidelines Section 15332), for which projects are required to demonstrate consistency with the CAP through this Checklist.

General procedures for Checklist compliance and review are described below. Specific guidance is also provided under each of the questions under Steps 1 and 2 of the Checklist.

- The City's Development Services - Planning Division reviews development applications and makes determinations regarding environmental review requirements under CEQA.
- The specific applicable requirements outlined in the Checklist shall be required as conditions of project approval.
- The project must provide written documentation and supporting evidence that demonstrate how the proposed project would implement each applicable Checklist requirement described herein to the satisfaction of the Planning Division.
- If a question in the Checklist is deemed not applicable (N/A) to a project, written documentation and evidence supporting that conclusion shall be provided to the satisfaction of the Planning Division. Each Checklist question provides the scenario(s) where checking N/A may be acceptable. If a measure is deemed not applicable for reasons other than those outlined in each question, supporting evidence will need to be provided and would be subject to Planning Division approval. A project may be determined to be inconsistent with the CAP if the N/A response is deemed to be not supported by credible evidence.
- Development projects requiring discretionary review that cannot demonstrate consistency with the CAP using this Checklist shall prepare a separate, project-level GHG analysis as part of the CEQA document prepared for the project.

[1] In this context, a project is any action that meets the definition of a "Project" in Section 15378 of the State CEQA Guidelines.

Application Information

Contact Information

Project No. and Name: Gran Vista Project

Property Address and APN: 219-121-1500 and 219-121-1600

Applicant Name and Co.: Meritage Homes

Contact Phone: 949 299 3852 Contact Email: Johanna.Crooker@mlcholdings.net

Was a consultant retained to complete this checklist? ☐ Yes ☐ No
If Yes, complete the following:

Consultant Name: Adam Poll Contact Phone: 805-308-8516

Company Name: Dudek Contact Email: apoll@dudek.com

Project Information

1. What is the size of the project site (acres)? 7.59

2. Identify all applicable proposed land uses:

   ☐ Residential (indicate # of single-family dwelling units):

   ☒ Residential (indicate # of multi-family dwelling units): 120

   ☐ Commercial (indicate total square footage):

   ☐ Industrial (indicate total square footage):

   ☐ Other (describe):

3. Provide a description of the project proposed. This description should match the basic project description used for the CEQA document. The description may be attached to the Checklist if there are space constraints.

GPA, RZ, SP, MFSDP, TSM for development of 120 multi-family dwelling units and private open space.

STEP 1: LAND USE CONSISTENCY

The first step in this section evaluates a project's GHG emissions consistent with the City's *Guidance to Demonstrating Consistency with the City of San Marcos Climate Action Plan: For Discretionary Projects Subject to CEQA* (Guidance Document). New discretionary development projects subject to CEQA review that emit fewer than 500 metric tons of carbon dioxide equivalent ($MTCO_2e$) annually would not contribute considerably to cumulative climate change impacts as stated in the City's Guidance Document, and therefore, would be considered consistent with the CAP and associated emissions projections.

For projects that are subject to CAP consistency review, the next step in determining consistency is to assess the project's consistency with the growth projections used in the development of the CAP. This section allows the city to determine a project's consistency with the land use assumptions used in the CAP.

Step 1: Land Use Consistency

	Checklist Item (Check the appropriate box and provide an explanation and supporting documentation for your answer)	**Yes**	**No**
1.	The size and type of projects listed below would emit fewer than 500 $MTCO_2e$ per year. Based on this threshold, does the proposed project exceed these characteristics? ▪ Single Family Housing: 36 dwelling units ▪ Multi-Family Housing: 55 dwelling units ▪ Office: 43,000 square feet ▪ Commercial Space: 20,000 square feet ▪ Regional Shopping Center: 18,000 square feet ▪ Hotel: 37 rooms ▪ Restaurant (Sit-Down): 6,500 square feet ▪ Restaurant (Drive-Thru, High Turnover): 2,400 square feet ▪ General Light Industrial: 58,000 square feet ▪ University: 263 students ▪ Mixed-Use: See *Guidance to Demonstrating Consistency* memorandum for methods to estimate mixed-use development thresholds ▪ Other: For project types not listed in this section the need for GHG analysis and mitigation will be made on a project-specific basis, considering the 500 $MTCO_2e$ per year screening threshold. If **"Yes",** proceed to Question 2 of Step 1. If **"No",** in accordance with the City's CAP screening criteria, the project's GHG impact is less than significant and is not subject to the measures of the CAP.	☒	☐
2.	Is the proposed project consistent with the City's existing General Plan land use designation? If **"Yes"**, proceed to Step 2. If **"No"**, proceed to Question 3 of Step 1	☐	☒
3.	For projects not consistent with the existing General Plan land use designation, does the project include a General Plan Amendment that would generate GHG emissions equal to or less than estimated emissions generated under the existing designation? If **"Yes"**, proceed to Step 2 and provide estimated project emissions under both existing and proposed designation(s) for comparison. If **"No"**, the project's GHG impact is potentially significant, and a GHG analysis must be prepared in accordance with the City's Guidance Document and applicable CEQA guidelines. The project must incorporate each of the measures identified in Step 2 to mitigate cumulative GHG emissions impacts, along with other mitigation measures as necessary based on a project specific GHG analysis.. Proceed and complete a project specific GHG analysis, and Step 2 of the Checklist.	☒	☐

STEP 2: CAP MEASURES CONSISTENCY

The second step of CAP consistency review is to evaluate a project's consistency with the applicable strategies and measures of the CAP. Each Checklist item is associated with a specific GHG reduction measure in the City's CAP. "N/A" should only be checked based on the direction provided in each Checklist Item question. All projects for which the measure is applicable must demonstrate that they would implement measures consistent with the Checklist Item, or fully substantiate how the item would be infeasible for project implementation. "N/A" responses are subject to Planning Division review and approval. If "No" is provided as a response to a question, the project would be determined to be inconsistent with the CAP and result in a significant GHG impact.

Step 2: CAP Measures Consistency			
Checklist Item (Check the appropriate box and provide an explanation for your answer. Please use additional sheets if necessary)	**Yes**	**No**	**N/A**
Project Design			
1. Electric Vehicle Charging Stations (Measure T-2) Multi-Family Residential and Non-Residential: Will the project install electric vehicle charging stations (Level 2 or better) in at least five percent of the total parking spaces provided on-site? Check "N/A" if the project is a single-family residential project or would not provide any parking.	☐	☐	☒
Please substantiate how the project satisfies question 1. Indicate the total number of spaces and the number of EV chargers (should be 5% of more of total spaces): In accordance with the Guidance for Demonstrating Consistency with the City of San Marcos Climate Action Plan: For Discretionary Projects Subject to CEQA (Ascent 2020), the numerical GHG threshold of 2.1 MT CO2e per service population per year was used.			
2. Bicycle Infrastructure (Measure T-8) Residential and Non-Residential Projects: If the following conditions are met, would the project pay its fair-share contribution to bicycle infrastructure improvements? ☐ Intersection or roadway segment improvements are proposed as part of the project and, ☐ The City's General Plan Mobility Element identifies bicycle infrastructure improvements at any intersection(s) or roadway segment(s) that would be improved as part of the project. Check "N/A" if the conditions above would not be met.	☐	☐	☒
Please substantiate how the project satisfies question 2: In accordance with the Guidance for Demonstrating Consistency with the City of San Marcos Climate Action Plan: For Discretionary Projects Subject to CEQA (Ascent 2020), the numerical GHG threshold of 2.1 MT CO2e per service population per year was used.			

Step 2: CAP Measures Consistency			
Checklist Item (Check the appropriate box and provide an explanation for your answer. Please use additional sheets if necessary)	**Yes**	**No**	**N/A**
3. Transportation Demand Management (Measure T-9) Multi-Family Residential and Non-Residential: Will the project develop and implement a TDM plan that includes, at a minimum, all of the TDM strategies listed below? ☐ Provide discounted monthly transit pass or provide at least 25 percent transit fare subsidy to residents/employees. ☐ Provide designated car-share, carpool, vanpool, and/or park-and-ride parking spaces.[2] ☐ Provide pedestrian connections between all internal uses and to all existing or planned external streets around the project site(s). ☐ Provide secure bicycle parking spaces or bicycle racks, showers, and clothes lockers. ☐ Encourage telecommuting for employees (allow one telecommute day per week or compressed work weeks) or provide a telecommute work center with common office space and equipment available to residents. *-or-* Would the project implement and monitor for four (4) years a TDM program that demonstrates an alternative transportation (i.e. carpool, public transit, bicycle, walk, telecommute) mode share of at least 29 percent [3] for all residents? Check "N/A" if the project is a single-family residential project or is not subject to the City's TDM Ordinance.	☐	☐	☒
Please state which measure option the project for which the project would comply and substantiate how the project satisfies question 3: In accordance with the Guidance for Demonstrating Consistency with the City of San Marcos Climate Action Plan: For Discretionary Projects Subject to CEQA (Ascent 2020), the numerical GHG threshold of 2.1 MT CO2e per service population per year was used.			

[2] The designated number of car-share, carpool, vanpool, and/or park-and-ride parking spaces provided at a rate equal to or greater than CALGreen minimum requirements.

[3] Measure T-10 requires projects to increase alternative mode share by seven percent. The baseline mode share for alternative transportation (i.e. carpool, public transit, bicycle, walk, and telecommute) is 22 percent based on 2010 Census Data.

Step 2: CAP Measures Consistency			
Checklist Item (Check the appropriate box and provide an explanation for your answer. Please use additional sheets if necessary)	**Yes**	**No**	**N/A**
4. Reduce Parking Near Transit (Measure T-12) Multi-Family Residential: If located within a half-mile of a major transit stop[4], would the project provide at least 27 percent fewer parking spaces than required for the same use based on the City's municipal code parking requirements? Check "N/A" if the project is a single-family residential or non-residential project.	☐	☐	☒
Please substantiate how the project satisfies question 4. Indicate total parking spaces that are required per the City's Zoning Ordinance and the total number of spaces as proposed: In accordance with the Guidance for Demonstrating Consistency with the City of San Marcos Climate Action Plan: For Discretionary Projects Subject to CEQA (Ascent 2020), the numerical GHG threshold of 2.1 MT CO_2e per service population per year was used.			
5. Water Heaters (Measure E-1) Residential: Will the project install one of, or a combination of, the following water heater types in place of natural gas water heaters? ☐ Electric heat pump water heater ☐ Instantaneous electric water heater ☐ Electric tank ☐ Solar water heater with heat pump water heater backup ☐ Solar water heater with electric tank backup Check "N/A" if the project is a non-residential project.	☐	☐	☒

[4] Major transit stop is defined as a bus or light-rail station with fixed service and 10-minute minimum headways during peak hours. Project applicants should confirm with City staff if the project site would fall within this proximity tot a major transit stop.

Step 2: CAP Measures Consistency			
Checklist Item (Check the appropriate box and provide an explanation for your answer. Please use additional sheets if necessary)	**Yes**	**No**	**N/A**
Please substantiate how the project satisfies question 5. A note should be added to the Floor plans and site plan to show that Building Permit Plan will include this requirement: In accordance with the Guidance for Demonstrating Consistency with the City of San Marcos Climate Action Plan: For Discretionary Projects Subject to CEQA (Ascent 2020), the numerical GHG threshold of 2.1 MT CO2e per service population per year was used.			
6. Photovoltaic Installation (Measure E-2) Non-Residential: Will the project install photovoltaic systems with a minimum capacity of two watts per square foot of gross floor area? Check "N/A" if the project is a residential project or if installation of on-site photovoltaic would be infeasible.	☐	☐	☒
Please substantiate how the project satisfies question 6. The Photovotaic systems should be included in the Roof Plan/Site Plan (as applicable) and a note should be added to the Plans set to show that Building Permit Plan will include this requirement:: The Project is residential.			
7. Landscaping Water Use (Measure W-1) Residential and Non-Residential: Will the project comply with the City's Water Efficient Landscape Ordinance?[5] Check "N/A" if the project is not proposing any landscaping or is not subject to the City's Water Efficient Landscape Ordinance.	☐	☐	☒

[5] City of San Marcos Landscape Manual: https://www.san-marcos.net/home/showdocument?id=13984

Step 2: CAP Measures Consistency			
Checklist Item (Check the appropriate box and provide an explanation for your answer. Please use additional sheets if necessary)	**Yes**	**No**	**N/A**
Please substantiate how the project satisfies question 7. Include total landscape area that is subject to WELO: In accordance with the Guidance for Demonstrating Consistency with the City of San Marcos Climate Action Plan: For Discretionary Projects Subject to CEQA (Ascent 2020), the numerical GHG threshold of 2.1 MT CO2e per service population per year was used.			
8. Urban Tree Canopy (Measure C-2) <u>Single-Family Residential</u>: Will the project plant a minimum of one tree per single-family residential unit? *-or-* <u>Multi-Family Residential and Non-Residential</u>: If the project is providing more than 10 parking spaces, will the project plant at least one tree per five parking spaces provided? Check "N/A" if planting the required number of trees on-site would be infeasible.	☐	☐	☒
Please substantiate how the project satisfies question 8. Include total number of tree (which should be the same as indicated on Landscape Plans): In accordance with the Guidance for Demonstrating Consistency with the City of San Marcos Climate Action Plan: For Discretionary Projects Subject to CEQA (Ascent 2020), the numerical GHG threshold of 2.1 MT CO2e per service population per year was used.			

Appendix C

Biological Resources Technical Report

DRAFT

Biological Resources Technical Report

Gran Vista

SEPTEMBER 2022

Prepared for:

MERITAGE HOMES
5 Peters Canyon Road, Suite 310
Irvine, California 92606
Contact: Johanna Crooker

Prepared by:

DUDEK
605 Third Street
Encinitas, California 92024
Contact: Vanessa Scheidel

Printed on 30% post-consumer recycled material.

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Acronyms and Abbreviations

Acronym/Abbreviation	Definition
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
City	City of San Marcos
CNDDB	California Natural Diversity Database
IPaC	Information for Planning and Consultation
MBTA	Migratory Bird Treaty Act
MHCP	Multiple Habitat Conservation Program
MM	Mitigation Measure
Project	Gran Vista Project
report	Biological Resources Technical Report
RWQCB	Regional Water Quality Control Board
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey

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1 Introduction

Dudek prepared this Biological Resources Technical Report (report) for the Gran Vista Project (Project) in support of Project review by the City of San Marcos (City) in the California Environmental Quality Act (CEQA) evaluation process. It is also intended to support environmental review by other applicable regulatory resource agencies as needed.

The purpose of this report is to provide the methods and results of the vegetation mapping, jurisdictional delineation, reconnaissance survey, and literature review. This report includes an impact analysis based on survey results and federal, state, and local regulations, as well as conditions to avoid and minimize impacts to biological resources.

1.1 Regional and Local Setting

The proposed Project is the development of an approximately 7.6-acre vacant lot. The site is located in the land use jurisdictions of both the City of San Marcos and the County of San Diego; however, it is proposed to be annexed into City jurisdiction. The site is located at the southeastern portion of San Marcos, bordering the City of Escondido to the east and unincorporated County of San Diego lands to the south. The Project site is bounded by Las Posas Road along the eastern boundary, W. Mission Road along the southwest boundary, an existing CVS store to the south (with a parking lot that extends into the Project site), and existing single-family residential development to the west/northwest (Figure 1, Project Location). Nearby land uses in the vicinity of the Project site include industrial and commercial uses to the west on the other side of W. Mission Road, the Santa Fe Hills residential community to the north, and Palomar College approximately 0.5 miles to the east. The Project site is composed of Assessor's Parcel Numbers 219-121-1500 and 219-121-1600; it is located on the 7.5-minute San Marcos quadrangle map on Sections 3 and 10, in Township 12 South, Range 3 West of the San Bernardino Base and Meridian. The approximate center of the Project site corresponds to 33.150335° north latitude, and -117.189601° west longitude. The site is General Plan designated Commercial (C) (City of San Marcos 2012).

Topography of the Project site is gently sloping from north to south, with an elevation range of approximately 582 to 568 feet above mean sea level. San Diego County experiences a Mediterranean climate with warm, dry summers and cool, wet winters. The average maximum temperature in the general vicinity of the Project site is 77.2°F, and the average minimum temperature is approximately 52.3°F. Average annual precipitation in the general vicinity of the Project site is 14.93 inches, nearly all of which falls October through April (WRCC 2022).

1.2 Project Description

The residential component of the Project would consist of 120 townhomes with a mix of 2- and 3-bedroom units. The Project would include approximately 92,645 square feet of recreation area onsite and an average of 154 square feet of private open space per unit. Amenities onsite would include tot-lots and recreational areas, a dog park, a community garden, and a landscaped pedestrian path along the Las Posas Road frontage. The Project would include two points of entry using the existing driveway entries on N. Las Posas Road and W. Mission Road that currently provide access to the adjacent CVS store. A total of 264 parking spaces would be provided for the residential dwelling units, including 20 guest spaces, in addition to 37 existing spaces on-site. The Project site is currently zoned for Commercial (C) use with an existing General Plan designation of Commercial and is within the City's General Plan Neighborhood College area (City of San Marcos 2012). The Project proposes a General Plan and Zoning Amendment to change the land use designation to Specific Plan Area (SPA).

1.3 Land Uses

The majority of the on-site land use is currently unoccupied and disturbed from previous grading and disking. The Project site was graded in the early 1990s and imported fill material from a site in eastern San Marcos and again in the early 2000s based on first-hand knowledge and historical aerial imagery; in 2009, the site was again rough graded, sheet graded, and used as a staging area for construction of the CVS store located just southwest of the site (Historic Aerials 2021), and implemented an approved erosion control plan which utilized a hydroseed mix to stabilize the soil. The southeast portion of the Project site is currently used as a CVS parking lot. In addition, in 2017 the State of California processed a use permit for Palomar Community College District for temporary parking. Once the parking was no longer needed, the area was restored by removing parking fill to the disturbed areas and graded back to its pre-parking condition. The site has been disced every one to three years since the original grading permit was relied upon. This site reportedly is mowed for fire abatement (EAEC 2017). The site is bordered primarily by residential neighborhoods to the north and commercial and industrial development to the east, west, and south (Figure 2, Vegetation Communities and Land Cover Types).

1.4 Soils

The U.S. Department of Agriculture Soil Survey mapped most of the Project site as underlain by the following soil types: Huerhuero loam (HrC), 2% to 9% slopes and Placentia sandy loam (PeC), 2% to 9% slopes (USDA 2022) (Figure 3, Soils). Neither of the soil types are considered hydric soils or are known to support edaphic special-status plant species (i.e., the soils of the site are neither serpentine nor alkaline).

Soils within the Project site have been degraded over time from disturbances such as grading and disking. As a result, the soils no longer maintain their native soil characteristics, and therefore have no particular significance to biological resources of the Project site.

1.5 Watersheds and Hydrology

The Project site is located within the San Marcos Creek Hydrologic Unit (Figure 4, Hydrologic Setting) (HUC 12-180703030503) (USGS 2022). The San Marcos Creek Hydrologic Unit covers an area of approximately 54 square miles. This hydrologic unit is bordered by Lower Escondido Creek Hydrologic Unit to the south, Loma Alta Creek-Frontal Gulf of Santa Catalina Hydrologic Unit to the west, Agua Hedionda Creek Hydrologic Unit to the north, and Upper Escondido Creek Hydrologic Unit to the east. The San Marcos Creek Hydrologic Unit includes one major coastal lagoon, Batiquitos (USGS 2022).

2 Regulatory Context

2.1 Federal

2.1.1 Federal Endangered Species Act

The federal Endangered Species Act of 1973 (16 USC 1531 et seq.), as amended, is administered by the U.S. Fish and Wildlife Service (USFWS) for most plant and animal species, and by the National Oceanic and Atmospheric Administration National Marine Fisheries Service for certain marine species. This legislation is intended to provide a means to conserve the ecosystems upon which endangered and threatened species depend, and provide programs for the conservation of those species, thus preventing extinction of plants and wildlife. The federal Endangered Species Act defines an endangered species as "any species that is in danger of extinction throughout all or a significant portion of its range." A threatened species is defined as "any species that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range." Under the federal Endangered Species Act, it is unlawful to take any listed species, and "take" is defined as, "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct."

The federal Endangered Species Act allows for the issuance of incidental take permits for listed species under Section 7, which is generally available for projects that also require other federal agency permits or other approvals, and under Section 10, which provides for the approval of habitat conservation plans on private property without any other federal agency involvement. Upon development of a habitat conservation plan, USFWS can issue incidental take permits for listed species.

2.1.2 Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) was originally passed in 1918 as four bilateral treaties, or conventions, for the protection of a shared migratory bird resource. The primary motivation for the international negotiations was to stop the "indiscriminate slaughter" of migratory birds by market hunters and others. Each of the treaties protects selected species of birds and provides for closed and open seasons for hunting game birds. The MBTA protects more than 800 species of birds and prohibits the take of any migratory bird or any part, nest, or eggs of any such bird. Under the MBTA, "take" is defined as pursuing, hunting, shooting, capturing, collecting, or killing, or attempting to do so (16 USC 703 et seq.). Additionally, Executive Order 13186, Responsibilities of Federal Agencies to Protect Migratory Birds, requires that any project with federal involvement address impacts of federal actions on migratory birds with the purpose of promoting conservation of migratory bird populations (66 FR 3853–3856). The executive order requires federal agencies to work with USFWS to develop a memorandum of understanding. USFWS reviews actions that might affect these species.

Two species of eagles that are native to the United States, bald eagle (*Haliaeetus leucocephalus*) and golden eagle (*Aquila chrysaetos*), were granted additional protection within the United States under the Bald and Golden Eagle Protection Act (16 USC 668–668d) to prevent the species from becoming extinct.

2.1.3 Clean Water Act

Pursuant to Section 404 of the Clean Water Act, the U.S. Army Corps of Engineers (USACE) regulates the discharge of dredged and/or fill material into "waters of the United States." The term "wetlands" (a subset of waters of the United

States) is defined in Title 33 of the Code of Federal Regulations, Section 328.3(b), as "those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas." In the absence of wetlands, the limits of USACE jurisdiction in non-tidal waters, such as intermittent streams, extend to the ordinary high water mark (OHWM), which is defined in Title 33 of the Code of Federal Regulations, Section 328.3(e).

2.2 State

2.2.1 California Endangered Species Act

The California Department of Fish and Wildlife (CDFW) administers the California Endangered Species Act (CESA), which prohibits the "take" of plant and animal species designated by the California Fish and Game Commission as endangered or threatened in the state of California. Under CESA Section 86, take is defined as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." CESA Section 2053 stipulates that state agencies may not approve projects that will "jeopardize the continued existence of any endangered species or threatened species, or result in the destruction or adverse modification of habitat essential to the continued existence of those species, if there are reasonable and prudent alternatives available consistent with conserving the species or its habitat which would prevent jeopardy."

CESA defines an endangered species as "a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant which is in serious danger of becoming extinct throughout all, or a significant portion, of its range due to one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, or disease." CESA defines a threatened species as "a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that, although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future in the absence of the special protection and management efforts required by this chapter. Any animal determined by the [California Fish and Game] Commission as rare on or before January 1, 1985, is a threatened species." A candidate species is defined as "a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that the Commission has formally noticed as being under review by the department for addition to either the list of endangered species or the list of threatened species, or a species for which the Commission has published a notice of proposed regulation to add the species to either list." CESA does not list invertebrate species.

CESA authorizes the taking of threatened, endangered, or candidate species if take is incidental to an otherwise lawful activity and if specific criteria are met. These provisions also require CDFW to coordinate consultations with USFWS for actions involving federally listed species that are also state-listed species. In certain circumstances, CESA allows CDFW to adopt a CESA incidental take authorization as satisfactory for CEQA purposes based on finding that the federal permit adequately protects the species and is consistent with state law.

A CESA permit may not authorize the take of "fully protected" species that are protected in other provisions of the California Fish and Game Code, discussed further below.

2.2.2 California Fish and Game Code

Sections 3511 (birds), 4700 (mammals), 5050 (reptiles and amphibians), and 5515 (fish) of the California Fish and Game Code provide that designated fully protected species may not be taken or possessed without a permit. Incidental take of these species is not authorized by law.

Pursuant to Section 3503.5 of the California Fish and Game Code, it is unlawful to take, possess, or destroy any birds of prey; or to take, possess, or destroy any nest or eggs of such birds. Birds of prey refer to species in the orders Falconiformes and Strigiformes.

Nests of all other birds (except English sparrow [*Passer domesticus*] and European starling [*Sturnus vulgaris*]) are protected under Sections 3503 and 3513 of the California Fish and Game Code.

Pursuant to Section 1602 of the California Fish and Game Code, CDFW regulates all diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake that supports fish or wildlife. Diversion, obstruction, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake that supports fish or wildlife requires authorization from CDFW by means of entering into an agreement pursuant to Section 1602 of the California Fish and Game Code.

2.2.3 Porter–Cologne Water Quality Control Act

The Porter–Cologne Water Quality Control Act (Porter–Cologne Act) protects water quality and the beneficial uses of water. It applies to surface water and groundwater. Under this law, the State Water Resources Control Board develops statewide water quality plans, and the Regional Water Quality Control Boards (RWQCBs) develop regional basin plans that identify beneficial uses, water quality objectives, and implementation plans. The RWQCBs have the primary responsibility to implement the provisions of statewide plans and basin plans. Waters regulated under the Porter–Cologne Act include isolated waters that are not regulated by USACE. RWQCBs regulate discharging waste, or proposing to discharge waste, within any region that could affect a "water of the state" (California Water Code, Section 13260[a]). Waters of the state are defined as "any surface water or groundwater, including saline waters, within the boundaries of the state" (California Water Code, Section 13050[e]). Developments with impacts on jurisdictional waters must demonstrate compliance with the goals of the Porter–Cologne Act by developing stormwater pollution prevention plans, standard urban stormwater mitigation plans, and other measures to obtain a Clean Water Act Section 401 certification. If a Clean Water Act Section 404 permit is not required for a project, the RWQCB may still require a permit (i.e., Waste Discharge Requirement) for impacts to waters of the state under the Porter–Cologne Act.

2.2.4 California Environmental Quality Act

CEQA (California Public Resources Code Section 21000 et seq.) and the CEQA Guidelines (14 CCR 15000 et seq.) require identification of a project's potentially significant impacts on biological resources and feasible mitigation measures and alternatives that could avoid or reduce significant impacts. CEQA Guidelines Section 15380(b)(1) defines endangered animals or plants as species or subspecies whose "survival and reproduction in the wild are in immediate jeopardy from one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, disease, or other factors" (14 CCR 15000 et seq.). A rare animal or plant is defined in CEQA Guidelines Section 15380(b)(2) as a species that, although not currently threatened with extinction, exists "in such small numbers throughout all or a significant portion of its range that it may become endangered if its environment worsens; or … [t]he species is likely to become endangered within the foreseeable future throughout all or a significant portion of its range and may be considered 'threatened' as that term is used in the federal Endangered Species Act." Additionally, an animal or plant may be presumed to be endangered, rare, or threatened if it meets the criteria for listing, as defined further in CEQA Guidelines Section 15380(c). CEQA also requires identification of a project's potentially significant impacts on riparian habitats (such as wetlands, bays, estuaries, and marshes) and other sensitive natural communities, including habitats occupied by endangered, rare, and threatened species.

In Title 14 of the California Code of Regulations (CCR), Section 1.72 (14 CCR, Section 1.72), CDFW defines a "stream" (including creeks and rivers) as "a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life. This includes watercourses having surface or subsurface flow that supports or has supported riparian vegetation."

In 14 CCR 1.56, CDFW's definition of "lake" includes "natural lakes or man-made reservoirs." Diversion, obstruction, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake that supports fish or wildlife requires authorization from CDFW by means of entering into an agreement pursuant to Section 1602 of the California Fish and Game Code.

CDFW recognizes that all plants with a California Rare Plant Rank 1A, 1B, or 2, and some ranked 3, of the California Native Plant Society Inventory of Rare and Endangered Plants in California (CNPS 2022) may meet the criteria for listing as threatened or endangered and should be considered under CEQA (CDFW 2021). Some of the California Rare Plant Rank 3 and 4 plants meet the criteria for determination as "rare" or "endangered" as defined in Section 1901, Chapter 10 (Native Plant Protection Act), Division 2, of the California Fish and Game Code, as well as Section 2062 and Section 2067, Chapter 1.5 (CESA), Division 3. Therefore, consideration under CEQA for these California Rare Plant Rank 3 and 4 species is strongly recommended by the California Native Plant Society (CNPS 2022).

For purposes of this report, animals considered "rare" under CEQA include endangered or threatened species, Birds of Conservation Concern (USFWS 2021), California Species of Special Concern (CDFW 2022a), and fully protected species.

Section IV, Appendix G, Environmental Checklist Form, of the CEQA Guidelines (14 CCR 15000 et seq.) requires an evaluation of impacts to "any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service."

The criteria used to determine the significance of impacts to biological resources under CEQA are provided in Chapter 5, Project Impacts and Significance Determination.

2.3 Local

2.3.1 North County Multiple Habitat Conservation Program

The North County Multiple Habitat Conservation Program (MHCP) is a long-term regional conservation plan established to protect sensitive species and habitats in northern San Diego County. The MHCP is divided into seven Subarea Plans—one for each jurisdiction within the MHCP—that are permitted and implemented separately from one another. The City of Carlsbad is the only city under the MHCP that has an approved and permitted Subarea Plan. The City of San Marcos Subarea Habitat Conservation Plan/Natural Community Conservation Plan (San Marcos Subarea Plan) has not been finalized or implemented, and the City is no longer an active participant in the Natural Community Conservation Plan program or the subregional MHCP conservation planning effort. However, it is the City's policy to comply with the conservation policies identified in the draft San Marcos Subarea Plan, including an assessment of a designated Biological Core and Linkage Area or MHCP Focused Planning Area in the context of a proposed project and the preservation of sensitive biological resources.

3 Methods

3.1 Literature Review

Dudek conducted a review of the existing biological resources and species within the vicinity of the Project site using CDFW's California Natural Diversity Database (CDFW 2022b); the California Native Plant Society's Online Inventory of Rare, Threatened, and Endangered Plants of California (CNPS 2022); the San Diego Natural History Museum's Plant Atlas (SDNHM 2022), Mammal Atlas (Tremor et al. 2017), and Bird Atlas (Unitt 2004); and the San Diego Geographic Information System (SanGIS). Dudek obtained special-status species occurrence data from the above sources by querying records within the U.S. Geological Survey (USGS) 7.5-Minute Quadrangle Map and the nine Quadrangle Maps surrounding the Project site: Valley Center, Morro Hill, Bonsall, Pala, Encinitas, Escondido, Rancho Santa Fe, San Luis Rey, and San Marcos USGS.

For this report, special-status plant and wildlife species are defined as those that are (1) listed, proposed for listing, or candidates for listing as threatened or endangered under the federal Endangered Species Act; (2) listed or candidates for listing as threatened or endangered under the California Endangered Species Act; (3) designated as Fully Protected under the California Fish and Game Code; (4) designated as a California Species of Special Concern by CDFW; and/or (5) assigned a California Rare Plant Rank of 1B or 2B by the California Native Plant Society.

In addition, Dudek reviewed the following available resources to assess the potential for biological and wetland resources within the Project site and vicinity:

- List of potentially occurring listed species generated from a review of USFWS's Information for Planning and Consultation (IPaC) Trust Resources Report list of federal and threatened species (USFWS 2022a)
- USGS National Hydrography Dataset (USGS 2022)
- USFWS National Wetlands Inventory (USFWS 2022b)
- U.S. Department of Agriculture, Natural Resources Conservation Service, Web Soil Survey (USDA 2022)

Prior environmental documents prepared for the Project provided information on biological resources and constraints previously identified. The documents reviewed included the following:

- Biological Site Assessment for the Meritage Homes Project in San Marcos, California (Dudek 2021)
- Directed Surveys for Thread-Leaved and Orcutt's Brodiaea, Mission Pointe (EAEC 2017)
- Potential Biological Constraints to Development for the Property Located at the Corner of Las Posas and Mission, City of San Marcos (BCG 2008)

3.2 Field Surveys

3.2.1 Vegetation Community and Land Cover Mapping

Dudek biologists conducted vegetation mapping to characterize natural vegetation communities, including habitats for special-status species, within the Project site. Vegetation communities and land covers were mapped using the Preliminary Descriptions of the Terrestrial Natural Communities of California (Holland 1986) as modified by the County of San Diego and noted in Vegetation Communities of San Diego County (Oberbauer et al. 2008).

Vegetation mapping was conducted within the Project site in June 2021 in conjunction with the initial reconnaissance-level surveys for sensitive resources. Mapping was performed in the field through interpretation of field maps with a high-quality aerial photographic base map.

3.2.2 Focused Surveys for Thread-Leaved and Orcutt's Brodiaea

Everett and Associates Environmental Consultants conducted a focused survey for thread-leaved brodiaea (*Brodiaea filifolia*) and Orcutt's brodiaea (*B. Orcutti*) in 2017 within the Project site. A reference site approximately 1,300 feet northwest of the Project site, with a known population of thread-leaved brodiaea, was visited the morning of the survey to verify the species was in bloom. The Project site was surveyed using transects to achieve complete visual coverage of the site (EAEC 2017).

3.2.3 Jurisdictional Delineation

3.2.3.1 Previous Jurisdictional Delineation

In 2008, Blue Consulting Group performed a jurisdictional delineation to classify "waters of the United States and State," including wetlands, under the jurisdiction of USACE and CDFW (BCG 2008). The USACE jurisdictional wetlands delineation was conducted in accordance with the 1987 U.S. Army Corps of Engineers Wetland Delineation Manual (USACE 1987). Hydrology, vegetation, and soils were examined at potential wetland sites and were recorded on wetland determination data forms. Additionally, a directed survey for potential vernal pool basins and vernal pool plant species was completed onsite.

3.2.3.2 2021 Jurisdictional Delineation

Dudek biologists field verified the findings of previous jurisdictional delineations within the Project site in June 2021 in conjunction with the initial reconnaissance-level surveys for sensitive resources. Methods followed those described for the 2008 delineation (Section 3.2.3.1).

3.3 Survey Limitations

The reconnaissance survey, vegetation mapping, and jurisdictional delineation were done during the daylight hours under weather conditions that allowed for quality biological observations (e.g., surveys were not conducted during rain). Because surveys were conducted during the day, the likelihood of detecting nocturnal and crepuscular species, such as many mammal species, was relatively low.

4 Results

4.1 Vegetation Communities and Land Covers

Three vegetation communities/land covers were mapped within the Project site: non-native grassland, Diegan coastal sage scrub, and urban/developed (Figure 2).

4.1.1 Non-native Grassland

Non-native grassland consists of dense to sparse cover of annual grasses with flowering culms between 0.5 to 3 feet in height (Oberbauer et al. 2008). In San Diego County, the presence of wild oat (*Avena* spp.), bromes, stork's bill (*Erodium cicutarium*), and mustard (*Hirschfeldia incana*) are common indicators. In some areas, depending on past disturbance and annual rainfall, annual forbs may be the dominant species; however, it is presumed that grasses will dominate. Non-native grassland makes up the majority of the Project site and is dominated by oats and brome grasses (*Bromus* spp.) in the open to continuous herbaceous layer. Other common herbs observed in the grassland include shortpod mustard, prickly Russian thistle (*Salsola tragus*), redstem stork's bill, and Menzies's golden bush (*Isocoma menziesii*). The vegetation community is the result of hydroseed placement over the graded portions of the site. The current owner actively mows the area thus limiting the potential for the area to regenerate to its fullest potential. There is 5.95 acres of non-native grassland onsite.

4.1.2 Diegan Coastal Sage Scrub: Baccharis-dominated

Diegan coastal sage scrub is a subcategory of coastal scrub plant community as described in Oberbauer et al. (2008). The community is typically dominated by low, soft woody drought-deciduous shrubs with shallow root systems and open canopies and contain associated herbaceous species. The community typically occupies xeric sites with shallow soils. Characteristic species include California sagebrush (*Artemisia californica*), California buckwheat (*Eriogonum fasciculatum*), black sage (*Salvia mellifera*), and white sage (*Salvia apiana*). The western slope of the Project site contains approximately 0.6 acres of disturbed Diegan coastal sage scrub, dominated by coyote brush (*Baccharis pilularis*) and ladies' tobacco (*Pseudognaphalium californicum*).

4.1.3 Urban/Developed

The urban/developed land cover refers to areas that have been constructed on or otherwise physically altered to the point where vegetation is no longer present. Urban or developed areas are characterized by permanent or semi-permanent structures, hardscapes, and landscaped areas that require irrigation.

Within the Project site, this mapping unit identifies the developed area in the southern portion of the site containing the CVS parking lot, Peruvian peppertree (*Schinus mole*), Brazilian peppertree (*Schinus terebinthifolious*), and a couple small palm trees. There is 0.9 acres of urban/developed land onsite. As described above, this land cover is not sensitive and does not require habitat compensation.

4.2 Plant and Wildlife Species Observed

The majority of vegetation within the Project site consists of non-native, introduced plant species. Twenty-one species of plants 7 native [33%] and 14 non-native [67%]) were recorded on the site during the 2021 survey (see Appendix A, Plant Species Compendium).

Wildlife was recorded onsite during the initial reconnaissance-level survey in 2021. Common species observed on the Project site included California ground squirrel (*Spermophilus (Otospermophilus*) *beecheyi*), brush rabbit (*Sylvilagus bachmani*), Cassin's kingbird (*Tyrannus vociferans*), and American crow (*Corvus brachyrhynchos*). A full list of wildlife species observed during the survey is included in Appendix B, Wildlife Species Compendium.

4.3 Special-Status/Regulated Resources

Special-status species occurrences are shown in Figure 5A, Special-Status Species Occurrences – Wildlife; Figure 5B, Special-Status Species Occurrences – Plants; and Figure 5C, Special-Status Species Occurrences – Communities, and are discussed further below.

4.3.1 Sensitive Vegetation Communities

Sensitive natural communities are vegetation communities that (1) support concentrations of special-status plant or wildlife species, (2) are of particular value to wildlife, and/or (3) are of limited distribution statewide or within a county or region. The Multiple Habitat Conservation Program organizes vegetation into habitat group types: Wetland Communities, Rare Upland, Coastal Sage Scrub, Chaparral, Annual Grassland, and Other (Table 2) (SANDAG 2003). Vegetation communities listed under each of those groups, except for "other lands", are considered sensitive and impacts to these communities would require mitigation. The City typically requires habitat compensation for impacts to non-native grassland at a 0.5:1 ratio and for impacts to Diegan coastal sage scrub at a 1:1 ratio. No habitat compensation is required for impacts to urban/developed.

4.3.2 Special-Status Plant Species

Results of the California Natural Diversity Database (CNDDB), California Native Plant Society, and IPaC database searches identified 65 special-status plant species as occurring or potentially occurring within the USGS 7.5-minute quadrangle map and the nine quadrangle maps surrounding the Project site—Valley Center, Morro Hill, Bonsall, Pala, Encinitas, Escondido, Rancho Santa Fe, San Luis Rey, and San Marcos (CDFW 2022b; CNPS 2022)—and within the vicinity (USFWS 2022a) (Appendix C, Special-Status Plant Species Potential to Occur). All 65 were eliminated from further consideration due to a lack of suitable habitat or edaphic conditions, extent of habitat degradation within the Project site (e.g., regular mowing, previous disturbance), or the location of the Project site outside a species' known range. No special-status plant species were observed during the initial site reconnaissance survey (Figure 5B). Everett and Associates Environmental consulting did not observe any special-status plant species onsite during the focused survey for thread-leaved brodiaea or Orcutt's brodiaea, and reported that appropriate soils for these species were not onsite (EAEC 2017). Therefore, the Project site has no value as habitat for endangered, rare, or threatened plant species.

4.3.3 Special-Status Wildlife Species

Results of the CNDDB and IPaC database searches identified 52 special-status wildlife species as occurring or potentially occurring within the USGS 7.5-minute quadrangle map and the nine quadrangle maps surrounding the Project site—Valley Center, Morro Hill, Bonsall, Pala, Encinitas, Escondido, Rancho Santa Fe, San Luis Rey, and San Marcos USGS quadrangle maps (CDFW 2022b)—and within the vicinity (USFWS 2022a). Of these, 51 species were eliminated from consideration due to the absence of suitable habitat within the Project site (Figure 5A) or the Project site's location outside of their known range (Appendix D, Special-Status Wildlife Species Potential to Occur). The remaining species, burrowing owl (*Athene cunicularia*), was determined to have a moderate potential to occur on the Project site and is discussed in more detail below.

4.3.3.1 Burrowing Owl

Burrowing owl is a California Species of Special Concern. It requires habitat with three basic attributes: open, well-drained terrain; short, sparse vegetation; and underground burrows or burrow surrogates, such as culverts, concrete debris piles, or riprap (Klute et al. 2003). This species occupies grasslands, deserts, sagebrush scrub, agricultural areas (including pastures and untilled margins of cropland), earthen levees and berms, coastal uplands, and urban vacant lots, as well as the margins of airports, golf courses, and roads. This species also prefers sandy soils with higher bulk density and less silt, clay, and gravel (Lenihan 2007).

Although habitat within the Project site is moderately suitable to support burrowing owl foraging and breeding, this species not known to breed and forage within proximity of the Project site. Suitable habitat for this species exists within the non-native grassland and disturbed Diegan coastal sage scrub vegetation communities located within the Project site. California ground squirrel burrows, which can be used by burrowing owls for breeding and shelter, were observed within the Project site during the reconnaissance survey, but no burrowing owls or sign of burrowing owl presence (i.e., whitewash, pellets, feathers) were observed within the Project site during the reconnaissance survey or previous surveys. The nearest CNDDB documented occurrence for this species is a historical occurrence approximately 6.86 miles southeast of the Project site (Occ. No. 567) (CDFW 2022b). In addition, the project site is surrounded by development and has been disturbed multiple times throughout the years. Therefore, although currently there is suitable habitat available for this species, it is not expected to occur.

4.3.4 Nesting Birds

In California, all native birds and active bird nests (with eggs or young) are protected by Sections 3503 and 3503.5 of the California Fish and Game Code. The trees and shrubs within and adjacent to the Project site provide suitable nesting habitat for several native resident and migratory bird species.

4.3.5 Jurisdictional Waters

As described in Chapter 2, Regulatory Context, in 2008, Blue Consulting Group conducted a delineation at the site and observed mulefat (*Baccharis salicifolia*) and deer weed (*Acmispon glaber*) growing in the southwest portion of the site. Wetland sampling points were taken beside the mulefat, and it was concluded that no jurisdictional wetlands were located on the Project site (BCG 2008). Dudek biologists analyzed the Project site in 2021 and confirmed that no jurisdictional aquatic resources occur onsite (see Appendix E, Representative Site Photographs).

4.4 Wildlife Corridors and Habitat Linkages

Wildlife corridors are linear features that connect large patches of natural open space and provide avenues for the migration of animals. Wildlife corridors contribute to population viability by ensuring continual exchange of genes between populations, providing access to adjacent habitat areas for foraging and mating, and providing routes for recolonization of habitat after local extirpation or ecological catastrophes (e.g., fires).

Habitat linkages are small patches that join larger blocks of habitat and help reduce the adverse effects of habitat fragmentation. Habitat linkages provide a potential route for gene flow and long-term dispersal of plants and animals. They may also serve as primary habitat for smaller animals, such as reptiles and amphibians. Habitat linkages may be continuous habitat or discrete habitat islands that function as stepping stones for dispersal.

To function effectively, a wildlife corridor must link two or more patches of habitat for which connectivity is desired, and it must be suitable for the focal target species to achieve the desired demographic and genetic exchange between populations. Habitat areas are identified as open space by the City as areas of natural habitats located in patches spread throughout San Marcos. The largest patches of open space occur in the northern and southern portions of San Marcos (City of San Marcos 2012).

The approximately 7.6-acre Project site is not expected to provide for wildlife movement or serve as an important habitat linkage because it is surrounded by residential neighborhoods and commercial and industrial development. Because of regular human activity and considerable vehicle traffic in and surrounding the site, predominantly urban-adapted wildlife species are expected to occur in this area, such as raccoons (*Procyon lotor*), Virginia opossum (*Didelphis virginiana*), striped skunk (*Mephitis mephitis*), and brush rabbits (*Sylvilagus* spp.).

5 Project Impacts and Significance Determination

5.1 Definition of Impacts

This chapter defines the types of impacts considered in this report to analyze the potential effects of the Project on biological resources. The entire site would be developed as part of the proposed Project. These impacts are discussed in more detail below.

Direct impacts were quantified by overlaying the anticipated limits of grading onto the biological resources and quantifying impacts. For this Project, "direct permanent impacts" would occur to the entire parcel, so the Project site is considered 100% impacted.

Indirect impacts are reasonably foreseeable effects caused by Project implementation on remaining or adjacent biological resources outside the parcel. Because the entire Project site would be permanently impacted and the surrounding areas consist of developed land, no indirect impacts are anticipated and are not discussed further.

5.2 Explanation of Findings of Significance

This report analyzes impacts to sensitive vegetation communities, special-status wildlife species, and wildlife corridors and habitat connectivity to determine whether such impacts are significant. CEQA Guidelines Section 15064(b) states that an ironclad definition of "significant" effect is not possible because the significance of an activity may vary with the setting. However, CEQA Guidelines Section 15065(a) lists impacts that are helpful in defining whether a project may have a significant effect on the environment. Mandatory findings of significance, which require preparation of an environmental impact report, occur when there is substantial evidence that a project could (1) substantially degrade the quality of the environment, (2) substantially reduce the habitat of a fish or wildlife species, (3) cause a fish or wildlife population to drop below self-sustaining levels, (4) threaten to eliminate a plant or animal community, or (5) reduce the number or restrict the range of a rare or endangered plant or animal.

The following are the significance thresholds for biological resources provided in the CEQA Appendix G environmental checklist, which states that a project could potentially have a significant effect if it would (14 CCR 15000 et seq.):

a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?
c. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

5.3 Special-Status Vegetation Communities

The majority of the non-native grassland would be directly impacted, resulting in the loss of 5.95 acres of non-native grassland (Figure 6, Impacts to Vegetation Communities and Land Cover Types). Impacts to non-native grassland are typically be considered significant, requiring mitigation for impacts. However, the portions of the project site which contain non-native grassland have been subject to repeated disturbance as discussed in Section 1.3. The current conditions are the result of erosion control hydroseed installation following the removal of the temporary parking lot. The non-native grassland is regularly maintained by the current owner, thus reducing the ability for the it to function as habitat for wildlife species. Therefore, any impacts to this vegetation community resulting from the proposed project would be less than significant, and no mitigation would be required. The proposed project does not propose impacts to the Diegan coastal sage scrub. No habitat compensation is required for impacts to urban/developed.

Potential direct impacts could occur if construction work inadvertently extends beyond the authorized work limits where impacts to sensitive natural communities are not anticipated. The proposed project would be required to install temporary fencing to ensure that impacts stay within the project limits (**MM-BIO-1**). Therefore, potential direct impacts to sensitive vegetation communities would be **less than significant**.

5.4 Special-Status Plant Species

The Project site has no value as habitat for endangered, rare, or threatened plant species. No special-status plants have moderate or high potential to occur on the Project site due to lack of suitable vegetation, soil, or microhabitats, or the Project site is outside of known species ranges (Appendix C); therefore, there would be **no impacts** to special-status plants.

5.5 Special-Status Wildlife Species

The Project site has no value as habitat for endangered, rare, or threatened wildlife species. No special-status wildlife species have moderate or high potential to occur on the Project site due to current site conditions (i.e., repeated disturbance and surrounding development; therefore, there would be **no impacts** to special-status wildlife species.

5.6 Jurisdictional Waters

There are no jurisdictional waters or wetlands onsite; therefore, there would be **no impacts** to these features.

5.7 Wildlife Corridors and Habitat Linkages

There are no wildlife corridors or habitat linkages onsite; therefore, there would be **no impacts** to these resources.

5.8 Migratory Birds

Raptors and/or any migratory birds are protected under the MBTA (16 USC 703 et seq.) and California Fish and Game Code (Sections 3503 and 3503.5). The MBTA provides protection for birds by prohibiting the destruction of active nests for most native birds. The MBTA protects more than 800 species of birds, including species such as house finch (*Haemorhous mexicanus*), mourning dove (*Zenaida macroura*), and California towhee (*Melozone crissalis*), which could nest in the grassland, Diegan coastal sage scrub, or urban/developed areas within the Project site. Nesting bird surveys be completed if clearing and grubbing occur during the nesting season (typically February 15 through August 31) (MM-BIO-2). Local governments have the land use authority to protect bird nests during clearing and grubbing activities; therefore, nesting bird surveys are a common and typical mitigation measure for any property in the state and western region due to the wide range of the Pacific Flyway. The incorporation of this mitigation measure, described below, would reduce this impact to **less than significant**.

5.9 Regional Conservation Planning Context

The Project is not located within a designated Biological Core Linkage Area or Focused Planning Area, and therefore, it is consistent with the conservation policies of the Draft San Marcos Subarea Plan. In addition, the Project would be required to conform to the goals and policies in the City of San Marcos General Plan (City of San Marcos 2012) related to the protection of biological resources. Following implementation of proposed mitigation measures, the Project is expected to be found to be in conformance with the Draft San Marcos Subarea Plan and the General Plan. Therefore, no impacts related to regional resource planning are anticipated.

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6 Mitigation Measures

Mitigate for Impacts to Vegetation Communities

The loss of 5.95 acres of non-native grassland would be less than significant impact and therefore no mitigation is required for the loss of this vegetation community. However, there is a potential for the project to result in unintentional impacts to vegetation located outside of the project limits. Implementation of Mitigation Measure (MM) BIO-1 would reduce this impact to less than significant.

MM-BIO-1 Temporary Construction Fencing. The Project applicant shall temporarily fence the limits of Project impacts and install appropriate sediment-trapping devices to prevent additional impacts to, and the spread of silt from, the construction zone into adjacent habitats to be avoided. Fencing and sediment trapping devices shall be installed in a manner that does not impact habitats to be avoided.

If work occurs beyond the fenced limits of impacts, all work shall cease until the problem has been remedied to the satisfaction of the City of San Marcos. Any habitat impacts that occur beyond the authorized work area shall be offset at ratios approved by the City of San Marcos. Temporary construction fencing and sediment trapping devices shall be removed upon Project completion.

Avoid and Minimize Impacts to Nesting Birds

The potential loss of migratory birds and/or active nests would be a potentially significant impact on migratory birds protected under the MBTA (16 USC 703 et seq.) and California Fish and Game Code Sections 3503 and 3503.5. However, implementation of MM-BIO-2 would reduce this impact to less than significant.

MM-BIO-2 Pre-Construction Nesting Bird Surveys. To avoid any direct impacts to raptors and/or any migratory birds protected under the Migratory Bird Treaty Act (16 USC 703 et seq.) and California Fish and Game Code (Sections 3503 and 3503.5), removal of habitat shall occur outside of the nesting season for these species (i.e., outside of February 15 through August 31, annually). If, however, removal of habitat must occur during the nesting period, the proposed Project applicant or its designee shall retain a biologist to conduct a pre-construction survey to determine the presence or absence of nesting birds in the proposed area of disturbance. The pre-construction survey must be conducted within 72 hours prior to the start of construction, and shall be repeated if construction activities discontinue for more than 3 consecutive days.

Impacts to active nests are typically avoided as follows. Clearing and construction shall be postponed or halted within the following buffers to be established by the biologist: (1) no work within 50 feet of a non-listed and non-raptor avifauna nest; and (2) no work within 500 feet of a raptor nest. Raptor nests are not anticipated within the immediate Project site due to lack of suitable nesting habitat; however, trees within 500 feet of the Project boundary could support raptor nesting. The construction avoidance area shall be clearly demarcated in the field with highly visible construction fencing or flagging, and construction personnel shall be instructed on the sensitivity of nest areas. To the extent possible, the no-construction buffer zones shall be avoided until the nesting cycle is complete. However, it may be reasonable for the City of San Marcos to reduce these buffer widths depending onsite conditions. If construction-related activities must take place within an active nest buffer area, the proposed Project applicant or its designee shall present a plan the City of San Marcos with measures to monitor and minimize impacts to nesting birds. No ground-disturbance activities shall occur within the avoidance buffer zone until the qualified biologist has determined that the nest is no longer active and the young are not dependent on the nest.

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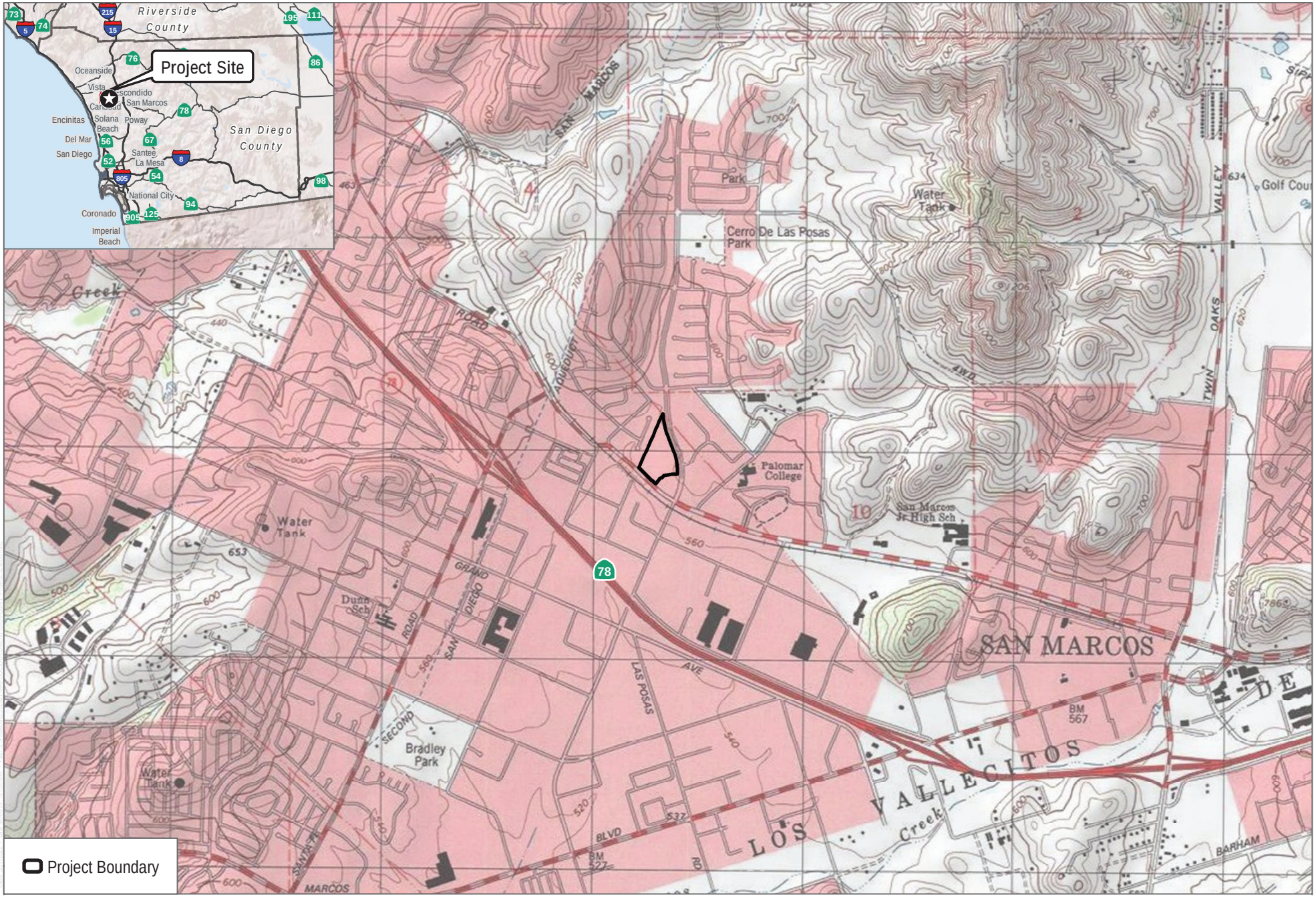
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SOURCE: USGS 7.5-Minute Series San Marcos Quadrangle
Township 12S; Range 3W; Section 10

DUDEK

FIGURE 1

Project Location

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SOURCE: SanGIS 2019

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0 80 160 Feet

FIGURE 2

Vegetation Communities and Land Cover Types

Biological Resources Technical Report for Gran Vista

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SOURCE: SanGIS 2019; USDA 2020

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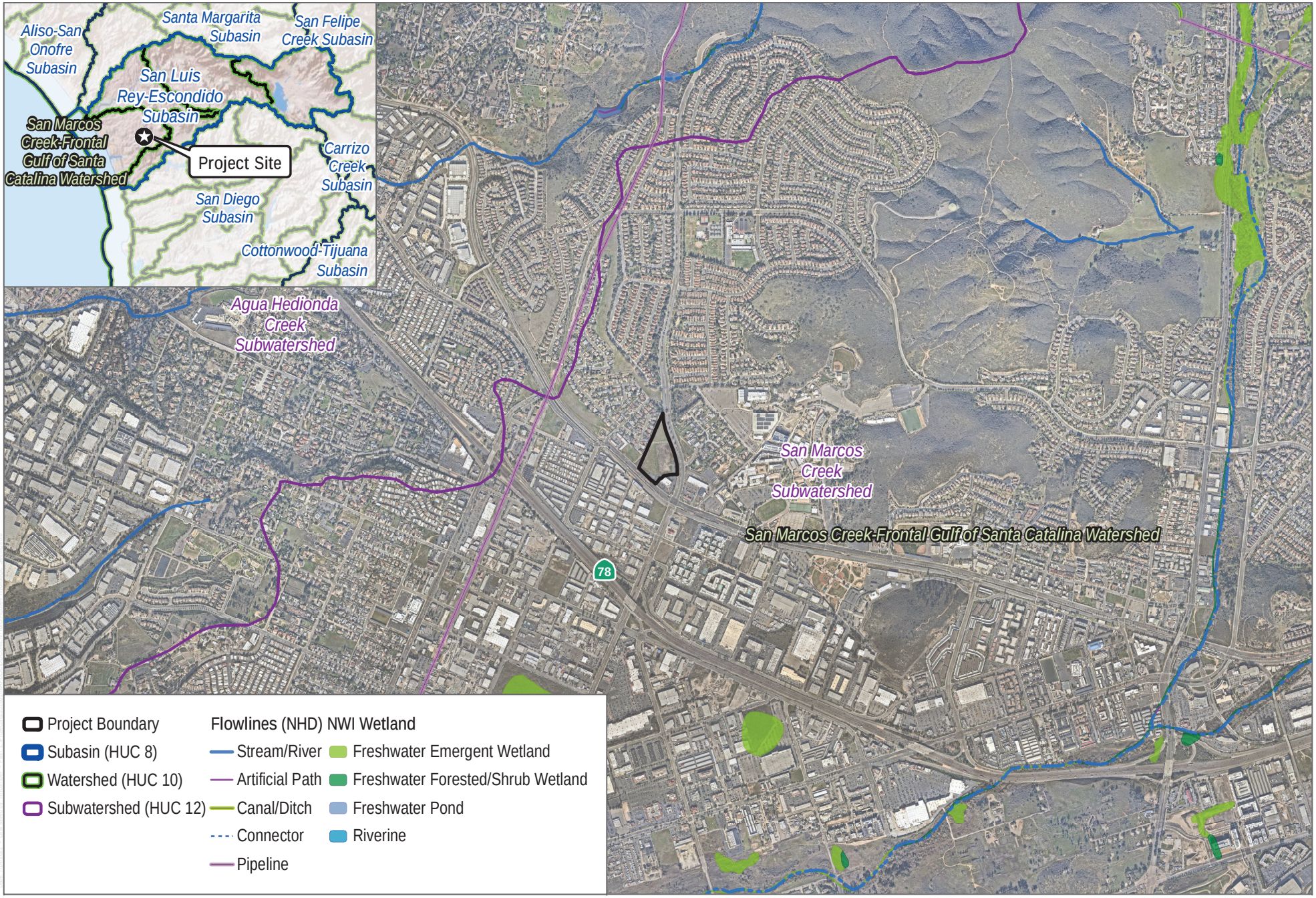
0 80 160 Feet

FIGURE 3

Soils

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SOURCE: SanGIS 2019; NWI 2022; NHD 2022

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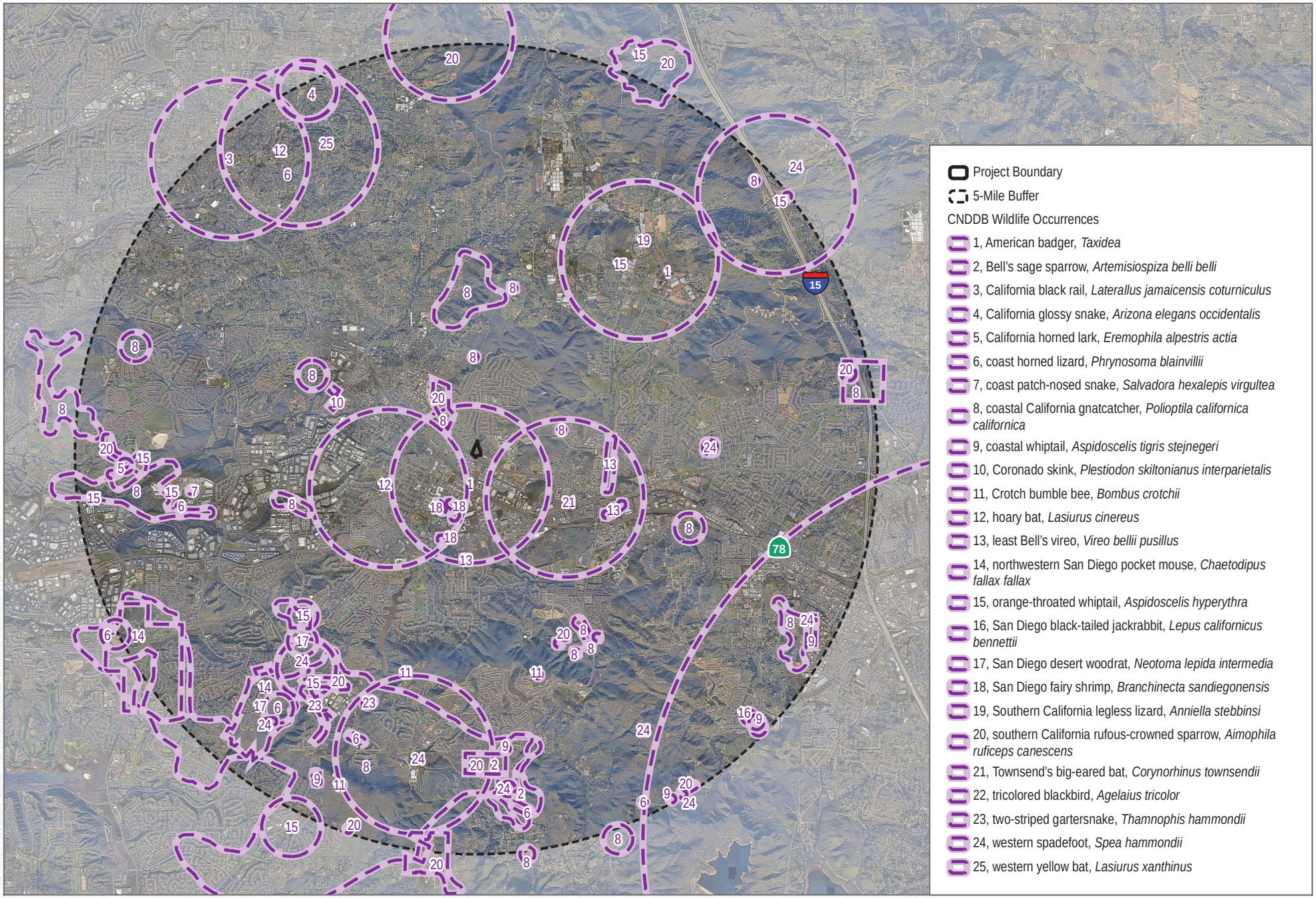
0 1,000 2,000 Feet

FIGURE 4

Hydrologic Setting

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SOURCE: SanGIS 2019; CNDDB 2021

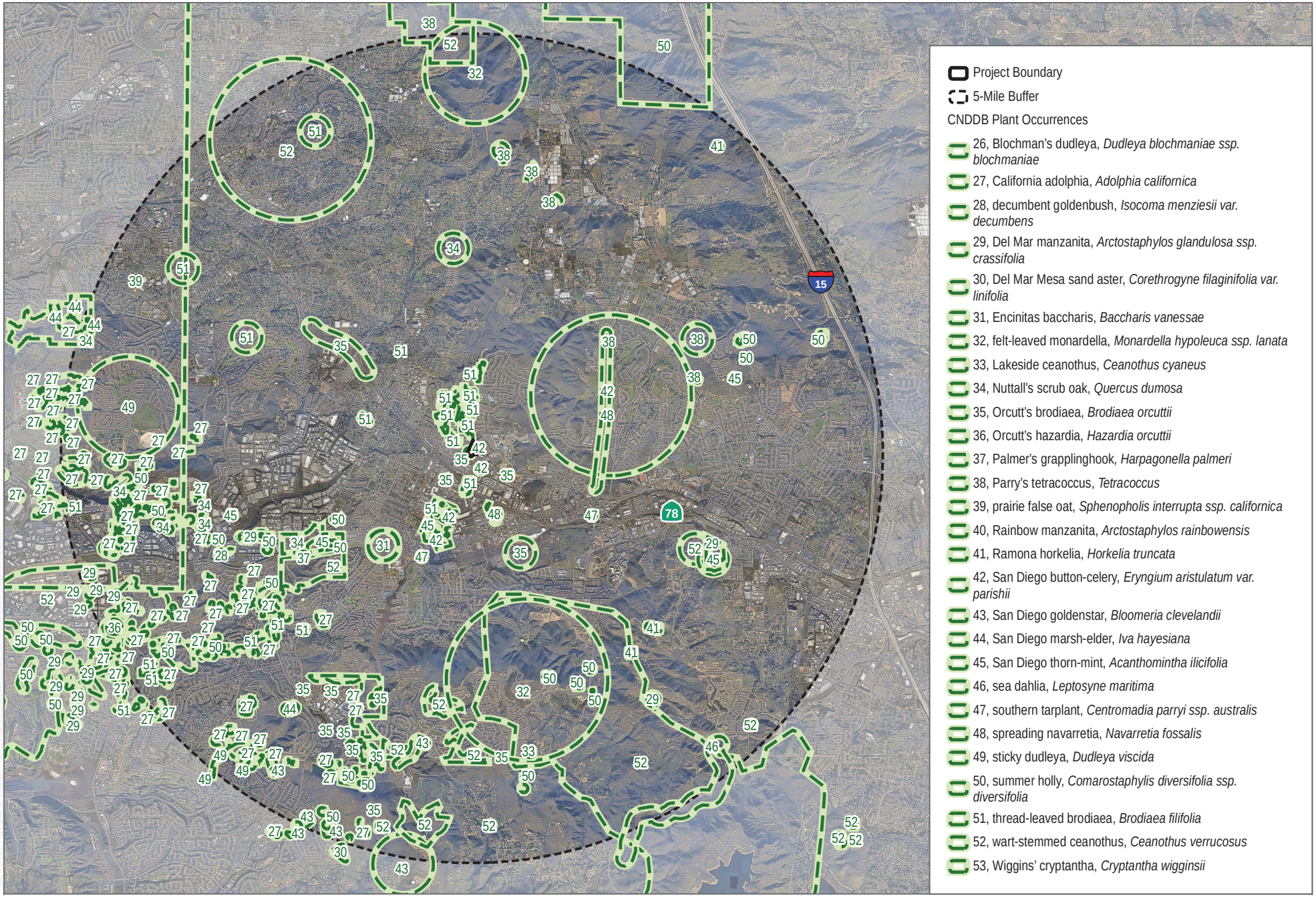
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FIGURE 5A

Special-Status Species Occurrences - Wildlife

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SOURCE: SanGIS 2019; CNDDB 2021

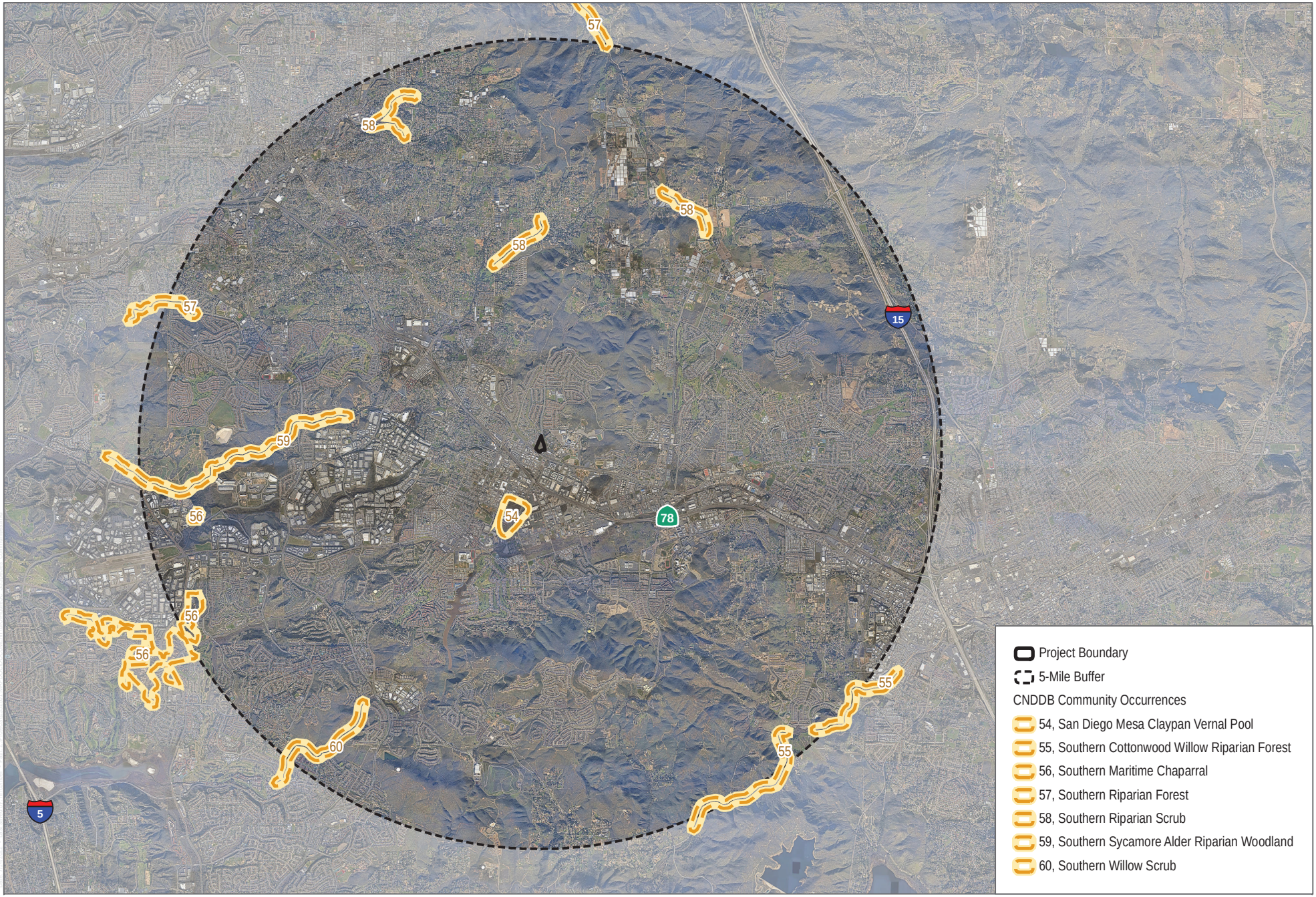
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FIGURE 5B

Special-Status Species Occurrences - Plants

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SOURCE: SanGIS 2019; CNDDB 2021

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FIGURE 5C

Special-Status Species Occurrences - Communities

Biological Resources Technical Report for Gran Vista

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SOURCE: SanGIS 2019

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0 90 180 Feet

FIGURE 6

Imapcts to Vegetation Communities and Land Cover Types

Biological Resources Technical Report for Gran Vista

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Appendix A
Plant Species Compendium

Vascular Species

Eudicots

ANACARDIACEAE – SUMAC OR CASHEW FAMILY

* *Schinus molle* – Peruvian peppertree
* *Schinus terebinthifolius* – Brazilian peppertree

ASTERACEAE – SUNFLOWER FAMILY

Baccharis pilularis – coyote brush

Isocoma menziesii – Menzies's golden bush

Pseudognaphalium californicum – ladies' tobacco

BRASSICACEAE – MUSTARD FAMILY

* *Hirschfeldia incana* – shortpod mustard

CHENOPODIACEAE – GOOSEFOOT FAMILY

* *Salsola tragus* – prickly Russian thistle

GERANIACEAE – GERANIUM FAMILY

* *Erodium cicutarium* – redstem stork's bill

* signifies introduced (non-native) species

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Appendix B
Wildlife Species Compendium

Birds

Flycatchers

TYRANNIDAE – TYRANT FLYCATCHERS

Tyrannus vociferans – Cassin's kingbird

Jays, Magpies and Crows

CORVIDAE – CROWS AND JAYS

Corvus brachyrhynchos – American crow

Mammals

Hares and Rabbits

LEPORIDAE – HARES AND RABBITS

Sylvilagus bachmani – brush rabbit

Squirrels

SCIURIDAE – SQUIRRELS

Otospermophilus beecheyi – California ground squirrel

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Appendix C

Special-Status Plant Species Potential to Occur

Scientific Name	Common Name	Status (Federal/State/CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Blooming during survey?	Elevation appropriate?	Habitats Appropriate?	Potential to Occur
Abronia villosa var. *aurita*	chaparral sand-verbena	None/None/1B.1	Chaparral, Coastal scrub, Desert dunes; Sandy/annual herb/ (Jan)Mar–Sep/245–5,245	Y	Y	N	**Not expected to occur**. The Project site lacks suitable chaparral, coastal scrub and dunes as required for this species. Additionally, the Project site has been graded and disturbed, further reducing the likelihood that this species would occur within the site.
Acanthomintha ilicifolia	San Diego thorn-mint	FT/SE/1B.1	Chaparral, Coastal scrub, Valley and foothill grassland, Vernal pools; Clay, Openings/annual herb/Apr–June/35–3,145	Y	Y	N	**Not expected to occur.** The Project site lacks suitable chaparral, coastal scrub and valley and foothill grassland as required for this species. Additionally, the Project site has been graded and disturbed, further reducing the likelihood that this species would occur within the site.
Acmispon prostratus	Nuttall's acmispon	None/None/1B.1	Coastal dunes, Coastal scrub/annual herb/ Mar–June(July)/0–35	Y	N	N	**Not expected to occur**. The Project site lacks suitable coastal dunes and coastal scrub as required for this species. Additionally, the Project site has been graded and disturbed, further reducing the likelihood that this species would occur within the site.
Adolphia californica	California adolphia	None/None/2B.1	Chaparral, Coastal scrub, Valley and foothill grassland; Clay/perennial deciduous shrub/ Dec–May/35–2,425	N	Y	N	**Not expected to occur.** The Project site lacks suitable chaparral, coastal scrub and valley and foothill grassland as required for this species, and the Project site is located outside of the species' known elevation range. Additionally, the Project site has been graded and disturbed, further reducing the likelihood that this species would occur within the site.
Agave shawii var. *shawii*	Shaw's agave	None/None/2B.1	Coastal bluff scrub, Coastal scrub/perennial leaf/ Sep–May/10–395	N	N	N	**Not expected to occur.** The Project site lacks suitable coastal bluff scrub and coastal scrub as required for this species, and the Project site is located outside of the species' known elevation range. Additionally, the Project site has been graded and disturbed, further reducing the likelihood that this species would occur within the site.
Allium marvinii	Yucaipa onion	None/None/1B.2	Chaparral/perennial bulbiferous herb/Apr–May/2,490–3,490	N	N	N	**Not expected to occur.** The Project site lacks suitable chaparral as required for this species, and The Project site is located outside of the species' known elevation range. Additionally, the Project site has been graded and disturbed, further reducing the likelihood that this species would occur within the site.
Ambrosia pumila	San Diego ambrosia	FE/None/1B.1	Chaparral, Coastal scrub, Valley and foothill grassland, Vernal pools; Alkaline (sometimes), Clay (sometimes), Disturbed areas (often), Sandy (sometimes)/ perennial rhizomatous herb/ Apr–Oct/65–1,360	Y	Y	N	**Low potential to occur.** The Project site lacks suitable chaparral, coastal scrub, valley and foothill grassland and vernal pools as required for this species. The species is known to occur in areas of disturbace, however, the species was not observed during the survey. There are no documented occurences of this species within 5 miles of the Project site (CDFW 2022a).
Aphanisma blitoides	aphanisma	None/None/1B.2	Coastal bluff scrub, Coastal dunes, Coastal scrub; Gravelly (sometimes), Sandy (sometimes)/ annual herb/Feb–June/5–1,000	Y	Y	N	**Not expected to occur**. The Project site lacks suitable coastal bluff scrub, coastal dunes and coastal scrub as required for this species. Additionally, the Project site has been graded and disturbed, further reducing the likelihood that this species would occur within the site.
Arctostaphylos glandulosa ssp. *crassifolia*	Del Mar manzanita	FE/None/1B.1	Chaparral/perennial evergreen shrub/June–Apr/0–1,195	Y	Y	N	**Not expected to occur**. The Project site lacks suitable chaparral as required for this species. Additionally, the Project site has been graded and disturbed, further reducing the likelihood that this species would occur within the site.
Arctostaphylos rainbowensis	Rainbow manzanita	None/None/1B.1	Chaparral/perennial evergreen shrub/Dec–Mar/675–2,195	N	N	N	**Not expected to occur**. The Project site lacks suitable chaparral as required for this species, and the Project site is located outside of the species ' known elevation range. Additionally, the Project site has been graded and disturbed, further reducing the likelihood that this species would occur within the site.
Atriplex coulteri	Coulter's saltbush	None/None/1B.2	Coastal bluff scrub, Coastal dunes, Coastal scrub, Valley and foothill grassland; Alkaline (sometimes), Clay (sometimes)/perennial herb/ Mar–Oct/10–1,505	Y	Y	N	**Not expected to occur**. The Project site lacks suitable chaparral, scrub and valley and foothill grasslands as required for this species. Additionally, the Project site has been graded and disturbed, further reducing the likelihood that this species would occur within the site.

Scientific Name	Common Name	Status (Federal/State/CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Blooming during survey?	Elevation appropriate?	Habitats Appropriate?	Potential to Occur
Atriplex pacifica	south coast saltscale	None/None/1B.2	Coastal bluff scrub, Coastal dunes, Coastal scrub, Playas/annual herb/Mar–Oct/0–460	Y	N	N	**Not expected to occur.** The Project site lacks suitable coastal dunes and scrub habitat as required for this species, and the Project site is located outside of the species ' known elevation range. Additionally, the Project site has been graded and disturbed, further reducing the likelihood that this species would occur within the site.
Baccharis vanessae	Encinitas baccharis	FT/SE/1B.1	Chaparral, Cismontane woodland; Sandstone/perennial deciduous shrub/Aug–Nov/195–2,360	N	Y	N	**Not expected to occur.** The Project site lacks suitable chaparral and cismontane woodland habitat as required for this species. Additionally, the Project site has been graded and disturbed, further reducing the likelihood that this species would occur within the site.
Bloomeria clevelandii	San Diego goldenstar	None/None/1B.1	Chaparral, Coastal scrub, Valley and foothill grassland, Vernal pools; Clay/perennial bulbiferous herb/Apr–May/165–1,525	N	Y	N	**Not expected to occur**. The Project site lacks suitable chaparral, scrub, and valley and foothill grassland habitat as required for this species. Additionally, the Project site has been graded and disturbed, further reducing the likelihood that this species would occur within the site.
Brodiaea filifolia	thread-leaved brodiaea	FT/SE/1B.1	Chaparral, Cismontane woodland, Coastal scrub, Playas, Valley and foothill grassland, Vernal pools; Clay (often)/perennial bulbiferous herb/Mar–June/80–3,670	Y	Y	N	**Not expected to occur**. The Project site lacks suitable chaparral, cismontane woodland, coastal scrub and valley and foothill grassland habitat as required for this species. Additionally, the Project site has been graded and disturbed, further reducing the likelihood that this species would occur within the site.
Brodiaea orcuttii	Orcutt 's brodiaea	None/None/1B.1	Chaparral, Cismontane woodland, Closed-cone coniferous forest, Meadows and seeps, Valley and foothill grassland, Vernal pools; Clay, Mesic/perennial bulbiferous herb/May–July/100–5,550	Y	Y	N	**Not expected to occur.** The Project site lacks suitable chaparral, cismontane woodland, coniferous forest, meadows and valley and foothill grassland habitat as required for this species. Additionally, the Project site has been graded and disturbed, further reducing the likelihood that this species would occur within the site.
Ceanothus cyaneus	Lakeside ceanothus	None/None/1B.2	Chaparral, Closed-cone coniferous forest/perennial evergreen shrub/ Apr–June/770–2,475	Y	N	N	**Not expected to occur.** The Project site lacks suitable chaparral and coniferous forest habitat as required for this species, and the Project site is located outside of the species' known elevation range. Additionally, the Project site has been graded and disturbed, further reducing the likelihood that this species would occur within the site.
Ceanothus verrucosus	wart-stemmed ceanothus	None/None/2B.2	Chaparral/perennial evergreen shrub/Dec–May/5–1,245	N	Y	N	**Not expected to occur.** The Project site lacks suitable chaparral as required for this species. Additionally, the Project site has been graded and disturbed, further reducing the likelihood that this species would occur within the site.
Centromadia parryi ssp. *australis*	southern tarplant	None/None/1B.1	Marshes and swamps, Valley and foothill grassland, Vernal pools/annual herb/ May–Nov/0–1,570	Y	Y	N	**Not expected to occur**. The Project site lacks suitable marshes, swamps and valley and foothill grasses as required for this species. Additionally, the Project site has been graded and disturbed, further reducing the likelihood that this species would occur within the site.
Centromadia pungens ssp. *laevis*	smooth tarplant	None/None/1B.1	Chenopod scrub, Meadows and seeps, Playas, Riparian woodland, Valley and foothill grassland; Alkaline/annual herb/ Apr–Sep/0–2,095	Y	Y	N	**Not expected to occur.** The Project site lacks suitable scrub, meadows, riparian woodlands and valley and foothill grasslands as required for this species. Additionally, the Project site has been graded and disturbed, further reducing the likelihood that this species would occur within the site.
Chaenactis glabriuscula var. *orcuttiana*	Orcutt 's pincushion	None/None/1B.1	Coastal bluff scrub, Coastal dunes/annual herb/ Jan–Aug/0–330	Y	N	N	**Not expected to occur.** The Project site lacks suitable scrub and coastal dunes as required for this species, and the Project site is located outside of the species' known elevation range. Additionally, the Project site has been graded and disturbed, further reducing the likelihood that this species would occur within the site.

Appendix D

Special-Status Wildlife Species Potential to Occur

Scientific Name	Common Name	Status (Federal/State)	Habitat	Appropriate habitats?	Potential to Occur
Amphibians					
Anaxyrus californicus	arroyo toad	FE/SSC	Semi-arid areas near washes, sandy riverbanks, riparian areas, palm oasis, Joshua tree, mixed chaparral and sagebrush; stream channels for breeding (typically third order); adjacent stream terraces and uplands for foraging and wintering	N	**Not expected to occur**. The Project site lacks suitable semi-arid habitat near riverbanks as required for this species. Additionally, the Project site is entirely surrounded by development, further reducing the likelihood that this species would occur within the site.
Spea hammondii	western spadefoot	BCC/SSC	Primarily grassland and vernal pools, but also in ephemeral wetlands that persist at least 3 weeks in chaparral, coastal scrub, valley–foothill woodlands, pastures, and other agriculture	N	**Not expected to occur.** The Project site lacks suitable vernal pools and ephemeral wetlands as required for this species. Additionally, the Project site is entirely surrounded by development, further reducing the likelihood that this species would occur within the site.
Birds					
Agelaius tricolor (nesting colony)	tricolored blackbird	BCC/SSC, ST	Nests near freshwater, emergent wetland with cattails or tules, but also in Himalayan blackberry; forages in grasslands, woodland, and agriculture	N	**Not expected to nest or forage**. The Project site lacks suitable emergent wetland habitat with appropriate nesting substrate for this species and continuous open grassland habitat or agricultural land cover for foraging is absent. Additionally, the Project site is entirely surrounded by development, further reducing the likelihood that this species would occur within the site.
Aquila chrysaetos (nesting and wintering)	golden eagle	None/FP, WL	Nests and winters in hilly, open/semi-open areas, including shrublands, grasslands, pastures, riparian areas, mountainous canyon land, open desert rimrock terrain; nests in large trees and on cliffs in open areas and forages in open habitats	N	**Not expected to nest or forage**. The Project site lacks suitable open and hilly nesting habitat for this species. This species is unlikely to forage within the Project site due to the lack of continuous open grassland habitat, and the close proximity to disturbance. Additionally, the Project site is entirely surrounded by development, further reducing the likelihood that this species would occur within the site.
Athene cunicularia (burrow sites and some wintering sites)	burrowing owl	BCC/SSC	Nests and forages in grassland, open scrub, and agriculture, particularly with ground squirrel burrows	Y	**Moderate potential to nest and forage**. The Project site contains California ground squirrel burrows and open grassland as required for this species. Although the Project site is entirely surrounded by development, there are small portions of suitable habitat within the site for this species. There are no CNDDB documented occurrences of the species within 5 miles of the Project site (CDFW 2022a).
Buteo swainsoni (nesting)	Swainson's hawk	None/ST	Nests in open woodland and savanna, riparian, and in isolated large trees; forages in nearby grasslands and agricultural areas such as wheat and alfalfa fields and pasture	N	**Not expected to nest or forage.** The Project site lacks suitable nesting trees for this species, and associated continuous open grassland and agricultural habitat for foraging is absent. Additionally, the Project site is entirely surrounded by development and located outside of the typical central valley range for this species.
Campylorhynchus brunneicapillus sandiegensis (San Diego and Orange Counties only)	coastal cactus wren	None/SSC	Southern cactus scrub patches	N	**Not expected to nest or forage**. The Project site lacks suitable southern cactus scrub as required for this species. Additionally, the Project site is entirely surrounded by development, further reducing the likelihood that this species would occur within the site.
Charadrius nivosus nivosus (nesting)	western snowy plover	FT, BCC/SSC	On coasts nests on sandy marine and estuarine shores; in the interior nests on sandy, barren or sparsely vegetated flats near saline or alkaline lakes, reservoirs, and ponds	N	**Not expected to nest or forage**. The Project site lacks suitable sandy shores and barren flats as required for this species. Additionally, the Project site is entirely surrounded by development, further reducing the likelihood that this species would occur within the site.
Circus hudsonius (nesting)	northern harrier	BCC/SSC	Nests in open wetlands (marshy meadows, wet lightly-grazed pastures, old fields, freshwater and brackish marshes); also in drier habitats (grassland and grain fields); forages in grassland, scrubs, rangelands, emergent wetlands, and other open habitats	Y	**Low potential to nest and forage.** The Project site contains marginally suitable grassland for foraging, however, the proximity to surrounding development may preclude this species from occuring. The Project site lacks suitable wetlands and agricultural fields for nesting as required for this species. There are no CNDDB documented occurrences of the species within 5 miles of the Project site (CDFW 2022a).

Scientific Name	Common Name	Status (Federal/State)	Habitat	Appropriate habitats?	Potential to Occur
Coccyzus americanus occidentalis (nesting)	western yellow-billed cuckoo	FT/SE	Nests in dense, wide riparian woodlands and forest with well-developed understories	N	**Not expected to nest or forage.** The Project site lacks suitable riparian woodlands and forest understory as required for this species. Additionally, the Project site is entirely surrounded by development, further reducing the likelihood that this species would occur within the site.
Elanus leucurus (nesting)	white-tailed kite	None/FP	Nests in woodland, riparian, and individual trees near open lands; forages opportunistically in grassland, meadows, scrubs, agriculture, emergent wetland, savanna, and disturbed lands	Y	**Not expected to nest but may forage on site from time to time**. The Project site lacks suitable riparian and woodland nesting habitat as required for this species. The Project site does contain marginally suitable grassland for foraging. Additionally, the Project site is entirely surrounded by development, further reducing the likelihood that this species would occur within the site.There are no CNDDB documented occurrences of the species within 5 miles of the Project site (CDFW 2022a).
Empidonax traillii extimus (nesting)	southwestern willow flycatcher	FE/SE	Nests in dense riparian habitats along streams, reservoirs, or wetlands; uses variety of riparian and shrubland habitats during migration	N	**Not expected to nest or forage.** The Project site lacks suitable riparian habitat as required for this species. Additionally, the Project site is entirely surrounded by development, further reducing the likelihood that this species would occur within the site.
Icteria virens (nesting)	yellow-breasted chat	None/SSC	Nests and forages in dense, relatively wide riparian woodlands and thickets of willows, vine tangles, and dense brush	N	**Not expected to nest or forage**. The Project site lacks suitable riparian woodlands and dense brush as required for this species. Additionally, the Project site is entirely surrounded by development, further reducing the likelihood that this species would occur within the site.
Ixobrychus exilis (nesting)	least bittern	None/SSC	Nests in freshwater and brackish marshes with dense, tall growth of aquatic and semi-aquatic vegetation	N	**Not expected to nest or forage**. The Project site lacks suitable marsh habitat and aquatic vegetation as required for this species. Additionally, the Project site is entirely surrounded by development, further reducing the likelihood that this species would occur within the site.
Laterallus jamaicensis coturniculus	California black rail	None/FP, ST	Tidal marshes, shallow freshwater margins, wet meadows, and flooded grassy vegetation; suitable habitats are often supplied by canal leakage in Sierra Nevada foothill populations	N	**Not expected to nest or forage**. The Project site lacks suitable marsh and wet meadows as required for this species. Additionally, the Project site is entirely surrounded by development, further reducing the likelihood that this species would occur within the site.
Passerculus sandwichensis beldingi	Belding's savannah sparrow	BCC/SE	Nests and forages in coastal saltmarsh dominated by pickleweed (*Salicornia* spp.)	N	**Not expected to nest or forage.** The Project site lacks suitable saltmarsh and pickleweed as required for this species. Additionally, the Project site is entirely surrounded by development, further reducing the likelihood that this species would occur within the site.
Polioptila californica californica	coastal California gnatcatcher	FT/SSC	Nests and forages in various sage scrub communities, often dominated by California sagebrush and buckwheat; generally avoids nesting in areas with a slope of greater than 40%; majority of nesting at less than 1,000 feet above mean sea level	N	**Not expected to nest and forage**. The Project site lacks suitable continous sage scrub as required for this species.There is a smalll section of disturbed sage scrub on the western boundary of the Project Site, however, it lacks California sagebrush (Artemisia californica), is disturbed, and the Project site is entirely surrounded by development, further reduces the likelihood that this species could occur site. The nearest modern CNDDB documented occurance is approximately 1.5 miles north of the Project site (Occ. No. 177) (CDFW 2022a).
Rallus obsoletus levipes	Ridgway's rail	FE/FP, SE	Coastal wetlands, brackish areas, coastal saline emergent wetlands	N	**Not expected to nest or forage.** The Project site lacks suitable wetlands as required for this species. Additionally, the Project site is entirely surrounded by development, further reducing the likelihood that this species would occur within the site.
Riparia riparia (nesting)	bank swallow	None/ST	Nests in riparian, lacustrine, and coastal areas with vertical banks, bluffs, and cliffs with sandy soils; open country and water during migration	N	**Not expected to nest or forage.** The Project site lacks suitable riparian, lacustrine and coastal areas with vertical cliffs and banks as required for this species. Additionally, the Project site is entirely surrounded by development, further reducing the likelihood that this species would occur within the site.

Scientific Name	Common Name	Status (Federal/State)	Habitat	Appropriate habitats?	Potential to Occur
Setophaga petechia (nesting)	yellow warbler	None/SSC	Nests and forages in riparian and oak woodlands, montane chaparral, open ponderosa pine, and mixed-conifer habitats	N	**Not expected to nest or forage.** The Project site lacks suitable riparian and oak woodlands, montane chaparral and conifer habitats as required for this species. Additionally, the Project site is entirely surrounded by development, further reducing the likelihood that this species would occur within the site.
Sternula antillarum browni (nesting colony)	California least tern	FE/FP, SE	Forages in shallow estuaries and lagoons; nests on sandy beaches or exposed tidal flats	N	**Not expected to nest or forage**. The Project site lacks suitable estuaries, lagoons, beaches and tidal flats as required for this species. Additionally, the Project site is entirely surrounded by development, further reducing the likelihood that this species would occur within the site.
Vireo bellii pusillus (nesting)	least Bell's vireo	FE/SE	Nests and forages in low, dense riparian thickets along water or along dry parts of intermittent streams; forages in riparian and adjacent shrubland late in nesting season	N	**Not expected to nest or forage.** The Project site lacks suitable riparian habitat as required for this species. Additionally, the Project site is entirely surrounded by development, further reducing the likelihood that this species would occur within the site.
Fishes					
Eucyclogobius newberryi	tidewater goby	FE/None	Brackish water habitats along the California coast from Agua Hedionda Lagoon, San Diego County, to the mouth of the Smith River	N	**Not expected to occur.** The Project site lacks suitable aquatic habitat as required for this species.
Gila orcuttii	arroyo chub	None/SSC	Warm, fluctuating streams with slow-moving or backwater sections of warm to cool streams at depths >40 centimeters (16 inches); substrates of sand or mud	N	Not expected to occur. The Project site lacks suitable aquatic habitat as required for this species.
Invertebrates					
Branchinecta sandiegonensis	San Diego fairy shrimp	FE/None	Vernal pools, non-vegetated ephemeral pools	N	**Not expected to occur.** The Project site lacks suitable vernal or ephemeral pools as required for this species.
Danaus plexippus pop. 1	monarch	FC/None	Wind-protected tree groves with nectar sources and nearby water sources	N	**Not expected to occur**. The Project site lacks suitable tree groves as required for this species.
Streptocephalus woottoni	Riverside fairy shrimp	FE/None	Vernal pools, non-vegetated ephemeral pools	N	**Not expected to occur**. The Project site lacks suitable vernal or ephemeral pools as required for this species.
Mammals					
Antrozous pallidus	pallid bat	None/SSC	Grasslands, shrublands, woodlands, forests; most common in open, dry habitats with rocky outcrops for roosting, but also roosts in man-made structures and trees	Y	**Not expected to roost but may forage on site from time to time**. The Project site lacks suitable rocky outcrops, trees and structures for roosting as required for this species. The Project site does contain marginally suitable grassland for foraging. Additionally, the Project site is entirely surrounded by development, further reducing the likelihood that this species would occur within the site. There are no CNDDB documented occurrences of the species within 5 miles of the Project site (CDFW 2022a).
Chaetodipus californicus femoralis	Dulzura pocket mouse	None/SSC	Open habitat, coastal scrub, chaparral, oak woodland, chamise chaparral, mixed-conifer habitats; disturbance specialist; 0 to 3,000 feet above mean sea level	N	**Not expected to occur.** The Project site does contain marginal open habitat, but lacks significant coastal scrub, oak woodland and chaparral as required for this species. Additionally, the Project site is entirely surrounded by development, further reducing the likelihood that this species would occur within the site. There are no CNDDB documented occurrences of the species within 5 miles of the Project site (CDFW 2022a).
Chaetodipus fallax fallax	northwestern San Diego pocket mouse	None/SSC	Coastal scrub, mixed chaparral, sagebrush, desert wash, desert scrub, desert succulent shrub, pinyon–juniper, and annual grassland	N	**Not expected to occur.** The Project site does contain marginal grassland, but lacks significant coastal scrub, chaparral and sagebrush as required for this species. Additionally, the Project site is entirely surrounded by development, further reducing the likelihood that this species would occur within the site. The nearest CNDDB documented occurrence of the species is located 4.6 miles southwest of the Project site (Occ. No. 7) (CDFW 2022a).

Scientific Name	Common Name	Status (Federal/State)	Habitat	Appropriate habitats?	Potential to Occur
Choeronycteris mexicana	Mexican long-tongued bat	None/SSC	Desert and montane riparian, desert succulent scrub, desert scrub, and pinyon–juniper woodland; roosts in caves, mines, and buildings	N	**Not expected to roost or forage.** The Project site lacks suitable riparian habitats, desert scrub, woodland, caves, mines and roosting structures as required for this species. Additionally, the Project site is entirely surrounded by development, further reducing the likelihood that this species would occur within the site.
Corynorhinus townsendii	Townsend's big-eared bat	None/SSC	Mesic habitats characterized by coniferous and deciduous forests and riparian habitat, but also xeric areas; roosts in limestone caves and lava tubes, man-made structures, and tunnels	N	**Not expected to roost or forage**. The Project site lacks suitable riparian habitats, forests, caves and roosting structures as required for this species. Additionally, the Project site is entirely surrounded by development, further reducing the likelihood that this species would occur within the site.
Dasypterus xanthinus	western yellow bat	BCC/SSC	Valley–foothill riparian, desert riparian, desert wash, and palm oasis habitats; below 2,000 feet above mean sea level; roosts in riparian and palms	N	**Not expected to roost or forage**. The Project site lacks suitable riparian, desert habitats and roosting trees as required for this species. Additionally, the Project site is entirely surrounded by development, further reducing the likelihood that this species would occur within the site.
Dipodomys stephensi	Stephens' kangaroo rat	FE/ST	Annual and perennial grassland habitats, coastal scrub or sagebrush with sparse canopy cover, or in disturbed areas	N	**Not expected to occur**. The Project site does contain marginal grassland, but lacks significant coastal scrub and sagebrush as required for this species. Additionally, the Project site is entirely surrounded by development, further reducing the likelihood that this species would occur within the site. There are no CNDDB documented occurrences of the species within 5 miles of the Project site (CDFW 2022a).
Eumops perotis californicus	western mastiff bat	None/SSC	Chaparral, coastal and desert scrub, coniferous and deciduous forest and woodland; roosts in crevices in rocky canyons and cliffs where the canyon or cliff is vertical or nearly vertical, trees, and tunnels	N	**Not expected to roost or forage.** The Project site lacks significant suitable scrub, forest, woodland, rocky canyons and cliffs as required for this species. Additionally, the Project site is entirely surrounded by development, further reducing the likelihood that this species would occur within the site.
Leptonycteris yerbabuenae	lesser long-nosed bat	FPD/SSC	Sonoran desert scrub, semi-desert grasslands, lower oak woodlands	N	**Not expected to roost or forage.** The Project site lacks suitable desert scrub, desert grasslands and oak woodlands required for this species. Additionally, the Project site is entirely surrounded by development, further reducing the likelihood that this species would occur within the site.
Neotoma lepida intermedia	San Diego desert woodrat	None/SSC	Coastal scrub, desert scrub, chaparral, cacti, rocky areas	N	**Not expected to occur.** The Project site lacks significant coastal scrub, chaparral, cacti and rocky areas as required for this species. Additionally, the Project site is entirely surrounded by development, further reducing the likelihood that this species would occur within the site.
Nyctinomops femorosaccus	pocketed free-tailed bat	None/SSC	Pinyon–juniper woodlands, desert scrub, desert succulent shrub, desert riparian, desert wash, alkali desert scrub, Joshua tree, and palm oases; roosts in high cliffs or rock outcrops with drop-offs, caverns, and buildings	N	**Not expected to roost or forage.** The Project site lacks suitable desert scrub, woodlands, Joshua tree, riparian habitat, cliffs and rock outcrops required for this species. Additionally, the Project site is entirely surrounded by development, further reducing the likelihood that this species would occur within the site.
Nyctinomops macrotis	big free-tailed bat	None/SSC	Rocky areas; roosts in caves, holes in trees, buildings, and crevices on cliffs and rocky outcrops; forages over water	N	**Not expected to roost or forage.** The Project site lacks suitable open water, caves and rocky outcrops required for this species. Additionally, the Project site is entirely surrounded by development, further reducing the likelihood that this species would occur within the site.
Perognathus longimembris pacificus	Pacific pocket mouse	FE/SSC	fine-grained sandy substrates in open coastal strand, coastal dunes, and river alluvium	N	**Not expected to occur**. The Project site lacks sandy substrates, coastal dunes or river alluvium habitats as required for this species. Additionally, the Project site is entirely surrounded by development, further reducing the likelihood that this species would occur within the site.
Taxidea taxus	American badger	None/SSC	Dry, open, treeless areas; grasslands, coastal scrub, agriculture, and pastures, especially with friable soils	Y	**Low potential to occur.** Although the Project site contains marginal non-native grassland habitat for this species, the proximity to development likley deters this species from occurring. The nearest CNDDB documented occurance is 0.4 miles south of the Project site (Occ. No. 313) (CDFW 2022a).

Scientific Name	Common Name	Status (Federal/State)	Habitat	Appropriate habitats?	Potential to Occur
Reptiles					
Anniella stebbinsi	southern California legless lizard	None/SSC	Coastal dunes, stabilized dunes, beaches, dry washes, valley–foothill, chaparral, and scrubs; pine, oak, and riparian woodlands; associated with sparse vegetation and moist sandy or loose, loamy soils	N	**Not expected to occur.** The Project site lacks coastal dunes, beaches, dry washes, chaparral, scrubs and woodlands as required for this species. Additionally, the Project site is entirely surrounded by development, further reducing the likelihood that this species would occur within the site.
Arizona elegans occidentalis	California glossy snake	None/SSC	Arid scrub, rocky washes, grasslands, chaparral, open areas with loose soil	N	**Not expected to occur**. The Project site lacks aird scrub, washes, chaparral and continous grassland as required for this species. Additionally, the Project site is entirely surrounded by development, further reducing the likelihood that this species would occur within the site.
Aspidoscelis tigris stejnegeri	San Diegan tiger whiptail	None/SSC	Hot and dry areas with sparse foliage, including chaparral, woodland, and riparian areas.	N	**Not expected to occur**. The Project site lacks chaparral, woodland and riparian habitat as required for this species. Additionally, the Project site is entirely surrounded by development, further reducing the likelihood that this species would occur within the site.
Crotalus ruber	red diamondback rattlesnake	None/SSC	Coastal scrub, chaparral, oak and pine woodlands, rocky grasslands, cultivated areas, and desert flats	N	**Not expected to occur**. The Project site lacks significant coastal scrub, chaparral, woodland and desert flats as required for this species. Additionally, the Project site is entirely surrounded by development, further reducing the likelihood that this species would occur within the site.
Emys marmorata	western pond turtle	None/SSC	Slow-moving permanent or intermittent streams, ponds, small lakes, and reservoirs with emergent basking sites; adjacent uplands used for nesting and during winter	N	**Not expected to occur.** The Project site lacks suitable aquatic habitat and connectivity to adjacent aquatic habitat as required for this species. Additionally, the Project site is entirely surrounded by development, further reducing the likelihood that this species would occur within the site.
Phrynosoma blainvillii	Blainville's horned lizard	None/SSC	Open areas of sandy soil in valleys, foothills, and semi-arid mountains including coastal scrub, chaparral, valley–foothill hardwood, conifer, riparian, pine–cypress, juniper, and annual grassland habitats	N	**Not expected to occur**. The Project site lacks suitable significant coastal scrub, chaparral, woodland and grassland as required for this species. Additionally, the Project site is entirely surrounded by development, further reducing the likelihood that this species would occur within the site.
Salvadora hexalepis virgultea	coast patch-nosed snake	None/SSC	Brushy or shrubby vegetation; requires small mammal burrows for refuge and overwintering sites	N	**Not expected to occur**. The Project site lacks suitable brushy and shrubby vegetation as required for this species. Additionally, the Project site is entirely surrounded by development, further reducing the likelihood that this species would occur within the site.
Thamnophis hammondii	two-striped gartersnake	None/SSC	Streams, creeks, pools, streams with rocky beds, ponds, lakes, vernal pools	N	**Not expected to occur.** The Project site lacks suitable aquatic habitat and connectivity to adjacent aquatic habitat as required for this species. Additionally, the Project site is entirely surrounded by development, further reducing the likelihood that this species would occur within the site.
Thamnophis sirtalis ssp. (Southern California coastal plain from Ventura County to San Diego County, and from sea level to about 850 m)	south coast garter snake	None/SSC	Marsh and upland habitats near permanent water and riparian vegetation	N	**Not expected to occur**. The Project site lacks suitable marsh habitat and connectivity to adjacent aquatic and riparian habitat as required for this species. Additionally, the Project site is entirely surrounded by development, further reducing the likelihood that this species would occur within the site.

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Appendix E
Representative Site Photographs



Photo 1. Northern portion of the site facing north



Photo 2. Northeastern boundary of the site facing east/northeast



Photo 3. CVS parking lot and southern portion of the site facing west



Photo 4. Disturbed Diegan coastal sage scrub on the western boundary of the site facing southwest.



Photo 5. Northern portion of the site facing north



Photo 6. Northeastern boundary of the site facing east/northeast

Appendix D

Cultural Resources Inventory Report

DUDEK
MAIN OFFICE
605 THIRD STREET
ENCINITAS, CALIFORNIA 92024
T 800.450.1818 F 760.632.0164

February 15, 2023 13528

Ms. Johanna Crooker
Meritage Homes

Subject: Archaeological Resource Inventory – Negative Findings Report for the Gran Vista Project, City of San Marcos, California

Dear Ms. Crooker:

This letter documents the negative archaeological resources inventory conducted by Dudek for the Gran Vista Project (Project), located in the City of San Marcos, San Diego County, California (Figure 1, Project Location). The City of San Marcos (City) is the lead agency for compliance with the California Environmental Quality Act (CEQA). This report was prepared by Dudek archaeologist Matthew DeCarlo, M.A., who meets the Secretary of the Interior's Standards for archaeology.

Dudek previously completed a cultural resources constraints analysis for the Project (DeCarlo et. al. 2021), the results of which were used to construct this archaeological resources inventory. A South Coastal Information Center (SCIC) records search (June 2021) confirms that no previously recorded cultural resources have been recorded within the Project's area of potential effect (APE). A list of historic structures and sites from the City of San Marcos' Development Services Department confirmed that none of these sites are located within the APE. A Native American Heritage Commission (NAHC) Sacred Lands File (SLF) search did not indicate the presence of any Tribal Cultural Resources (TCR) or sacred sites within the Project APE. However, one response letter from Native American outreach mentioned a resource within the Project APE but no specifics were included. An intensive pedestrian survey of the Project (April 2022) did not identify any archaeological resources within the Project APE.

The 7.6-acre Project APE consists of a vacant lot bordering existing residential and commercial developments (Figure 2, Project Site). The Project APE has been previously disturbed by leveling and grading activities. Due to the previous disturbances and the negative archival search, and survey results, Dudek does not recommend cultural resources monitoring for the proposed Project. Ground disturbance is unlikely to impact archaeological resources; however, if archaeological resources are encountered during exposure of subsurface soils, ground-disturbing work should be immediately halted in the area and a qualified archaeologist should be retained to evaluate this resource.

1 Project Description and location

The Project proposes the residential development of an approximately 7.6-acre property resulting in 120 townhomes, recreational areas, and landscaping. The Project APE is located in the City of San Marcos, County of San Diego, and delineated by Las Posas Road, Palm Road, and an existing single-family residential subdivision. The property is mapped within unsectioned land in Township 12 South, Range 3 West on the United States Geological Survey 7.5' San Marcos Quadrangle (Figure 1). The 7.6-acre property comprises the entire APE.

2 Regulatory Background

The City of San Marcos (City) is the lead agency for compliance with the California Environmental Quality Act (CEQA). This study is compliant with cultural resource regulations that apply to the Project APE including provisions for the California Register of Historic Resources (CRHR), the California Native American Graves Protection and Repatriation Act, CEQA, California Health and Safety Code section 7050.5, Assembly Bill (AB) Number 52, Senate Bill 18, and the City's General Plan.

2.1 The California Register of Historic Resources (Public Resources Code Section 5020 et seq.)

In California, the term "historical resource" includes but is not limited to "any object, building, structure, site, area, place, record, or manuscript which is historically or archaeologically significant, or is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California" (California Public Resources Code [PRC] Section 5020.1[j]). In 1992, the California legislature established CRHR "to be used by state and local agencies, private groups, and citizens to identify the state's historical resources and to indicate what properties are to be protected, to the extent prudent and feasible, from substantial adverse change" (PRC Section 5024.1[a]). A resource is eligible for listing in the CRHR if the State Historical Resources Commission determines that it is a significant resource and that it meets any of the following National Register of Historic Places (NRHP) criteria (PRC Section 5024.1[c]):

1. Associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.
2. Associated with the lives of persons important in our past.
3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.
4. Has yielded, or may be likely to yield, information important in prehistory or history.

Resources less than 50 years old are not considered for listing in the CRHR, but may be considered if it can be demonstrated that sufficient time has passed to understand the historical importance of the resource (14 CCR Section 4852[d][2]).

The CRHR protects cultural resources by requiring evaluations of the significance of prehistoric and historic resources. The criteria for the CRHR are nearly identical to those for the NRHP, and properties listed or formally designated as eligible for listing on the NRHP are automatically listed on the CRHR, as are the state landmarks and points of interest. The CRHR also includes properties designated under local ordinances or identified through local historical resource surveys. The State Historic Preservation Officer maintains the CRHR.

2.2 Native American Historic Cultural Sites (PRC section 5097 et seq.)

State law addresses the following:

- The disposition of Native American burials in archaeological sites and the protection of such remains from disturbance, vandalism, or inadvertent destruction
- The procedures to be implemented if Native American skeletal remains are discovered during construction of a project
- The establishment of the NAHC to resolve disputes regarding the disposition of such remains.

In addition, the Native American Historic Resource Protection Act states that defacing or destroying Native American historic or cultural sites that are listed (or may be eligible for listing) in the CRHR is a misdemeanor punishable by up to 1 year in jail.

2.3 California Environmental Quality Act

As described further below, the following CEQA statutes and CEQA Guidelines are of relevance to the analysis of archaeological and historic resources:

1. PRC Section 21083.2(g): Defines "unique archaeological resource."
2. PRC Section 21084.1 and CEQA Guidelines Section 15064.5(a): Define historical resources. In addition, CEQA Guidelines Section 15064.5(b) defines the phrase "substantial adverse change in the significance of an historical resource;" it also defines the circumstances when a project would materially impair the significance of a historical resource.
3. PRC Section 5097.98 and CEQA Guidelines Section 15064.5(e): Set forth standards and steps to be employed following the accidental discovery of human remains in any location other than a dedicated ceremony.
4. PRC Sections 21083.2(b)–(c) and CEQA Guidelines Section 15126.4: Provide information regarding the mitigation framework for archaeological and historic resources, including options of preservation-in-place mitigation measures; preservation-in-place is the preferred manner of mitigating impacts to significant archaeological sites because it maintains the relationship between artifacts and the archaeological context, and may also help avoid conflict with religious or cultural values of groups associated with the archaeological site(s).

Under CEQA, a project may have a significant effect on the environment if it may cause "a substantial adverse change in the significance of an historical resource" (PRC Section 21084.1; CEQA Guidelines Section 15064.5[b]). If a site is either listed or eligible for listing in the CRHR, if it is included in a local register of historic resources, or is identified as significant in a historical resources survey (meeting the requirements of PRC Section 5024.1[q]), it is a "historical resource" and is presumed to be historically or culturally significant for purposes of CEQA (PRC Section 21084.1; CEQA Guidelines Section 15064.5[a]). The lead agency is not precluded from determining that a resource is a historical resource even if it does not fall within this presumption (PRC Section 21084.1; CEQA Guidelines Section 15064.5[a]).

A "substantial adverse change in the significance of an historical resource" reflecting a significant effect under CEQA means "physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired" (CEQA Guidelines Section 15064.5[b][1]; PRC Section 5020.1[q]). In turn, the significance of a historical resource is materially impaired when a project does the following:

1. Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the CRHR
2. Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to section 5020.1(k) of the PRC or its identification in an historical resources survey meeting the requirements of Section 5024.1(g) of the PRC, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant
3. Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for inclusion in the CRHR as determined by a lead agency for purposes of CEQA

2.4 California Health and Safety Code Section 7050.5

California law protects Native American burials, skeletal remains, and associated grave goods, regardless of their antiquity, and provides for the sensitive treatment and disposition of those remains. Health and Safety Code Section 7050.5 requires that if human remains are discovered in any place other than a dedicated cemetery, no further disturbance or excavation of the site or nearby area reasonably suspected to contain human remains shall occur until the County coroner has examined the remains (Section 7050.5b). If the coroner determines or has reason to believe the remains are those of a Native American, the coroner must contact the NAHC within 24 hours (Section 7050.5c). The NAHC will notify the Most Likely Descendant. With the permission of the landowner, the Most Likely Descendant may inspect the site of discovery. The inspection must be completed within 24 hours of notification of the Most Likely Descendant by the NAHC. The Most Likely Descendant may recommend means of treating or disposing of, with appropriate dignity, the human remains and items associated with Native Americans.

2.5 Assembly Bill 52

California AB 52, which took effect July 1, 2015, establishes a consultation process between California Native American Tribes and lead agencies in order to address tribal concerns regarding project impacts and mitigation to "tribal cultural resources". PRC Section 21074(a) defines TCRs and states that a project that has the potential to cause a substantial adverse change to a TCR is a project that may have an adverse effect on the environment. A TCR is defined as a site, feature, place, cultural landscape, sacred place, and object with cultural value to a California Native American tribe that is either:

1. Listed or eligible for listing in the CRHR or a local register of historical resources
2. Determined by a lead agency to be a TCR

2.6 Senate Bill 18

Senate Bill 18 amended Section 65351 of the Government Code and dictates the following:

> During the preparation or amendment of the general plan, the planning agency shall provide opportunities for the involvement of citizens California Native American Indian tribes, public agencies, public utility companies, and civic, education, and other community groups, through public hearings and any other means the city or county deems appropriate.

2.7 Guidelines for Determining Significance

According to CEQA (Section 15064.5b), a project with an effect that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment. CEQA defines a substantial adverse change:

> Substantial adverse change in the significance of an historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired.

The significance of an historical resource is materially impaired when a project does the following:

- Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for inclusion in, the CRHR
- Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to Section 5020.1(k) of the PRC or its identification in an historical resources survey meeting the requirements of Section 5024.1(g) of the PRC, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant
- Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its eligibility for inclusion in the CRHR as determined by a lead agency for purposes of CEQA

Section 15064.5(c) of CEQA applies to effects on archaeological sites and contains the following additional provisions regarding archaeological sites:

- When a project will impact an archaeological site, a lead agency shall first determine whether the site is an historical resource, as defined in subsection (a)
- If a lead agency determines that the archaeological site is a historical resource, it shall refer to the provisions of Section 21084.1 of the PRC, and this section, Section 15126.4 of the Guidelines, and the limits contained in Section 21083.2 of the PRC do not apply
- If an archaeological site does not meet the criteria defined in subsection (a), but does meet the definition of a unique archaeological resource in Section 21083.2 of the PRC, the site shall be treated in accordance with the provisions of section 21083.2. The time and cost limitations described in PRC

Section 21083.2 (c–f) do not apply to surveys and site evaluation activities intended to determine whether the project location contains unique archaeological resources

- If an archaeological resource is neither a unique archaeological nor a historical resource, the effects of the project on those resources shall not be considered a significant effect on the environment. It shall be sufficient that both the resource and the effect on it are noted in the Initial Study or Environmental Impact Report (EIR), if one is prepared to address impacts on other resources, but they need not be considered further in the CEQA process

Section 15064.5(d) and (e) contain additional provisions regarding human remains. Regarding Native American human remains, paragraph (d) provides:

> When an initial study identifies the existence of, or the probable likelihood of, Native American human remains within the project, a lead agency shall work with the appropriate Native Americans as identified by the Native American Heritage Commission as provided in Public Resources Code SS5097.98. The applicant may develop an agreement for treating or disposing of, with appropriate dignity, the human remains and any items associated with Native American burials with the appropriate Native Americans as identified by the Native American Heritage Commission. Action implementing such an agreement is exempt from:
>
> 1. The general prohibition on disinterring, disturbing, or removing human remains from any location other than a dedicated cemetery (Health and Safety Code Section 7050.5); and
> 2. The requirement of CEQA and the Coastal Act.

Under CEQA, an EIR is required to evaluate any impacts on unique archaeological resources (PRC section 21083.2.) A "unique archaeological resource" is defined as:

> [A]n archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:
>
> 1. Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
> 2. Has a special and particular quality such as being the oldest of its type or the best available example of its type.
> 3. Is directly associated with a scientifically recognized important prehistoric or historic event or person. (PRC section 21083.2[g])

An impact to a non-unique archaeological resource is not considered a significant environmental impact and such non-unique resources need not be further addressed in the EIR (PRC Section 21083.2[a]; CEQA Guidelines Section 15064.5[c][4]).

As stated above, CEQA contains rules for mitigation of "unique archaeological resources." For example, "[i]f it can be demonstrated that a project will cause damage to a unique archaeological resource, the lead agency may require reasonable efforts to be made to permit any or all of these resources to be preserved in place or left in an

undisturbed state. Examples of that treatment, in no order of preference, may include, but are not limited to, any of the following:

1. Planning construction to avoid archaeological sites
2. Deeding archaeological sites into permanent conservation easements
3. Capping or covering archaeological sites with a layer of soil before building on the sites
4. Planning parks, greenspace, or other open space to incorporate archaeological sites." (PRC Section 21083.2[b][1]–[4])

PRC Section 21083.2(d) states that "[e]xcavation as mitigation shall be restricted to those parts of the unique archaeological resource that would be damaged or destroyed by the project. Excavation as mitigation shall not be required for a unique archaeological resource if the lead agency determines that testing or studies already completed have adequately recovered the scientifically consequential information from and about the resource, if this determination is documented in the environmental impact report."

The rules for mitigating impacts to archaeological resources to qualify as "historic resources" are slightly different. According to CEQA Guidelines Section 15126.4(b), "[p]ublic agencies should, whenever feasible, seek to avoid damaging effects on any historic resource of an archaeological nature. The following factors shall be considered and discussed in an EIR for a project involving such an archaeological site:

1. Preservation in place is the preferred manner of mitigating impacts to archaeological sites. Preservation in place maintains the relationship between artifacts and the archaeological context. Preservation may also avoid conflict with religious or cultural values of groups associated with the site.
2. Preservation in place may be accomplished by, but is not limited to, the following:
    a. Planning construction to avoid archaeological sites;
    b. Incorporation of sites within parks, greenspace, or other open space;
    c. Covering the archaeological sites with a layer of chemically stable soil before building tennis courts, parking lots, or similar facilities on the site[; and]
    d. Deeding the site into a permanent conservation easement.

Thus, although Section 21083.2 of the PRC, in addressing "unique archaeological sites," provides for specific mitigation options "in no order of preference," CEQA Guidelines Section 15126.4(b), in addressing "historical resources of an archaeological nature," provides that "[p]reservation in place is the preferred manner of mitigating impacts to archaeological sites."

Under CEQA, "[w]hen data recovery through excavation is the only feasible mitigation," the lead agency may cause to be prepared and adopt a "data recovery plan," prior to any excavation being undertaken. The data recovery plan must make "provision for adequately recovering the scientifically consequential information from and about the historic resource." (CEQA Guidelines Section 15126.4[b][3][C]). The data recovery plan also "must be deposited with the California Historical Resources Regional Information Center." (Ibid.) Further, "[i]f an artifact must be removed during project excavation or testing, curation may be an appropriate mitigation." (Ibid.)

However, "[d]ata recovery shall not be required for an historical resource if the lead agency determines that testing or studies already completed have adequately recovered the scientifically consequential information from and about the archaeological or historic resource, provided that determination is documented in the EIR and that the studies are deposited with the California Historical Resources Regional Information Center." (CEQA Guidelines Section 15126.4[b][3][D]).

2.8 Native American Heritage Values

Federal and state laws mandate that consideration be given to the concerns of contemporary Native Americans with regard to potentially ancestral human remains associated funerary objects, and items of cultural patrimony. Consequently, an important element in assessing the significance of the study site has been to evaluate the likelihood that these classes of items are present in areas that would be affected by the proposed Project.

The category termed "Traditional Cultural Properties" in discussions of cultural resource management performed under federal auspices is also potentially relevant to prehistoric archaeological sites. According to Patricia L. Parker and Thomas F. King (1998), "Traditional" in this context refers to those beliefs, customs, and practices of a living community of people that have been passed down through the generations, usually orally or through practice. The traditional cultural significance of a historic property, then, is significance derived from the role the property plays in a community's historically rooted beliefs, customs, and practices. Examples of properties possessing such significance include the following:

1. A location associated with the traditional beliefs of a Native American group about its origins, its cultural history, or the nature of the world
2. A rural community whose organization, buildings and structures, or patterns of land use reflect the cultural traditions valued by its long-term residents
3. An urban neighborhood that is the traditional home of a particular cultural group, and that reflects its beliefs and practices
4. A location where Native American religious practitioners have historically gone, and are known or thought to go today, to perform ceremonial activities in accordance with traditional cultural rules of practice
5. A location where a community has traditionally carried out economic, artistic, or other cultural practices important in maintaining its historic identity

2.9 City of San Marcos Guidelines

Chapter 4 of the City's General Plan (adopted in 2012 and updated in 2013) describes the City's cultural and paleontological resources, regulatory framework, and policies and plans to protect such resources (City of San Marcos 2013). The planning goals and policies are described below.

The City's General Plan Open Space and Conservation Element identifies goals and policies aimed at preserving cultural and historic resources. The City's goal is to "continue to identify and evaluate cultural, historical, archaeological, paleontological, and architectural resources for protection from demolition and inappropriate actions" in compliance with CEQA guidelines (City of San Marcos 2013).

3 Project Background

3.1 Existing Conditions

The approximately 7.6-acre Project APE consists of a vacant lot bordering existing residential and commercial developments. The Project APE has been previously disturbed as evidenced by graded terraces. There was an elevation difference of approximately 10 feet between the northern and the southern half of the parcel showing complete disturbance of the natural landscape. The Project APE is bound to the east by North Las Posas Road, to the west by a concrete storm channel, and to the south by a drug store parking lot. The Project APE elevations ranging from 560 to 580 feet above mean sea level.

3.2 Prehistoric Context

Evidence for continuous human occupation in the San Diego County region spans the last 12,000 years. Various attempts to parse out variability in archaeological assemblages over this broad time frame have led to the development of several cultural chronologies; some of these are based on geologic time, most are based on temporal trends in archaeological assemblages, and others are interpretive reconstructions. Each of these reconstructions describes essentially similar trends in assemblage composition in more or less detail. This research employs a common set of generalized terms used to describe chronological trends in assemblage composition from an archaeological perspective: Paleoindian (pre-5500 BC), Archaic (8000 BC.–AD 500), Late Prehistoric (AD 500–1750), and Ethnohistoric (post-AD 1750). Native American aboriginal lifeways did not cease at European contact. “Protohistoric” refers to the chronological trend of continued Native American aboriginal lifeways at the cusp of the recorded historic period in the Americas. The tribal cultural context spans all of the archaeologically based chronologies further described below.

3.2.1 Paleoindian Period (pre-5500 BC)

Evidence for Paleoindian occupation in coastal Southern California is tenuous, especially considering the fact that the oldest dated archaeological assemblages look nothing like the Paleoindian artifacts from the Great Basin. One of the earliest dated archaeological assemblages in coastal Southern California (excluding the Channel Islands) derives from P-37-004669 (CA-SDI-4669), in La Jolla. A human burial from P-37-004669 was radiocarbon dated to 9,590–9,920 years before present (approximately 95% probability). The burial is part of a larger site complex that contained more than 29 human burials associated with an assemblage that fits the Archaic profile (i.e., large amounts of groundstone, battered cobbles, and expedient flake tools). In contrast, typical Paleoindian assemblages include large stemmed projectile points, high proportions of formal lithic tools, bifacial lithic reduction strategies, and relatively small proportions of groundstone tools. Prime examples of this pattern are sites that were studied by Emma Lou Davis (1978) on China Lake Naval Air Weapons Station near Ridgecrest, California. These sites contained fluted and unfluted stemmed points and large numbers of formal flake tools (e.g., shaped scrapers, blades). Other typical Paleoindian sites include the Komodo site (MNO-679)—a multicomponent fluted point site, and MNO-680—a single component Great Basin stemmed point site (Basgall et al. 2002). At MNO-679 and MNO-680, groundstone tools were rare while finely made projectile points were common.

Turning back to coastal Southern California, the fact that some of the earliest dated assemblages are dominated by processing tools runs counter to traditional notions of mobile hunter–gatherers traversing the landscape for highly valued prey. Evidence for the latter—that is, typical Paleoindian assemblages—may have been located along the coastal margin at one time, prior to glacial desiccation and a rapid rise in sea level during the early Holocene (pre-7500 BP) that submerged as much as 1.8 km of the San Diego coastline. If this were true, however, it would also be expected that such sites would be located on older landforms near the current coastline. Some sites, such as P-37-000210 (CA-SDI-210) along Agua Hedionda Lagoon, contained stemmed points similar in form to Silver Lake and Lake Mojave projectile points (pre-8000 BP) that are commonly found at sites in California's high desert (Basgall and Hall 1993). P-37-000210 yielded one corrected radiocarbon date of 8520–9520 BP (Warren et al. 2004). However, sites of this nature are extremely rare and cannot be separated from large numbers of milling tools that intermingle with old projectile point forms.

Warren et al. (2004) claimed that a biface manufacturing tradition present at the Harris site complex P-37-000149 (CA-SDI-149) is representative of typical Paleoindian occupation in the San Diego County region that possibly dates between 10,365 and 8200 BC (Warren et al. 2004, p. 26). Termed San Dieguito, assemblages at the Harris site are qualitatively distinct from most others in the San Diego County region because the site has large numbers of finely made bifaces (including projectile points), formal flake tools, a biface reduction trajectory, and relatively small amounts of processing tools (Warren 1964, 1968). Despite the unique assemblage composition, the definition of San Dieguito as a separate cultural tradition is hotly debated. Gallegos (1987) suggested that the San Dieguito pattern is simply an inland manifestation of a broader economic pattern. Gallegos' interpretation of San Dieguito has been widely accepted in recent years, in part because of the difficulty in distinguishing San Dieguito components from other assemblage constituents. In other words, it is easier to ignore San Dieguito as a distinct socioeconomic pattern than it is to draw it out of mixed assemblages.

The large number of finished bifaces (i.e., projectile points and non-projectile blades), along with large numbers of formal flake tools at the Harris site complex, is very different than nearly all other assemblages throughout the San Diego County region, regardless of age. Warren et al. (2004) made this point, tabulating basic assemblage constituents for key early Holocene sites. Producing finely made bifaces and formal flake tools implies that relatively large amounts of time were spent for tool manufacture. Such a strategy contrasts with the expedient flake-based tools and cobble-core reduction strategy that typifies non-San Dieguito Archaic sites. It can be inferred from the uniquely high degree of San Dieguito assemblage formality that the Harris site complex represents a distinct economic strategy from non-San Dieguito assemblages.

If San Dieguito truly represents a distinct socioeconomic strategy from the non-San Dieguito Archaic processing regime, its rarity implies that it was not only short-lived, but that it was not as economically successful as the Archaic strategy. Such a conclusion would fit with other trends in southern California deserts, wherein hunting-related tools are replaced by processing tools during the early Holocene (Basgall and Hall 1993).

3.2.2 Archaic Period (8,000 BC – AD 500)

The more than 2500-year overlap between the presumed age of Paleoindian occupations and the Archaic period highlights the difficulty in defining a cultural chronology in the San Diego County region. If San Dieguito is the only recognized Paleoindian component in the San Diego County region, then the dominance of hunting tools implies that it derives from Great Basin adaptive strategies and is not necessarily a local adaptation. Warren et al. (2004)

admitted as much, citing strong desert connections with San Dieguito. Thus, the Archaic pattern is the earliest local socioeconomic adaptation in the San Diego County region (Hale 2001, 2009).

The Archaic pattern is relatively easy to define with assemblages that consist primarily of processing tools: millingstones, handstones, battered cobbles, heavy crude scrapers, incipient flake-based tools, and cobble-core reduction. These assemblages occur in all environments across the San Diego County region, with little variability in tool composition. Low assemblage variability over time and space among Archaic sites has been equated with cultural conservatism (Byrd and Reddy 2002; Warren 1968; Warren et al. 2004). Despite enormous amounts of archaeological work at Archaic sites, little change in assemblage composition occurs until the bow and arrow is adopted at around AD 500, as well as ceramics at approximately the same time (Hale 2009). Even then, assemblage formality remains low. After the bow is adopted, small arrow points appear in large quantities and already low amounts of formal flake tools are replaced by increasing amounts of expedient flake tools. Similarly, shaped millingstones and handstones decrease in proportion relative to expedient, unshaped groundstone tools (Hale 2009). Thus, the terminus of the Archaic period is equally as hard to define as its beginning because basic assemblage constituents and patterns of manufacturing investment remain stable, complimented only by the addition of the bow and ceramics.

3.2.3 Late Prehistoric Period (AD 500 - 1769)

The period of time following the Archaic and prior to Ethnohistoric times (AD 1750) is commonly referred to as the Late Prehistoric (Wallace 1955; Warren et al. 2004). However, several other subdivisions continue to be used to describe various shifts in assemblage composition, including the addition of ceramics and cremation practices. In northern San Diego County, the post-AD 1450 period is called the San Luis Rey Complex. Rogers (1929) also subdivided the last 1,000 years into the Yuman II and III cultures, based on the distribution of ceramics. Despite these regional complexes, each is defined by the addition of arrow points and ceramics, and the widespread use of bedrock mortars. Vagaries in the appearance of the bow and arrow and ceramics make the temporal resolution of the San Luis Rey complex difficult. For this reason, the term Late Prehistoric is well-suited to describe the last 1,500 years of prehistory in the San Diego region.

Temporal trends in socioeconomic adaptations during the Late Prehistoric period are poorly understood. This is partly due to the fact that the fundamental Late Prehistoric assemblage is very similar to the Archaic pattern, but includes arrow points and large quantities of fine debitage from producing arrow points, ceramics, and cremations. The appearance of mortars and pestles is difficult to place in time because most mortars are on bedrock surfaces; bowl mortars are actually rare in the San Diego County region. Some argue that the Ethnohistoric intensive acorn economy extends as far back as AD 500 (Bean and Shipek 1978). However, there is no substantial evidence that reliance on acorns, and the accompanying use of mortars and pestles, occurred prior to AD 1400. True (1980) argued that acorn processing and ceramic use in the northern San Diego region did not occur until the San Luis Rey pattern emerged after approximately AD 1450.

3.2.4 Ethnohistoric (post-AD 1769)

Early descriptions of the lifeways of Southern California ethnohistoric groups were provided by explorers, missionaries, administrators, and other travelers, who gave particular attention to the coastal populations (Boscana 1846; Fages 1937; Geiger and Meighan 1976; Harrington 1934; Laylander 2000). Subsequent ethnographers in the early twentieth century were able to give much more objective, detailed, and penetrating

accounts. Most of the ethnographers attempted to distinguish between observations of the customs of surviving Native Americans and orally transmitted or inferred information concerning the lifeways of native groups prior to European intrusion into the region. The second of these subjects provides a terminal baseline for discussing the cultures of the region's prehistory. Despite the relatively rich ethnographic record, attempts to distinguish between the archaeological residues that were produced by the linguistically unrelated but culturally similar Luiseño and Ipai/Kumeyaay have been largely unsuccessful (Pigniolo 2004).

The first systematic ethnographic work in California was done in 1871 and 1872 by Stephen Powers (Heizer 1978); in 1877, Powers collected and printed his ethnographic observations in Tribes of California (Powers 1877). Prior to the work of Powers, there were limited records and accounts that might be broadly considered as ethnohistorical data, such as Boscana (1846). At the beginning of the twentieth century, Alfred L. Kroeber and others began four decades of systematic documentation of tribal ethnographies. Kroeber's (1925) monumental work on the Indians of California continues to be an authoritative source of information. It is important to note that even though there were many informants for these early ethnographies who were able to provide information from personal experiences about native life before the Europeans, a significantly large proportion of these informants were born after 1850 (Heizer and Nissen 1973); therefore, the documentation of pre-contact, aboriginal culture was being increasingly supplied by individuals born in California after considerable contact with Europeans. As Robert F. Heizer (1978) stated, this is an important issue to note when examining these ethnographies, since considerable culture change had undoubtedly occurred by 1850 among the Native American survivors of California. Nonetheless, the enormous value of the ethnographies done under Kroeber's guidance is obvious. The major sources for this review include Lowell John Bean and Florence C. Shipek (1978), Kroeber (1925), Philip S. Sparkman (1908), and Raymond White (1963).

San Marcos is situated within the ethnohistoric territory of the Native American Luiseño cultural group, according to Kroeber's study (1925; see also Rivers 1993). The Luiseño language belongs to the Cupan group of the Takic language branch of the Uto-Aztecan language family. Luiseño is a term given to Native Americans under the administration of Mission San Luis Rey, and later applied specifically to the Payomkawichum ethnic nation who were present in the region where the mission was founded. Meaning the "western people," the name Payomkawichum can also be applied to the closely related coastal Luiseño who lived north of the mission.

Luiseño territory was situated in the north half of San Diego County and the western edge of Riverside County. Their lands encompassed the southern Santa Margarita Mountains and the Palomar Mountains, and their foothills to the Pacific Ocean. The territory extended eastward into the San Jacinto Valley and the western foothills of the San Jacinto Mountains. Their neighbors to the were the Juaneño (Acjachemen) who spoke a Luiseño dialect, the Cahuilla and Cupeño to the east who spoke other Takic Cupan languages, and the Ipai (Kumeyaay) to the south who spoke a California-Delta Yuman language.

The Luiseño resided in permanent villages and associated seasonal camps. Village population ranged from 50–400 with social structure based on lineages and clans. A single lineage was generally represented in smaller villages, while multiple lineages and a dominant clan presided in larger villages. Each clan/village owned a resource territory and was politically independent, yet maintained ties to others through economic, religious, and social networks in the immediate region. There were contact period villages in the vicinity of this segment, near the towns of Vista, San Marcos, and Escondido, but researchers have been unable to place rancheria names from the mission registers with these locations.

Like other Indigenous California groups, the primary food staple was the acorn (Bean and Shipek 1978), supplemented by other plant resources, fish, shellfish, waterfowl, and marine and terrestrial mammals. Villages were situated near reliable sources of water, needed for the daily leaching of milled acorn flour. Other plant foods included pine nuts and grass seeds, manzanita, sunflower, sage, chia, lemonade berry, wild rose, holly-leaf cherry, prickly pear, and lamb's quarter. Large and small prey included deer, antelope, rabbit, jackrabbit, wood rat, mice, and ground squirrel, as well as quail, ducks, and other birds. Fish, such as trout, were caught in rivers and creeks.

The first direct European contact with the Luiseño occurred in July 1769 with the Spanish expedition led by Gaspar de Portolá. During the next six years, eight missions and forts were founded north and south of Luiseño territory. In 1776, Mission San Juan Capistrano was founded less than 10 miles north, and the populations of five northern Luiseño villages had been halved within 15 years. In 1798, Mission San Luis Rey was established within Luiseño territory, and the proselytizing among the Payomkawichum began in earnest.

Several Luiseño leaders signed the statewide 1852 treaty, locally known as the Treaty of Temecula (an interior Luiseño village), but the U.S. Congress never ratified it. By 1875, however, reservations for the Luiseño were established in the Palomar Mountains and nearby valleys, including Pala, Pauma, Rincon, Pechanga, and La Jolla.

4 Methods

4.1 SCIC Records Search

Dudek previously completed a cultural resources constraints analysis for the Project (DeCarlo et. al 2021), the results of which are summarized below. The purpose of the records search is to identify any previously recorded cultural resources that may be located within the property. In addition to a review of previously prepared EIRs, permit application packages, site records, and reports, the records search also reviewed historical maps of the Project APE and vicinity, ethnographies, the NRHP, CRHR, Built Environment Resources Directory, and the lists of California State Historical Landmarks, California Points of Historical Interest, and Archaeological Determinations of Eligibility. Dudek received the results of the records search on June 17, 2021 (Confidential Appendix A, SCIC Records Search Results).

Dudek reviewed the Built Environment Resources Directory on June 16, 2021. No previously recorded built environment resources are located on the Project APE or along the blocks of Las Posas Road and Mission Road that border the Project APE.

The SCIC records search results identified 40 cultural resources within 1 mile of the Project APE, none of which intersect the current Project APE. One resource, P-37-005584/CA-SDI-5584, was identified immediately adjacent to the Project APE and another resource, P-37-005633/CA-SDI-5633, was located 0.15 miles outside of the Project APE. The resources are discussed below. Table 1 summarizes the cultural resources within 1 mile of the Project APE.

Table 1. Cultural Resources Previously Identified within 1 Mile of Project APE

Primary No	Trinomial	Era	Description
Within 1 Mile of Project APE			
P-37-005581	CA-SDI-005581	Prehistoric	Habitation site
P-37-005582	CA-SDI-005582	Prehistoric	Lithic scatter
P-37-005583	CA-SDI-005583	Prehistoric	Lithic scatter
P-37-005584	CA-SDI-005584	Prehistoric	Bedrock milling feature and lithic artifacts
P-37-005632	CA-SDI-005632	Prehistoric	Bedrock milling features and lithic scatter
P-37-005633	CA-SDI-005633	Prehistoric	Habitation site
P-37-005641	CA-SDI-005641	Multicomponent	Habitation site
P-37-005642	CA-SDI-005642	Prehistoric	Lithic scatter
P-37-005643	CA-SDI-005643	Prehistoric	Two lithic cores
P-37-005644	CA-SDI-005644	Prehistoric	Lithic scatter
P-37-005645	CA-SDI-005645	Prehistoric	Lithic scatter
P-37-005646	CA-SDI-005646	Prehistoric	Lithic scatter
P-37-005647	CA-SDI-005647	Prehistoric	Bedrock milling and lithic scatter
P-37-005648	CA-SDI-005648	Prehistoric	Lithic scatter
P-37-005649	CA-SDI-005649	Prehistoric	Bedrock milling feature and lithic artifacts
P-37-008813	CA-SDI-008813	Prehistoric	Bedrock milling feature and lithic artifacts
P-37-008814	CA-SDI-008814	Historic	Remnants of building
P-37-008815	CA-SDI-008815	Prehistoric	Lithic scatter
P-37-008816	CA-SDI-008816	Prehistoric	Lithic and shell scatter
P-37-011661	CA-SDI-011661	Prehistoric	Lithic scatter
P-37-011662	CA-SDI-011662	Prehistoric	Rock shelter and two flakes
P-37-011663	CA-SDI-011663	Prehistoric	Lithic scatter
P-37-011715	CA-SDI-011715	Prehistoric	Quarry and bedrock milling features with lithic scatter
P-37-011716	CA-SDI-011716	Historic	Remains of historic structure
P-37-012592	CA-SDI-012592	Prehistoric, Historic	Prehistoric bedrock milling and artifact scatter; historic refuse
P-37-012593	CA-SDI-012593	Prehistoric, Historic	Prehistoric bedrock milling and artifact scatter; historic refuse
P-37-012594	CA-SDI-012594	Historic	Refuse scatter
P-37-012595	CA-SDI-012595	Prehistoric	Bedrock milling
P-37-012596	CA-SDI-012596	Historic	Refuse scatter
P-37-014950	—	Prehistoric	Isolated scraper
P-37-015064	—	Prehistoric	Isolated handstone
P-37-018190	—	Historic	Industrial building
P-37-018191	—	Historic	Commercial building
P-37-024911	CA-SDI-016492	Prehistoric	Refuse scatter

Table 1. Cultural Resources Previously Identified within 1 Mile of Project APE

Primary No	Trinomial	Era	Description
P-37-025556	CA-SDI-016971	Prehistoric	Bedrock milling
P-37-033557	—	Historic	Highway 395
P-37-036868	—	Historic	Earthen dam
P-37-036869	—	Historic	Earthen dam
P-37-039088	CA-SDI-022954	Historic	Refuse deposit
0 S. Rancho Santa Fe Road	—	Historic	Historic address

P-37-005584/CA-SDI-5584

This site was originally recorded by Randy Franklin in 1977 as a single grinding slick in a boulder outcrop on a small knoll. Franklin (1977a) stated that there was no midden, but lithic flakes, core fragments, and a hammerstone were present near the adjacent road, and suggested that they may have been intrusive. This resource was located immediately east of the Project APE within the current path of Las Posas Road. This resource was destroyed during the road's construction in 1986 and its expansion by 1990.

P-37-005633/CA-SDI-5633

This site was originally recorded by Randy Franklin in 1977 as a bedrock milling station on a small knoll (Franklin 1977b). The site went through several rounds of archaeological testing and was determined significant under CEQA. In 2002, the eastern half of the site underwent data recovery to mitigate developments. The collected deposits include bifaces and projectile points, cores, over 13,000 debitage, groundstone implements, beads, shell, and historic refuse. Human bone was also recovered and repatriated to Native American representatives. This resource is located 0.15 miles from the Project APE.

The records search also identified 55 previous studies that have been performed within 1 mile of the Project APE. Four of these studies have addressed at least a portion of the Project APE, one of which (SD-18210) addressed the entire Project APE. SD-18210, however, was a constraints study and did not include a full pedestrian survey. The findings of SD-18210 are similar to the findings of this inventory so will not be summarized here. These previous 55 studies were conducted between 1974 and 2020. No survey of the Project APE has been conducted within the past 6 years. A complete list of the previous studies conducted within 1 mile of the Project APE is included as Table 2 in Confidential Appendix A.

4.2 Built Environment Historical Resources

There are no built environment resources on the Project APE. The Project APE is surrounded by numerous residential and commercial buildings, all of which were constructed after 1973. No previously identified historical resources are in the vicinity. The commercial building to the south of the Project APE (currently CVS) was constructed in 2010. The width of streets and topography surrounding the Project APE creates a geographic and visual separation between the Project APE and all nearby development. There are no built environment historical resources that require avoidance or evaluation prior to construction.

On June 17, 2021, Dudek Architectural Historian Nicole Frank emailed the City of San Marcos' Development Services Department at planningdivision@san-marcos.net, requesting information on the City of San Marcos' historic preservation program and a list of designated resources. On June 18, 2021, Ms. Frank left a voicemail with the City of San Marcos' general voicemail line asking for information about City's historic preservation program and a list of designated historic properties. On June 21, 2021, Ms. Frank received an emailed response from Art Piñon, Senior Planner at the City of San Marcos. The email contained a list of historic structures and sites in San Marcos. After reviewing the location of these structures and sites, none were found to overlap the Project APE.

4.3 Archival Research

The previous constraints analysis included a review of historic topographic maps and aerial photographs of the Project APE and the general vicinity, to help determine the possible development and land use of the Project APE in the past. The historic aerial imagery available from the website HistoricAerials.com by Nationwide Environmental Title Research, LLC includes historic photographs available since 1953 (NETR 2021). The 1953 aerial photograph shows that the property was undeveloped but still bordered Mission Road to the south. The knoll and rock outcrop on which archaeological resource P-37-005584 was located is vaguely visible on the 1953 aerial photograph. By 1964, a natural drainage that was located west of the Project APE was channelized and demarcates the western boundary of the current Project APE. The Project APE itself was still undisturbed but a residential development was constructed to the northeast. By 1978, the Project APE and the adjacent P-37-005584 knoll were undisturbed, though a new residential development was constructed west of the project boundary. The 1984 aerial photograph shows that the southeastern corner of the Project APE was graded but the rest of the Project APE and the adjacent P-37-005584 knoll was undisturbed. The 1986 aerial photograph, however, shows the grading of the current North Las Posas Road alignment. This grading disturbed the eastern border of the Project APE and destroyed part of the adjacent P-37-005584 knoll. In 1989, the grading of the eastern Project APE boundary was expanded and substantial earth movement was required to support the current alignment of the six-laned North Las Posas Road. This expansion destroyed the P-37-005584 knoll adjacent to the Project APE. By 1991, the entire Project APE had been graded. By 2009, the entire Project APE was graded again leaving the property with a northern terrace that overlooked the southern 3/4ths of the Project APE. The current commercial building and parking lot that bound the southern portion of the Project APE was also constructed in 2009. The historic aerial photographs show that the Project APE has been undeveloped but completely disturbed.

4.4 NAHC and Native American Outreach Letters

Dudek requested a NAHC search of the SLF on April 15, 2022, for the proposed Project APE and a 1-mile buffer. The SLF consists of a database of known Native American resources. These resources may not be included in SCIC database. The NAHC replied on May 19, 2022, and reported that the SLF did not identify any known Native American cultural resources within the Project APE or the surrounding 1-mile buffer (Appendix B, Tribal Correspondence). The NAHC additionally provided a list of Native American tribes and individuals/organizations with traditional geographic associations that might have knowledge of cultural resources in this area.

Outreach letters were mailed on May 27, 2022, to all Native American group representatives included on the NAHC contact list (Appendix B). These letters attempted to solicit additional information relating to Native American resources that may be impacted by the Project. Native American representatives were requested to

define a general area where known resources intersect the Project APE. To date, Dudek has received responses to these outreach letters from three tribal representatives. On June 17, 2022, San Pasqual Band of Mission Indians responded to the letter stating that the Project APE is within the boundary of the tribe's Traditional Use Area. San Pasqual stated that they would like to engage in "formal government to government consultation". On June 21, 2022, Pechanga Band of Luiseño Mission Indians stated that the Project APE is within their Ancestral Territory and that they are interested in participating in the Project Area. Pechanga added that the Project APE is within 1.75 miles of two Ancestral Placenames and nine other previously recorded sites within 0.5 miles, one of which is within the Project APE. Unfortunately, no other information about the intersecting resource was included but Pechanga is likely referring to the destroyed Project Area adjacent P-37-005584 knoll. On June 28, 2022 Rincon Band of Luiseño Indians responded to the outreach letter and stated that the Project APE was within the band's specific Area of Historic Interest. Rincon added that they were concerned that the project may impact Tribal Cultural Resources, Traditional Cultural Landscapes, or potential Traditional Cultural Properties. Rincon recommended that an archaeological/cultural resources inventory and that a Tribal monitor from the Rincon Band should accompany the survey. On July 12, 2022, Dudek archaeologist Mattthew DeCarlo met Cheryl Madrigal, the Tribal Historic Preservation Officer for Rincon Band, at the Project APE for a site visit. They discussed the previous disturbance of the area and visited the location of former prehistoric bedrock milling site P-37-005584. Ms. Madrigal stated that she would contact the City about her concerns after she had some time to research the Project Area. On September 8, 2022, Rincon sent a letter to the City critiquing an earlier version of this report. Rincon requested an ethno-historic research and further analysis of adjacent sites P-37-005584 and P-37-005633.

In compliance with Assembly Bill 52 and Senate Bill 18, the City, as lead agency, is responsible for conducting government to government consultation with pertinent tribal entities. Rincon Band responded to City outreach for Senate Bill 18 and Assembly Bill 52 on February 16 and April 13 requesting consultation on the Project. The City had a consultation meeting with representatives of Rincon Band on August 16, 2022.

4.5 Intensive Pedestrian Survey

Dudek archaeologist Javier Hernandez conducted a survey of the proposed Project APE on April 22, 2022. Native American monitor Logovii Sialoi from Saving Sacred Sites, Inc., a Luiseño owned company, participated in the pedestrian survey. The Project consists of a vacant lot bordering existing residential and commercial developments. The Project APE has been previously disturbed as evidenced by graded terraces. There was an elevation difference of approximately 10 feet between the northern and the southern half of the parcel showing complete disturbance of the natural landscape. Ground visibility was low throughout the APE due to heavy vegetation with some modern trash and debris scattered throughout the area. Though currently undeveloped, the Project APE is immediately adjacent to residential and commercial development and has been subjected to illicit dumping activities. Pedestrian survey was conducted utilizing formal transects at 15-meter intervals. Deviations from transects also occurred to inspect animal burrows and other locations of exposed sediments and boulders. No remnants of adjacent resource P-37-005584 or other archaeological resources were identified within the Project APE.

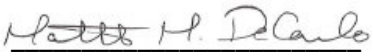
5 Summary and Management Considerations

Dudek's archaeological resources inventory for the Project did not identify any archaeological resources within the Project APE. The Project APE has been completely graded and levelled, as evidenced by historic aerial photographs and the pedestrian survey.

Due to the negative results of the SCIC records search, NAHC SLF Search, and intensive-level survey, Dudek anticipates that no known cultural resources will be impacted by the proposed Project. These negative results and the previous disturbance of the area suggest that there is a low probability for impacting unknown cultural resources during construction. Dudek does not recommend cultural resources monitoring or any other cultural resource efforts for the Project; however, in the unlikely event that archaeological materials are identified during earth moving activities, work should be temporary halted in the vicinity of the discovery. A qualified archaeologist should be notified to review the unanticipated find and evaluate the resource for CRHR listing. Should human remains be discovered, work will halt in that area and procedures set forth in the PRC (Section 5097.98) and State Health and Safety Code (Section 7050.5) will be followed, beginning with notification to the County Coroner. If Native American remains are present, the County Coroner will contact the NAHC to designate a Most Likely Descendent, who will provided recommendations for the dignified disposition and treatment of the remains.

Should you have any questions relating to this report and its findings please do not hesitate to contact Dudek directly.

Respectfully Submitted,



Matthew DeCarlo, MA
Archaeologist
Office: 760.479.4831
Email: mdecarlo@dudek.com

cc: *Vanessa Scheidel, Erin Phillips, Dudek*

Att: *Figure 1. Project Location Map*
Figure 2. Project APE Map
Confidential Appendix A: SCIC Record Search Results
Appendix B: Native American Correspondence

6 References

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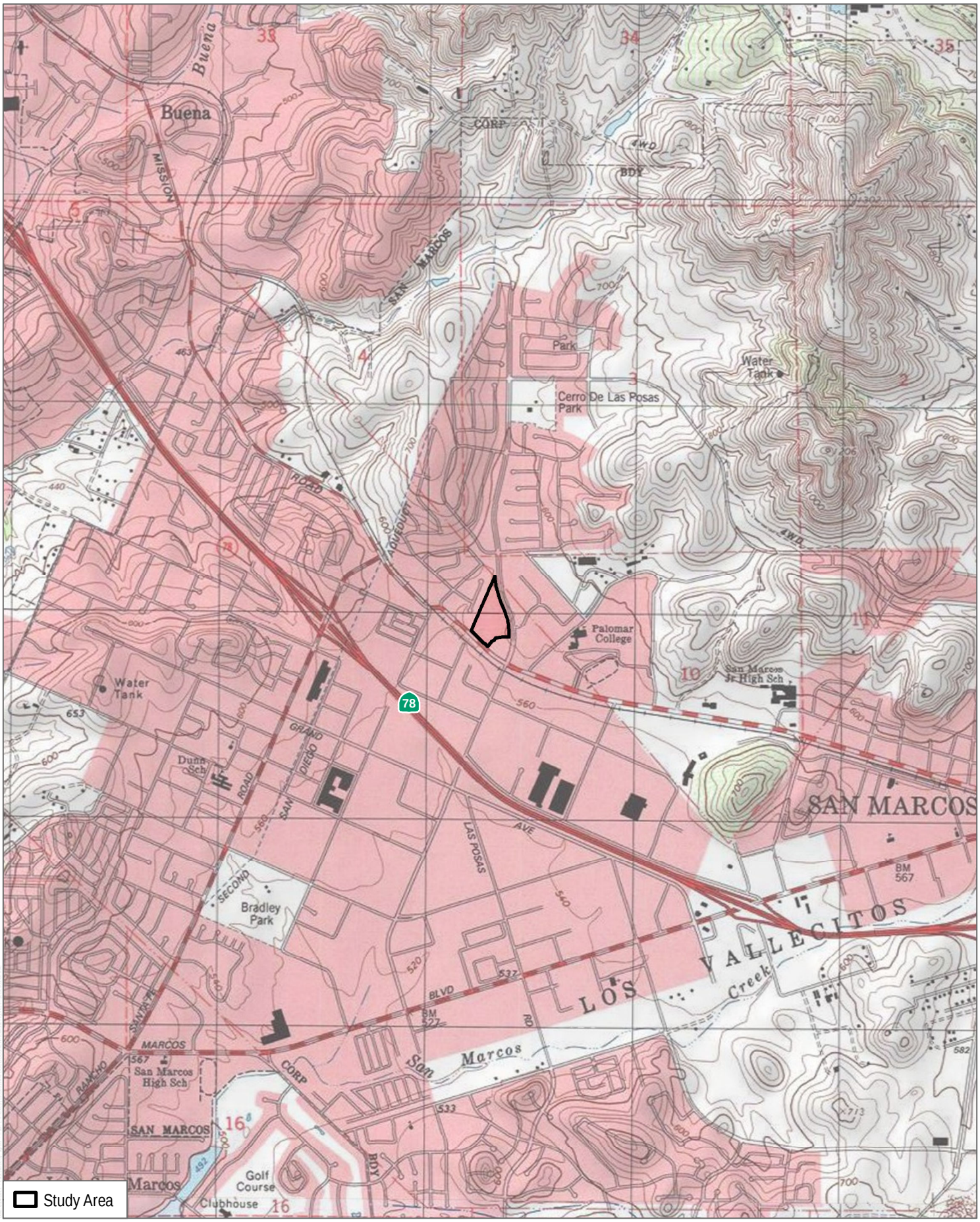
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SOURCE: USGS 7.5-Minute Series San Marcos Quadrangle

FIGURE 1

Project Location

Gran Vista Project

DUDEK



SOURCE: SANGIS 2020, 2021

DUDEK

0 75 150 Feet

FIGURE 2

Project Site

Gran Vista Project

National Archaeological Database (NADB) Information

Authors:	Matthew DeCarlo M.A.
Firm:	Dudek
Project Proponent:	Meritage Homes
Report Date:	February 2023
Report Title:	Archaeological Resources Inventory – Negative Findings Report for the Gran Vista Project, City of San Marcos, California
Type of Study:	Phase I Inventory
Resources:	None
USGS Quads:	San Marcos, California, Unsectioned land in Township 12 South, Range 3 West
Acreage:	7.6
Permit Numbers:	N/A
Keywords:	Pedestrian Survey, Inventory, Negative, City of San Marcos, Gran Vista

Appendix A (Confidential)

SCIC Record Search Results

Appendix B

Native American Correspondence

Sacred Lands File & Native American Contacts List Request

NATIVE AMERICAN HERITAGE COMMISSION
1550 Harbor Blvd, Suite 100
West Sacramento, CA 95501
(916) 373-3710
(916) 373-5471 – Fax
nahc@nahc.ca.gov

Information Below is Required for a Sacred Lands File Search

Project: Gran VIsta Project - Dudek No. 13528
County: San Diego

USGS Quadrangle
Name: San Marcos
Township: 12 South Range: 3 West Section(s): Unsectioned

Company/Firm/Agency:
Dudek
Contact Person: Matthew DeCarlo
Street Address: 605 Third Street
City: Encinitas, CA Zip: 92024
Phone: (760) 815-7067 Extension:
Fax: (760) 632-0164
Email: mdecarlo@dudek.com

Project Description:
The proposed project consists of developing a leveled lot into a residential subdivision.

☑ Project Location Map is attached

NATIVE AMERICAN HERITAGE COMMISSION

CHAIRPERSON
Laura Miranda
Luiseño

VICE CHAIRPERSON
Reginald Pagaling
Chumash

PARLIAMENTARIAN
Russell Attebery
Karuk

SECRETARY
Sara Dutschke
Miwok

COMMISSIONER
William Mungary
Paiute/White Mountain Apache

COMMISSIONER
Isaac Bojorquez
Ohlone-Costanoan

COMMISSIONER
Buffy McQuillen
Yokayo Pomo, Yuki, Nomlaki

COMMISSIONER
Wayne Nelson
Luiseño

COMMISSIONER
Stanley Rodriguez
Kumeyaay

EXECUTIVE SECRETARY
Raymond C. Hitchcock
Miwok/Nisenan

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov
NAHC.ca.gov

May 19, 2022

Matthew DeCarlo
Dudek

Via Email to: mdecarlo@dudek.com

Re: Gran Vista Project, San Diego County

Dear Mr. DeCarlo:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were negative. However, the absence of specific site information in the SLF does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated; if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance, we can assure that our lists contain current information.

If you have any questions or need additional information, please contact me at my email address: Andrew.Green@nahc.ca.gov.

Sincerely,

Andrew Green

Andrew Green
Cultural Resources Analyst

Attachment

Native American Heritage Commission
Native American Contact List
San Diego County
5/19/2022

Barona Group of the Capitan Grande
Edwin Romero, Chairperson
1095 Barona Road — Diegueno
Lakeside, CA, 92040
Phone: (619) 443 - 6612
Fax: (619) 443-0681
cloyd@barona-nsn.gov

Campo Band of Diegueno Mission Indians
Ralph Goff, Chairperson
36190 Church Road, Suite 1 — Diegueno
Campo, CA, 91906
Phone: (619) 478 - 9046
Fax: (619) 478-5818
rgoff@campo-nsn.gov

Ewiiaapaayp Band of Kumeyaay Indians
Michael Garcia, Vice Chairperson
4054 Willows Road — Diegueno
Alpine, CA, 91901
Phone: (619) 933 - 2200
Fax: (619) 445-9126
michaelg@leaningrock.net

Ewiiaapaayp Band of Kumeyaay Indians
Robert Pinto, Chairperson
4054 Willows Road — Diegueno
Alpine, CA, 91901
Phone: (619) 368 - 4382
Fax: (619) 445-9126
ceo@ebki-nsn.gov

Iipay Nation of Santa Ysabel
Virgil Perez, Chairperson
P.O. Box 130 — Diegueno
Santa Ysabel, CA, 92070
Phone: (760) 765 - 0845
Fax: (760) 765-0320

Iipay Nation of Santa Ysabel
Clint Linton, Director of Cultural Resources
P.O. Box 507 — Diegueno
Santa Ysabel, CA, 92070
Phone: (760) 803 - 5694
cjlinton73@aol.com

Inaja-Cosmit Band of Indians
Rebecca Osuna, Chairperson
2005 S. Escondido Blvd. — Diegueno
Escondido, CA, 92025
Phone: (760) 737 - 7628
Fax: (760) 747-8568

Jamul Indian Village
Erica Pinto, Chairperson
P.O. Box 612 — Diegueno
Jamul, CA, 91935
Phone: (619) 669 - 4785
Fax: (619) 669-4817
epinto@jiv-nsn.gov

Jamul Indian Village
Lisa Cumper, Tribal Historic Preservation Officer
P.O. Box 612 — Diegueno
Jamul, CA, 91935
Phone: (619) 669 - 4855
lcumper@jiv-nsn.gov

Kwaaymii Laguna Band of Mission Indians
Carmen Lucas,
P.O. Box 775 — Kwaaymii
Pine Valley, CA, 91962 — Diegueno
Phone: (619) 709 - 4207

La Jolla Band of Luiseno Indians
Norma Contreras, Chairperson
22000 Highway 76 — Luiseno
Pauma Valley, CA, 92061
Phone: (760) 742 - 3771

La Posta Band of Diegueno Mission Indians
Gwendolyn Parada, Chairperson
8 Crestwood Road — Diegueno
Boulevard, CA, 91905
Phone: (619) 478 - 2113
Fax: (619) 478-2125
LP13boots@aol.com

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed Gran Vista Project, San Diego County.

La Posta Band of Diegueno Mission Indians
Javaughn Miller, Tribal Administrator
8 Crestwood Road — Diegueno
Boulevard, CA, 91905
Phone: (619) 478 - 2113
Fax: (619) 478-2125
jmiller@LPtribe.net

Manzanita Band of Kumeyaay Nation
Angela Elliott Santos, Chairperson
P.O. Box 1302 — Diegueno
Boulevard, CA, 91905
Phone: (619) 766 - 4930
Fax: (619) 766-4957

Mesa Grande Band of Diegueno Mission Indians
Michael Linton, Chairperson
P.O Box 270 — Diegueno
Santa Ysabel, CA, 92070
Phone: (760) 782 - 3818
Fax: (760) 782-9092
mesagrandeband@msn.com

Pala Band of Mission Indians
Shasta Gaughen, Tribal Historic Preservation Officer
PMB 50, 35008 Pala Temecula Rd. — Cupeno, Luiseno
Pala, CA, 92059
Phone: (760) 891 - 3515
Fax: (760) 742-3189
sgaughen@palatribe.com

Pauma Band of Luiseno Indians
Temet Aguilar, Chairperson
P.O. Box 369 — Luiseno
Pauma Valley, CA, 92061
Phone: (760) 742 - 1289
Fax: (760) 742-3422
bennaecalac@aol.com

Pechanga Band of Indians
Paul Macarro, Cultural Resources Coordinator
P.O. Box 1477 — Luiseno
Temecula, CA, 92593
Phone: (951) 770 - 6306
Fax: (951) 506-9491
pmacarro@pechanga-nsn.gov

Pechanga Band of Indians
Mark Macarro, Chairperson
P.O. Box 1477 — Luiseno
Temecula, CA, 92593
Phone: (951) 770 - 6000
Fax: (951) 695-1778
epreston@pechanga-nsn.gov

Rincon Band of Luiseno Indians
Cheryl Madrigal, Tribal Historic Preservation Officer
One Government Center Lane — Luiseno
Valley Center, CA, 92082
Phone: (760) 297 - 2635
crd@rincon-nsn.gov

Rincon Band of Luiseno Indians
Bo Mazzetti, Chairperson
One Government Center Lane — Luiseno
Valley Center, CA, 92082
Phone: (760) 749 - 1051
Fax: (760) 749-5144
bomazzetti@aol.com

San Luis Rey Band of Mission Indians
San Luis Rey, Tribal Council
1889 Sunset Drive — Luiseno
Vista, CA, 92081
Phone: (760) 724 - 8505
Fax: (760) 724-2172
cjmojado@slrmissionindians.org

San Luis Rey Band of Mission Indians
1889 Sunset Drive — Luiseno
Vista, CA, 92081
Phone: (760) 724 - 8505
Fax: (760) 724-2172
cjmojado@slrmissionindians.org

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed Gran Vista Project, San Diego County.

Native American Heritage Commission
Native American Contact List
San Diego County
5/19/2022

San Pasqual Band of Diegueno Mission Indians
Allen Lawson, Chairperson
P.O. Box 365 — Diegueno
Valley Center, CA, 92082
Phone: (760) 749 - 3200
Fax: (760) 749-3876
allenl@sanpasqualtribe.org

San Pasqual Band of Diegueno Mission Indians
John Flores, Environmental Coordinator
P. O. Box 365 — Diegueno
Valley Center, CA, 92082
Phone: (760) 749 - 3200
Fax: (760) 749-3876
johnf@sanpasqualtribe.org

Soboba Band of Luiseno Indians
Isaiah Vivanco, Chairperson
P. O. Box 487 — Cahuilla
San Jacinto, CA, 92581 — Luiseno
Phone: (951) 654 - 5544
Fax: (951) 654-4198
ivivanco@soboba-nsn.gov

Soboba Band of Luiseno Indians
Joseph Ontiveros, Cultural Resource Department
P.O. BOX 487 — Cahuilla
San Jacinto, CA, 92581 — Luiseno
Phone: (951) 663 - 5279
Fax: (951) 654-4198
jontiveros@soboba-nsn.gov

Sycuan Band of the Kumeyaay Nation
Kristie Orosco, Kumeyaay Resource Specialist
1 Kwaaypaay Court — Kumeyaay
El Cajon, CA, 92019
Phone: (619) 445 - 6917

Sycuan Band of the Kumeyaay Nation
Cody Martinez, Chairperson
1 Kwaaypaay Court — Kumeyaay
El Cajon, CA, 92019
Phone: (619) 445 - 2613
Fax: (619) 445-1927
ssilva@sycuan-nsn.gov

Viejas Band of Kumeyaay Indians
John Christman, Chairperson
1 Viejas Grade Road — Diegueno
Alpine, CA, 91901
Phone: (619) 445 - 3810
Fax: (619) 445-5337

Viejas Band of Kumeyaay Indians
Ernest Pingleton, Tribal Historic Officer, Resource Management
1 Viejas Grade Road — Diegueno
Alpine, CA, 91901
Phone: (619) 659 - 2314
epingleton@viejas-nsn.gov

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed Gran Vista Project, San Diego County.

DUDEK
MAIN OFFICE
605 THIRD STREET
ENCINITAS, CALIFORNIA 92024
T 800.450.1818 F 760.632.0164

May 23, 2022 13528

Mr. Temet Aguilar, Chairperson
Pauma & Yuima Reservation
P.O. Box 369
Pauma Valley, CA 92061

Subject: Information Request for the Gran Vista Project, City of San Marcos, California

Dear Mr. Aguilar,

A private developer has proposed the development of a vacant lot into residential development in the City of San Marcos, California. The project area is located within an existing residential and commercial development at the intersection of by Las Posas Road and Palm Road. The area falls within unsectioned land within Township 12S/ Range 3W of the San Marcos, CA 1:24,000 USGS map (Figure 1).

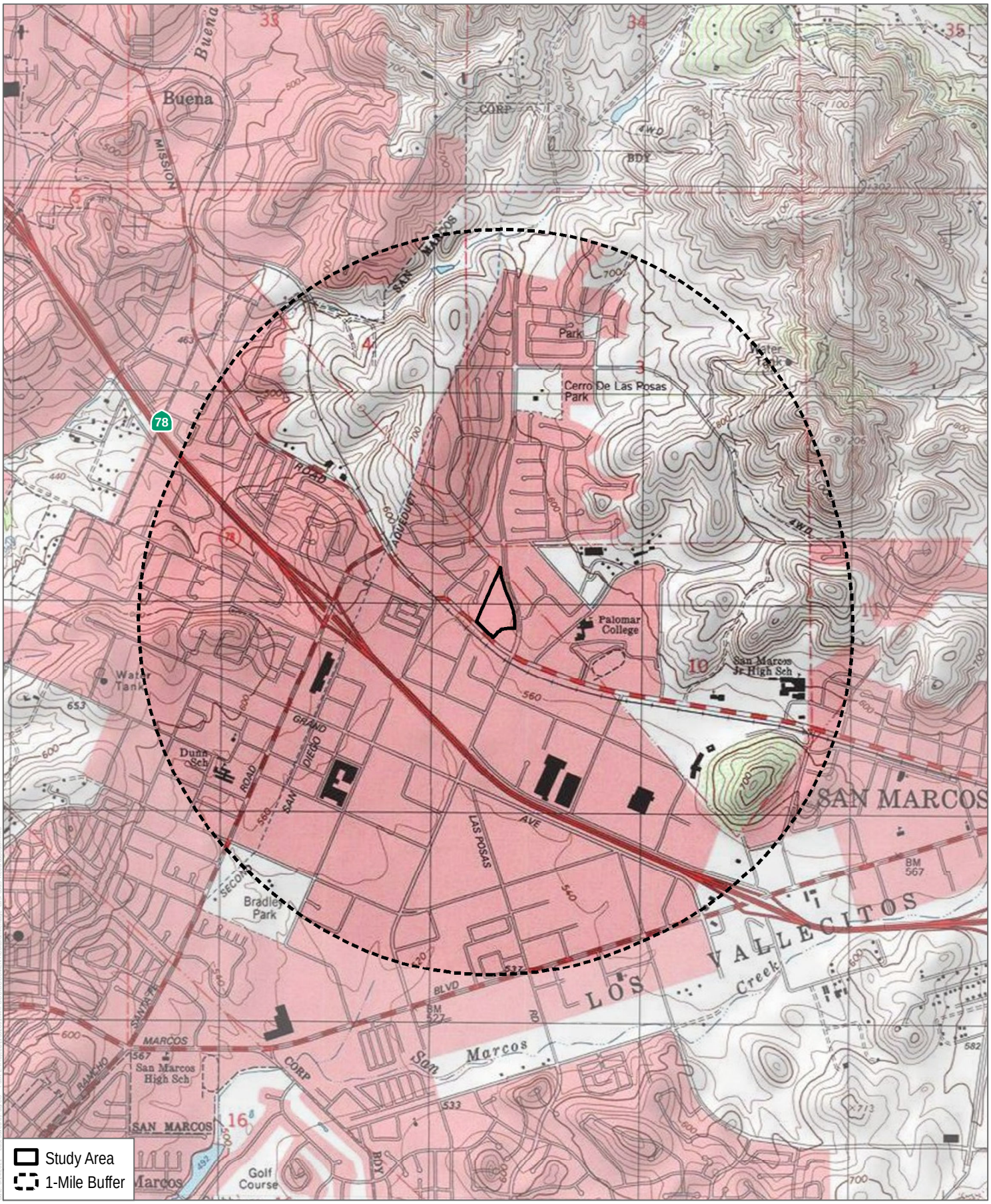
The Native American Heritage Commission conducted a Sacred Lands file search. The results were negative for Native American cultural resources within or adjacent to the project area. I am writing as part of the cultural inventory process in order find out if you, or your tribal community, have any knowledge of cultural resources or places that may be impacted by the proposed project. This letter does not constitute formal government to government consultation pursuant to Assembly Bill 52.

If you have any information or concerns pertaining to such information, please contact me.

Respectfully,

Matthew M. DeCarlo

Matthew DeCarlo, M.A.
Archaeologist
DUDEK
Phone: (760) 479-4831
Email: mdecarlo@dudek.com



SOURCE: USGS 7.5-Minute Series San Marcos Quadrangle
Township 12S; Range 3W; Sections 2, 3, 4, 9, 10, 11, 15, 16

DUDEK

0 1,000 2,000 Feet
0 285 570 Meters
1:24,000

Records Search

Gran Vista Project

DUDEK
MAIN OFFICE
605 THIRD STREET
ENCINITAS, CALIFORNIA 92024
T 800.450.1818 F 760.632.0164

May 23, 2022 13528

Mr. John Christman, Chairperson
Viejas Band of Kumeyaay Indians
1 Viejas Grade Rd.
Alpine, CA 91901

Subject: Information Request for the Gran Vista Project, City of San Marcos, California

Dear Mr. Christman,

A private developer has proposed the development of a vacant lot into residential development in the City of San Marcos, California. The project area is located within an existing residential and commercial development at the intersection of by Las Posas Road and Palm Road. The area falls within unsectioned land within Township 12S/ Range 3W of the San Marcos, CA 1:24,000 USGS map (Figure 1).

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DUDEK
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DUDEK
MAIN OFFICE
605 THIRD STREET
ENCINITAS, CALIFORNIA 92024
T 800.450.1818 F 760.632.0164

May 23, 2022 13528

Ms. Norma Contreras, Chairperson
La Jolla Band of Mission Indians
22000 Highway 76
Pauma Valley, CA 92061

Subject: Information Request for the Gran Vista Project, City of San Marcos, California

Dear Ms. Contreras,

A private developer has proposed the development of a vacant lot into residential development in the City of San Marcos, California. The project area is located within an existing residential and commercial development at the intersection of by Las Posas Road and Palm Road. The area falls within unsectioned land within Township 12S/ Range 3W of the San Marcos, CA 1:24,000 USGS map (Figure 1).

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DUDEK
MAIN OFFICE
605 THIRD STREET
ENCINITAS, CALIFORNIA 92024
T 800.450.1818 F 760.632.0164

May 23, 2022 13528

Ms. Lisa Cumper, THPO
Jamul Indian Village
P.O. Box 612
Jamul, CA 91935

Subject: Information Request for the Gran Vista Project, City of San Marcos, California

Dear Ms. Cumper,

A private developer has proposed the development of a vacant lot into residential development in the City of San Marcos, California. The project area is located within an existing residential and commercial development at the intersection of by Las Posas Road and Palm Road. The area falls within unsectioned land within Township 12S/ Range 3W of the San Marcos, CA 1:24,000 USGS map (Figure 1).

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MAIN OFFICE
605 THIRD STREET
ENCINITAS, CALIFORNIA 92024
T 800.450.1818 F 760.632.0164

May 23, 2022 13528

Mr. John Flores, Environmental Coordinator
San Pasqual Band of Diegueno Mission Indians
P.O. Box 365
Valley Center, CA 92082

Subject: Information Request for the Gran Vista Project, City of San Marcos, California

Dear Mr. Flores,

A private developer has proposed the development of a vacant lot into residential development in the City of San Marcos, California. The project area is located within an existing residential and commercial development at the intersection of by Las Posas Road and Palm Road. The area falls within unsectioned land within Township 12S/ Range 3W of the San Marcos, CA 1:24,000 USGS map (Figure 1).

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DUDEK
MAIN OFFICE
605 THIRD STREET
ENCINITAS, CALIFORNIA 92024
T 800.450.1818 F 760.632.0164

May 23, 2022 13528

Mr. Michael Garcia, Vice Chairperson
Ewiiaapaayp Tribe
4054 Willows Road
Alpine, CA 91901

Subject: Information Request for the Gran Vista Project, City of San Marcos, California

Dear Mr. Garcia,

A private developer has proposed the development of a vacant lot into residential development in the City of San Marcos, California. The project area is located within an existing residential and commercial development at the intersection of by Las Posas Road and Palm Road. The area falls within unsectioned land within Township 12S/ Range 3W of the San Marcos, CA 1:24,000 USGS map (Figure 1).

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DUDEK
MAIN OFFICE
605 THIRD STREET
ENCINITAS, CALIFORNIA 92024
T 800.450.1818 F 760.632.0164

May 23, 2022 13528

Ms. Shasta Gaughen, Tribal Historic Preservation Officer
Pala Band of Mission Indians
35008 Pala Temecula Rd.
Pala, CA 92059

Subject: Information Request for the Gran Vista Project, City of San Marcos, California

Dear Ms. Gaughen,

A private developer has proposed the development of a vacant lot into residential development in the City of San Marcos, California. The project area is located within an existing residential and commercial development at the intersection of by Las Posas Road and Palm Road. The area falls within unsectioned land within Township 12S/ Range 3W of the San Marcos, CA 1:24,000 USGS map (Figure 1).

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DUDEK
MAIN OFFICE
605 THIRD STREET
ENCINITAS, CALIFORNIA 92024
T 800.450.1818 F 760.632.0164

May 23, 2022 13528

Mr. Ralph Goff, Chairperson
Campo Band of Diegueno Mission Indians
36190 Church Road, Suite 1
Campo, CA 91906

Subject: Information Request for the Gran Vista Project, City of San Marcos, California

Dear Mr. Goff,

A private developer has proposed the development of a vacant lot into residential development in the City of San Marcos, California. The project area is located within an existing residential and commercial development at the intersection of by Las Posas Road and Palm Road. The area falls within unsectioned land within Township 12S/ Range 3W of the San Marcos, CA 1:24,000 USGS map (Figure 1).

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DUDEK
Phone: (760) 479-4831
Email: mdecarlo@dudek.com

DUDEK
MAIN OFFICE
605 THIRD STREET
ENCINITAS, CALIFORNIA 92024
T 800.450.1818 F 760.632.0164

May 23, 2022 13528

Mr. Allen E. Lawson, Chairperson
San Pasqual Band of Diegueno Mission Indians
P.O. Box 365
Valley Center, CA 92082

Subject: Information Request for the Gran Vista Project, City of San Marcos, California

Dear Mr. Lawson,

A private developer has proposed the development of a vacant lot into residential development in the City of San Marcos, California. The project area is located within an existing residential and commercial development at the intersection of by Las Posas Road and Palm Road. The area falls within unsectioned land within Township 12S/ Range 3W of the San Marcos, CA 1:24,000 USGS map (Figure 1).

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DUDEK
Phone: (760) 479-4831
Email: mdecarlo@dudek.com

DUDEK
MAIN OFFICE
605 THIRD STREET
ENCINITAS, CALIFORNIA 92024
T 800.450.1818 F 760.632.0164

May 23, 2022 13528

Mr. Clint Linton, Director of Cultural Resources
Ipay Nation of Santa Ysabel
P.O. Box 507
Santa Ysabel, CA 92070

Subject: Information Request for the Gran Vista Project, City of San Marcos, California

Dear Mr. Linton,

A private developer has proposed the development of a vacant lot into residential development in the City of San Marcos, California. The project area is located within an existing residential and commercial development at the intersection of by Las Posas Road and Palm Road. The area falls within unsectioned land within Township 12S/ Range 3W of the San Marcos, CA 1:24,000 USGS map (Figure 1).

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Matthew H. DeCarlo

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DUDEK
Phone: (760) 479-4831
Email: mdecarlo@dudek.com

DUDEK
MAIN OFFICE
605 THIRD STREET
ENCINITAS, CALIFORNIA 92024
T 800.450.1818 F 760.632.0164

May 23, 2022 13528

Mr. Michael Linton, Chairperson
Mesa Grande Band of Dieguneo Mission Indians
P.O. Box 270
Santa Ysabel, CA 92070

Subject: Information Request for the Gran Vista Project, City of San Marcos, California

Dear Mr. Linton,

A private developer has proposed the development of a vacant lot into residential development in the City of San Marcos, California. The project area is located within an existing residential and commercial development at the intersection of by Las Posas Road and Palm Road. The area falls within unsectioned land within Township 12S/ Range 3W of the San Marcos, CA 1:24,000 USGS map (Figure 1).

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DUDEK
MAIN OFFICE
605 THIRD STREET
ENCINITAS, CALIFORNIA 92024
T 800.450.1818 F 760.632.0164

May 23, 2022 13528

Ms. Carmen Lucas,
Kwaaymii Laguna Band of Mission Indians
P.O. Box 775
Pine Valley, CA 91962

Subject: Information Request for the Gran Vista Project, City of San Marcos, California

Dear Ms. Lucas,

A private developer has proposed the development of a vacant lot into residential development in the City of San Marcos, California. The project area is located within an existing residential and commercial development at the intersection of by Las Posas Road and Palm Road. The area falls within unsectioned land within Township 12S/ Range 3W of the San Marcos, CA 1:24,000 USGS map (Figure 1).

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DUDEK
MAIN OFFICE
605 THIRD STREET
ENCINITAS, CALIFORNIA 92024
T 800.450.1818 F 760.632.0164

May 23, 2022 13528

Mr. Mark Macarro, Chairperson
Pechanga Band of Mission Indians
P.O. Box 1477
Temecula, CA 92593

Subject: Information Request for the Gran Vista Project, City of San Marcos, California

Dear Mr. Macarro,

A private developer has proposed the development of a vacant lot into residential development in the City of San Marcos, California. The project area is located within an existing residential and commercial development at the intersection of by Las Posas Road and Palm Road. The area falls within unsectioned land within Township 12S/ Range 3W of the San Marcos, CA 1:24,000 USGS map (Figure 1).

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DUDEK
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ENCINITAS, CALIFORNIA 92024
T 800.450.1818 F 760.632.0164

May 23, 2022 13528

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Pechanga Band of Mission Indians
P.O. Box 1477
Temecula, CA 92593

Subject: Information Request for the Gran Vista Project, City of San Marcos, California

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ENCINITAS, CALIFORNIA 92024
T 800.450.1818 F 760.632.0164

May 23, 2022 13528

Ms. Cheryl Madrigal, Tribal Historic Preservation Officer
Rincon Band of Mission Indians
One Governement Center Lane
Valley Center, CA 92082

Subject: Information Request for the Gran Vista Project, City of San Marcos, California

Dear Ms. Madrigal,

A private developer has proposed the development of a vacant lot into residential development in the City of San Marcos, California. The project area is located within an existing residential and commercial development at the intersection of by Las Posas Road and Palm Road. The area falls within unsectioned land within Township 12S/ Range 3W of the San Marcos, CA 1:24,000 USGS map (Figure 1).

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ENCINITAS, CALIFORNIA 92024
T 800.450.1818 F 760.632.0164

May 23, 2022 13528

Mr. Cody Martinez, Chairperson
Sycuan Band of the Kumeyaay Nation
1 Kwaaypaay Court
El Cajon, CA 92019

Subject: Information Request for the Gran Vista Project, City of San Marcos, California

Dear Mr. Martinez,

A private developer has proposed the development of a vacant lot into residential development in the City of San Marcos, California. The project area is located within an existing residential and commercial development at the intersection of by Las Posas Road and Palm Road. The area falls within unsectioned land within Township 12S/ Range 3W of the San Marcos, CA 1:24,000 USGS map (Figure 1).

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T 800.450.1818 F 760.632.0164

May 23, 2022 13528

Mr. Bo Mazzetti, Chairperson
Rincon Band of Luiseño Indians
1 Government Center Lane
Valley Center, CA 92082

Subject: Information Request for the Gran Vista Project, City of San Marcos, California

Dear Mr. Mazzetti,

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ENCINITAS, CALIFORNIA 92024
T 800.450.1818 F 760.632.0164

May 23, 2022 13528

Ms. Javaughn Miller, Tribal Administrator
La Posta Band of Diegueno Mission Indians
8 Crestwood Rd.
Boulevard, CA 91905

Subject: Information Request for the Gran Vista Project, City of San Marcos, California

Dear Ms. Miller,

A private developer has proposed the development of a vacant lot into residential development in the City of San Marcos, California. The project area is located within an existing residential and commercial development at the intersection of by Las Posas Road and Palm Road. The area falls within unsectioned land within Township 12S/ Range 3W of the San Marcos, CA 1:24,000 USGS map (Figure 1).

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T 800.450.1818 F 760.632.0164

May 23, 2022 13528

Mr. Joseph Ontiveros, Cultural Resource Department
Soboba Band of Luiseno Indians
P.O. Box 487
San Jacinto, CA 92581

Subject: Information Request for the Gran Vista Project, City of San Marcos, California

Dear Mr. Ontiveros,

A private developer has proposed the development of a vacant lot into residential development in the City of San Marcos, California. The project area is located within an existing residential and commercial development at the intersection of by Las Posas Road and Palm Road. The area falls within unsectioned land within Township 12S/ Range 3W of the San Marcos, CA 1:24,000 USGS map (Figure 1).

The Native American Heritage Commission conducted a Sacred Lands file search. The results were negative for Native American cultural resources within or adjacent to the project area. I am writing as part of the cultural inventory process in order find out if you, or your tribal community, have any knowledge of cultural resources or places that may be impacted by the proposed project. This letter does not constitute formal government to government consultation pursuant to Assembly Bill 52.

If you have any information or concerns pertaining to such information, please contact me.

Respectfully,

Matthew M. DeCarlo

_____

Matthew DeCarlo, M.A.
Archaeologist
DUDEK
Phone: (760) 479-4831
Email: mdecarlo@dudek.com

DUDEK
MAIN OFFICE
605 THIRD STREET
ENCINITAS, CALIFORNIA 92024
T 800.450.1818 F 760.632.0164

May 23, 2022 13528

Ms. Kristie Orosco, Resource Specialist
Sycuan Band of the Kumeyaay Nation
1 Kwaaypaay Court
El Cajon, CA 92019

Subject: Information Request for the Gran Vista Project, City of San Marcos, California

Dear Ms. Orosco,

A private developer has proposed the development of a vacant lot into residential development in the City of San Marcos, California. The project area is located within an existing residential and commercial development at the intersection of by Las Posas Road and Palm Road. The area falls within unsectioned land within Township 12S/ Range 3W of the San Marcos, CA 1:24,000 USGS map (Figure 1).

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DUDEK
MAIN OFFICE
605 THIRD STREET
ENCINITAS, CALIFORNIA 92024
T 800.450.1818 F 760.632.0164

May 23, 2022 13528

Ms. Rebecca Osuna, Chairperson
Inaja-Cosmit Band of Indians
2005 S. Escondido Blvd.
Escondido, CA 92025

Subject: Information Request for the Gran Vista Project, City of San Marcos, California

Dear Ms. Osuna,

A private developer has proposed the development of a vacant lot into residential development in the City of San Marcos, California. The project area is located within an existing residential and commercial development at the intersection of by Las Posas Road and Palm Road. The area falls within unsectioned land within Township 12S/ Range 3W of the San Marcos, CA 1:24,000 USGS map (Figure 1).

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Phone: (760) 479-4831
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DUDEK
MAIN OFFICE
605 THIRD STREET
ENCINITAS, CALIFORNIA 92024
T 800.450.1818 F 760.632.0164

May 23, 2022 13528

Ms. Gwendolyn Parada, Chairperson
La Posta Band of Diegueno Mission Indians
8 Crestwood Rd.
Boulevard, CA 91905

Subject: Information Request for the Gran Vista Project, City of San Marcos, California

Dear Ms. Parada,

A private developer has proposed the development of a vacant lot into residential development in the City of San Marcos, California. The project area is located within an existing residential and commercial development at the intersection of by Las Posas Road and Palm Road. The area falls within unsectioned land within Township 12S/ Range 3W of the San Marcos, CA 1:24,000 USGS map (Figure 1).

The Native American Heritage Commission conducted a Sacred Lands file search. The results were negative for Native American cultural resources within or adjacent to the project area. I am writing as part of the cultural inventory process in order find out if you, or your tribal community, have any knowledge of cultural resources or places that may be impacted by the proposed project. This letter does not constitute formal government to government consultation pursuant to Assembly Bill 52.

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Respectfully,

Matthew H. DeCarlo

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Archaeologist
DUDEK
Phone: (760) 479-4831
Email: mdecarlo@dudek.com

DUDEK
MAIN OFFICE
605 THIRD STREET
ENCINITAS, CALIFORNIA 92024
T 800.450.1818 F 760.632.0164

May 23, 2022 13528

Mr. Virgil Perez, Chairperson
Iipay Nation of Santa Ysabel
P.O. Box 130
Santa Ysabel, CA 92070

Subject: Information Request for the Gran Vista Project, City of San Marcos, California

Dear Mr. Perez,

A private developer has proposed the development of a vacant lot into residential development in the City of San Marcos, California. The project area is located within an existing residential and commercial development at the intersection of by Las Posas Road and Palm Road. The area falls within unsectioned land within Township 12S/ Range 3W of the San Marcos, CA 1:24,000 USGS map (Figure 1).

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Archaeologist
DUDEK
Phone: (760) 479-4831
Email: mdecarlo@dudek.com

DUDEK
MAIN OFFICE
605 THIRD STREET
ENCINITAS, CALIFORNIA 92024
T 800.450.1818 F 760.632.0164

May 23, 2022 13528

Mr. Ernest Pingleton, Tribal Historic Officer
Viejas Band of Kumeyaay Indians
1 Viejas Grade Rd.
Alpine, CA 91901

Subject: Information Request for the Gran Vista Project, City of San Marcos, California

Dear Mr. Pingleton,

A private developer has proposed the development of a vacant lot into residential development in the City of San Marcos, California. The project area is located within an existing residential and commercial development at the intersection of by Las Posas Road and Palm Road. The area falls within unsectioned land within Township 12S/ Range 3W of the San Marcos, CA 1:24,000 USGS map (Figure 1).

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Archaeologist
DUDEK
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DUDEK
MAIN OFFICE
605 THIRD STREET
ENCINITAS, CALIFORNIA 92024
T 800.450.1818 F 760.632.0164

May 23, 2022 13528

Mr. Robert Pinto, Chairperson
Ewiaapaayp Tribe
4054 Willow Rd.
Alpine, CA 91901

Subject: Information Request for the Gran Vista Project, City of San Marcos, California

Dear Mr. Pinto,

A private developer has proposed the development of a vacant lot into residential development in the City of San Marcos, California. The project area is located within an existing residential and commercial development at the intersection of by Las Posas Road and Palm Road. The area falls within unsectioned land within Township 12S/ Range 3W of the San Marcos, CA 1:24,000 USGS map (Figure 1).

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DUDEK
MAIN OFFICE
605 THIRD STREET
ENCINITAS, CALIFORNIA 92024
T 800.450.1818 F 760.632.0164

May 23, 2022 13528

Ms. Erica Pinto, Chairperson
Jamul Indian Village
P.O. Box 612
Jamul, CA 91935

Subject: Information Request for the Gran Vista Project, City of San Marcos, California

Dear Ms. Pinto,

A private developer has proposed the development of a vacant lot into residential development in the City of San Marcos, California. The project area is located within an existing residential and commercial development at the intersection of by Las Posas Road and Palm Road. The area falls within unsectioned land within Township 12S/ Range 3W of the San Marcos, CA 1:24,000 USGS map (Figure 1).

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DUDEK
MAIN OFFICE
605 THIRD STREET
ENCINITAS, CALIFORNIA 92024
T 800.450.1818 F 760.632.0164

May 23, 2022 13528

Mr. Edwin (Thorpe) Romero, Chairperson
Barona Group of the Capitan Grande
1095 Barona Road
Lakeside, CA 92040

Subject: Information Request for the Gran Vista Project, City of San Marcos, California

Dear Mr. Romero,

A private developer has proposed the development of a vacant lot into residential development in the City of San Marcos, California. The project area is located within an existing residential and commercial development at the intersection of by Las Posas Road and Palm Road. The area falls within unsectioned land within Township 12S/ Range 3W of the San Marcos, CA 1:24,000 USGS map (Figure 1).

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Archaeologist
DUDEK
Phone: (760) 479-4831
Email: mdecarlo@dudek.com

DUDEK
MAIN OFFICE
605 THIRD STREET
ENCINITAS, CALIFORNIA 92024
T 800.450.1818 F 760.632.0164

May 23, 2022 13528

Ms. Angela Elliott Santos, Chairperson
Manzanita Band of Kumeyaay Nation
P.O. Box 1302
Boulevard, CA 91905

Subject: Information Request for the Gran Vista Project, City of San Marcos, California

Dear Ms. Santos,

A private developer has proposed the development of a vacant lot into residential development in the City of San Marcos, California. The project area is located within an existing residential and commercial development at the intersection of by Las Posas Road and Palm Road. The area falls within unsectioned land within Township 12S/ Range 3W of the San Marcos, CA 1:24,000 USGS map (Figure 1).

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DUDEK
Phone: (760) 479-4831
Email: mdecarlo@dudek.com

DUDEK
MAIN OFFICE
605 THIRD STREET
ENCINITAS, CALIFORNIA 92024
T 800.450.1818 F 760.632.0164

May 23, 2022 13528

Mr. Isaiah Vivanco, Chairperson
Soboba Band of Luiseno Indians
P.O. Box 487
San Jacinto, CA 92581

Subject: Information Request for the Gran Vista Project, City of San Marcos, California

Dear Mr. Vivanco,

A private developer has proposed the development of a vacant lot into residential development in the City of San Marcos, California. The project area is located within an existing residential and commercial development at the intersection of by Las Posas Road and Palm Road. The area falls within unsectioned land within Township 12S/ Range 3W of the San Marcos, CA 1:24,000 USGS map (Figure 1).

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DUDEK
MAIN OFFICE
605 THIRD STREET
ENCINITAS, CALIFORNIA 92024
T 800.450.1818 F 760.632.0164

May 23, 2022 13528

Tribal Council ,
San Luis Rey Band of Mission Indians
1889 Sunset Dr.
Vista, CA 92081

Subject: Information Request for the Gran Vista Project, City of San Marcos, California

Dear ,

A private developer has proposed the development of a vacant lot into residential development in the City of San Marcos, California. The project area is located within an existing residential and commercial development at the intersection of by Las Posas Road and Palm Road. The area falls within unsectioned land within Township 12S/ Range 3W of the San Marcos, CA 1:24,000 USGS map (Figure 1).

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Respectfully,

Matthew H. DeCarlo

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Matthew DeCarlo, M.A.
Archaeologist
DUDEK
Phone: (760) 479-4831
Email: mdecarlo@dudek.com

IPAI

SAN PASQUAL BAND OF MISSION INDIANS

SAN PASQUAL RESERVATION

TRIBAL COUNCIL

Stephen W. Cope
Chairman

Justin Quis Quis
Vice Chairman

Jenny Alto
Secretary-Treasurer

Roberta Cameron
Councilman

Melody S. Arviso
Councilman

June 17, 2022

DUDEK
Matthew DeCarlo
Archaeologist
605 Third Street
Encinitas CA, 92024

RE: Gran Vista Project

Dear Mr. DeCarlo,

The San Pasqual Band of Mission Indians Tribal Historic Preservation Office has received your notification of the project referenced above. This letter constitutes our response on behalf of Desiree M. Whitman THPO Officer and San Pasqual Band of Mission Indians.

We have consulted our maps and determined that the project as described is not within the boundaries of the recognized San Pasqual Indian Reservation. It is, however, within the boundaries of the territory that the tribe considers its Traditional Use Area (TUA). Furthermore, we would like to engage in formal government to government consultation so that San Pasqual can have a voice in developing the measures that will be taken to protect these sites and mitigate any adverse impacts.

We would appreciate being given access to any cultural resource reports that have been or will be generated during the environmental review process so we can contribute most effectively to the consultation process.

We appreciate your involvement with your initiative and look forward to working with you on future efforts. If you have questions or need additional information, please do not hesitate to contact me by telephone at 760-803-5648 or by e-mail at Angelinag@sanpasqualtribe.org

Respectfully,

Angelina Gutierrez

Angelina Gutierrez
Tribal Historic Preservation Office, Monitor Supervisor
San Pasqual Band of Mission Indians

PECHANGA CULTURAL RESOURCES

Temecula Band of Luiseño Mission Indians

Post Office. Box 2183 • Temecula, CA 92593
Telephone (951) 770-6300 • Fax (951) 506-9491

Chairperson:
Neal Ibanez

Vice Chairperson:
Bridgett Barcello

Committee Members:
Darlene Miranda
Richard B. Scearce, III
Robert Villalobos
Shevon Torres
Juan Rodriguez

Director:
Gary DuBois

Coordinator:
Paul Macarro

Cultural Analyst:
Tuba Ebru Ozdil

Planning Specialist:
Molly Escobar

June 21, 2022

VIA E-Mail and USPS
Matthew DeCarlo, M.A.
Archaeologist
DUDEK
605 Third Street,
Encinitas, CA. 92024

RE: Request for Information for the SP-21-003 Gran Vista Project, City of San Marcos, San Diego County, CA.

Dear Mr. DeCarlo,

The Pechanga Band of Indians ("the Tribe") appreciates your request for information regarding the above referenced Project. After reviewing the provided maps and our internal documents, we have determined that the Project-area is not within our Reservation land's, although it is located in Our Ancestral Territory. At this time, we are interested in participating in this Project based upon our 'Ayélkwish/Traditional Knowledge of the area, this Project's adjacency to known Ancestral remains, because of proximity to two Ancestral Placenames (one 1.26 and the second 1.75 away), and because this project is directly upon a recorded cultural/archaeological location. Further, because this location is ½-a-mile to eight other of extensive and previously recorded sites the Tribe therefore, is interested in participating in this Project. The Pechanga Tribe believes that the possibility of recovering subsurface resources during ground-disturbing activities for this Project is extremely high.

The Tribe is dedicated to providing comprehensive cultural information to you and your firm for inclusion in the archaeological study as well as to the Lead Agency for CEQA review. At this time, the Tribe requests the following so we may continue the consultation process and to provide adequate and appropriate recommendations for the Project:

1) Notification once the Project begins the entitlement process, if it has not already;
2) Copies of all applicable archaeological reports, site records, proposed grading plans and environmental documents (EA/IS/MND/EIR, etc);
3) Government-to-government consultation with the Lead Agency; and
4) The Tribe believes that monitoring by a San Diego County qualified archaeologist and a professional Pechanga Tribal Monitor may be required during earthmoving activities. Therefore, the Tribe reserves its right to make additional comments and recommendations once the environmental documents have been received and fully

reviewed. Further, in the event that subsurface cultural resources are identified, the Tribe requests consultation with the Project proponent and Lead Agency regarding the treatment and disposition of all artifacts.

As a Sovereign governmental entity, the Tribe is entitled to appropriate and adequate government-to-government consultation regarding the proposed Project. We would like you and your client to know that the Tribe does not consider initial inquiry letters from project consultants to constitute appropriate government-to-government consultation, but rather tools to obtain further information about the Project area. Therefore, the Tribe reserves its rights to participate in the formal environmental review process, including government-to-government consultation with the Lead Agency, and requests to be included in all correspondence regarding this Project.

Please note that we are interested in participating in surveys within Luiseño Ancestral territory. Prior to conducting any surveys, please contact the Cultural Department to schedule specifics. If you have any additional questions or comments, please contact me at pmacarro@pechanga-nsn.gov or 951-770-6306.

Sincerely,

Paul E. Macarro

Paul E. Macarro
Cultural Coordinator
Pechanga Reservation

Rincon Band of Luiseño Indians

CULTURAL RESOURCES DEPARTMENT

One Government Center Lane | Valley Center | CA 92082
(760) 749-1092 | Fax: (760) 749-8901 | rincon-nsn.gov

June 28, 2022
Sent via email: mdecarlo@dudek.com
DUDEK
Main Office
Matthew DeCarlo
605 Third Street
Encinitas, CA 92024

Re: Gran Vista Project, City of San Marcos, San Diego County, California

Dear Mr. DeCarlo,

This letter is written on behalf of the Rincon Band of Luiseño Indians ("Rincon Band" or "Tribe"), a federally recognized Indian Tribe and sovereign government. We have received your notification regarding the above referenced project and we thank you for the opportunity to provide information pertaining to cultural resources. The identified location is within the Territory of the Luiseño people, and is also within Rincon Band's specific Area of Historic Interest (AHI).

After review of the provided documents and our internal information, the Rincon Band has specific concerns that that the project may impact tangible Tribal Cultural Resources (TCRs), Traditional Cultural Landscapes (TCLs), and potential Traditional Cultural Properties (TCPs). Embedded in these resources and within the AHI are Rincon's history, culture, and continuing traditional identity.

Based on the information provided above, the Rincon Band recommends conducting an archaeological/cultural resources study, to include an archeological record search and complete intensive survey of the property. Additionally, we ask that a professional Tribal monitor from the Rincon Band to accompany the archaeologist during the survey.

The Rincon Band further requests to consult directly with the lead agency regarding project impacts to cultural resources. While it is not the responsibility of consultants to facilitate State-mandated consultation, the request is included in this letter so the lead agency is aware of the Tribe's concerns about the project. If you have additional questions or concerns, please do not hesitate to contact our office at your convenience at (760) 749 1092 ext. 323 or via electronic mail at cmadrigal@rincon-nsn.gov. We look forward to working together to protect and preserve our cultural assets.

Sincerely,

Cheryl Madrigal
Tribal Historic Preservation Officer
Cultural Resources Manager

Bo Mazzetti, Chairman | Tishmall Turner, Vice Chair | Laurie E. Gonzalez, Council Member | John Constantino, Council Member | Joseph Linton, Council Member

Appendix E
Geotechnical Investigation

July 15, 2021 Project No. 21138-01

Ms. Johanna Crooker
Meritage Homes
5 Peters Canyon, Suite 310
Irvine, CA 92606

Subject: ***Geotechnical Evaluation for the Proposed "Las Posas" Residential Development Located North of the Intersection of North Mission Road and Las Posas Road, San Marcos, California***

In accordance with your request, LGC Geotechnical, Inc. has performed a geotechnical evaluation of the current conditions of the teardrop shaped property located north of the intersection of North Mission Road and Las Posas Road located in San Marcos, California. This geotechnical report presents the results of our evaluation and geotechnical analysis and provides a summary of our conclusions and recommendations relative to the proposed development of the site.

We sincerely appreciate this opportunity to be of service. Should you have any questions, please do not hesitate to contact this office.

Respectfully,

LGC Geotechnical, Inc.

Kelby Styler, RCE 87413
Project Engineer

REGISTERED PROFESSIONAL ENGINEER
KELBY MORGAN STYLER
No. 87413
CIVIL
STATE OF CALIFORNIA

Barry Graham, CEG 2749
Senior Staff Geologist

CERTIFIED ENGINEERING GEOLOGIST
BARRY GRAHAM
No. 2749
STATE OF CALIFORNIA

KMS/BPG/amm

Distribution: (1) Addressee (1 electronic copy)
(1) Hunsaker & Associates (1 electronic copy)
Attn: Ryan Martin

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1.0 INTRODUCTION

LGC Geotechnical has performed a geotechnical evaluation to assess the current geotechnical conditions for the project site located north of the intersection of North Mission Road and Las Posas Road located in San Marcos, California (see Site Location Map, Figure 1). We understand that the property is to be developed for multi-story, single-family, attached residential home sites, private drives, parking, underground utilities and associated improvements. This report presents the results of our evaluation and geotechnical analysis and provides a summary of our conclusions and recommendations relative to the proposed development of the site.

1.1 Scope of Services

The conceptual site plan prepared by Hunsaker & Associates (Hunsaker, 2021) has been utilized as a base map for presentation of the data obtained in this study (see Sheet 1).

Our scope of services included:

- Review of pertinent readily available geotechnical reports and geologic maps (Appendix A);
- Excavation, sampling, and logging of nine 8-inch exploratory borings at selected locations across the site;
- Excavation, sampling, and logging of five exploratory test pits at selected locations across the site;
- Conversion of the three of the borings for infiltration testing;
- Reconnaissance level geologic mapping of the site;
- Preparation of a Geotechnical Map (Sheet 1) depicting the interpreted geologic conditions on the site;
- Geotechnical analysis of the data reviewed/obtained; and
- Preparation of this report presenting our findings, conclusions, and preliminary recommendations with respect to the proposed site development.

1.2 Project Description and Background

The site is a teardrop-shaped property originally graded for commercial development. The site is currently undeveloped and is bound to the east by a Las Posas Road, to the west by existing residential development, an existing CVS and North Mission Road to the south, and to the north by similar undeveloped property and existing residential development. Based on as-graded grading plans and historic aerial photos, the grading activities are observed between 2008 and 2010.

Topographically, the majority of the site is relatively flat lying but slopes gradually to the west and southwest from an elevation of approximately 580 feet to 570 feet above mean sea level with an existing approximately 3:1 (horizontal to vertical) slope descending westward to the adjacent residential development.

We understand that the proposed residential development of the site will include grading of the site for construction of approximately 16 multi-family residential structures. In addition,

interior streets, parking, open-space areas, associated underground utilities, and other associated improvements are proposed.

2.0 LIMITED GEOTECHNICAL EVALUATION

2.1 Subsurface Exploration

A geotechnical field evaluation was performed by LGC Geotechnical consisting of excavation of 9 hollow-stem auger borings and 5 test pits. Three of the borings were converted to test wells to perform field percolation testing, only one of the converted borings was logged and sampled.

The borings (HS-1 through HS-6, I-1, I-2, & I-3) were excavated using a truck-mounted drill rig equipped with 8-inch-diameter hollow-stem augers. Borings HS-1 through HS-6 were excavated to depths ranging from approximately 5 to 15.5 feet below existing grades. Borings I-1, I-2, & I-3 were excavated to depths of approximately 10 feet below existing grade. An LGC Geotechnical representative observed the drilling operations, logged the borings, and collected soil samples for laboratory testing. Driven soil samples were collected by means of the Standard Penetration Test (SPT) and Modified California Drive (MCD) sampler. The SPT sampler (1.4-inch ID) and MCD sampler (2.4-inch ID, 3.0-inch OD) were driven using a 140-pound automatic hammer falling 30 inches to advance the sampler a total depth of 18 inches or until refusal. Bulk samples were also collected and logged for laboratory testing at select depths. The raw blow counts for each 6-inch increment of penetration were recorded on the boring logs. Once drilling was completed the borings were backfilled with drill cuttings. Some settlement of the backfill soils may occur over time

The test pits were sampled and logged by a representative from our firm and subsequently backfilled and compacted with the excavated materials. The soils were placed in relatively thin lifts and compacted with a backhoe equipped with a compaction wheel. Considerable effort was used during the backfill operations to ensure appropriate compaction. Approximate test pit and boring locations are presented on our Geotechnical Map (Sheet 1). The subsurface logs are included in Appendix B.

2.2 Infiltration Testing

Three field percolation tests were performed in borings I-1, I-2, and I-3 approximately 10 feet below the existing ground elevation. The borings for the infiltration tests were excavated using a drill rig equipped with 8-inch diameter hollow-stem augers. Estimation of infiltration rates was performed in general accordance with guidelines set forth by the County of San Diego (SD, 2020). In general, a 3-inch diameter perforated PVC pipe was placed in each borehole to be tested and the annulus was backfilled with gravel, including placement of about 2 inches of gravel at the bottom of the borehole. The observed infiltration rates are considered representative of the site soils. These observed infiltration rates do not include any factor of safety. Observed infiltration rates have been normalized to correct the 3-Dimensional flow that occurs within the field test to 1-Dimensional flow out of the bottom of the boring.

The tested infiltration rate provided in this report is considered a general representation of the infiltration rate at the location and depth performed. Please note, the testing of infiltration rates is highly dependent upon the materials encountered at the point of testing (i.e., location and depth of testing). Varying subsurface conditions may exist outside of the test location which could alter the calculated infiltration rate. Please refer to Section 5.6 for subsurface water infiltration recommendations, a summary of the infiltration data and, pertinent factors of safety.

2.3 Laboratory Testing

Representative bulk and driven samples were obtained for laboratory testing during our field evaluation. Laboratory testing included in-situ moisture content and dry density, fines content, Atterberg limits, consolidation, expansion index, laboratory compaction, and corrosion (sulfate, chloride, pH and minimum resistivity).

- Dry density of the samples collected ranged from approximately 97.6 pounds per cubic foot (pcf) to 123.4 pcf, with an average of 113.2 pcf. Field moisture contents ranged from approximately 5.6 percent to 12.9 percent, with an average of 8.5 percent.
- One fines content tests was performed and indicated a fines content (passing No. 200 sieve) of approximately 45 percent. Based on the Unified Soils Classification System (USCS), the tested sample would be classified "fine-grained."
- One Atterberg Limit (liquid limit and plastic limit) test was performed. Results indicated Plasticity Index (PI) value of 23.
- One consolidation test was performed, the plot is provided in Appendix C.
- Two Expansion Index (EI) tests of a near-surface samples indicated EI values of 32 and 55, corresponding to "Low" and "Medium" expansion potential, respectively.
- One laboratory compaction test resulted in a maximum dry density of 125.5 pcf at an optimum moisture content of 10.0 percent.
- Corrosion testing indicated a soluble sulfate content of less than approximately 0.019 percent, a chloride content of 149 parts per million (ppm), pH of 7.99, and a minimum resistivity of 740 ohm-centimeters.

Laboratory test results obtained from our field evaluation are provided in Appendix C. The moisture and dry density results are presented on the boring logs in Appendix B.

3.0 GEOTECHNICAL CONDITIONS

3.1 Site Geology

The findings of our limited geotechnical evaluation indicate that the site is generally underlain by older artificial fill overlying Quaternary older alluvium. Cretaceous Tonalite underlies the site at depth but was not encountered during our subsurface evaluation. The typical onsite characteristics of the materials are described in the following subsections (from youngest to oldest). The approximate lateral extent of the geologic units encountered is presented on the Geotechnical Map (Sheet 1). It should be noted that geotechnical explorations are only representative of the location where they are performed and varying subsurface conditions may exist outside of each location. In addition, subsurface conditions can change over time. The soil descriptions provided herein should not be construed to mean that the subsurface profile is uniform and that soil is homogeneous within the project area. For detailed descriptions of the materials at the exploration locations, refer to the exploration logs provided in Appendix B.

3.1.1 Older Artificial Fill (Map Symbol – afo)

Older artificial fill as depicted on the Geotechnical Map generally indicates material that has been placed over native on-site soils as part of prior rough grading activities. The materials encountered consisted of light to medium brown clayey sands and sandy clays that are slightly moist to moist, dense and/or stiff. The artificial fill materials encountered during our subsurface evaluation ranged from approximately at existing grade to 8 feet in depth.

3.1.2 Quaternary Older Alluvium (Map Symbol - Qcol)

Quaternary-aged alluvium was encountered in each of the exploratory test pits and borings excavated across the site. In general, the alluvial materials encountered consisted of light to dark brown, slightly moist, dense to very dense clayey sands and stiff to hard sandy clays with gravel and lesser amounts of cobbles. The alluvial materials encountered during our subsurface evaluation ranged from approximately 2 feet to a maximum 15.5 feet in depth.

3.2 Seismic Design Criteria

The site seismic characteristics were evaluated per the guidelines set forth in Chapter 16, Section 1613 of the 2019 California Building Code (CBC) and applicable portions of ASCE 7-16 which has been adopted by the CBC. **Please note that the following seismic parameters are only applicable for code-based acceleration response spectra and are not applicable for where site-specific ground motion procedures are required by ASCE 7-15.** Representative site coordinates of latitude 33.1503 degrees north and longitude -117.1897 degrees west were utilized in our analyses. The maximum considered earthquake (MCE) spectral response accelerations (S_{MS} and S_{M1}) and adjusted design spectral response acceleration parameters (S_{DS} and S_{D1}) for Site Class C are provided in Table 1 on the following page. The structural designer should contact the geotechnical consultant if structural conditions (e.g., number of stories, seismically isolated structures, etc.) require site-specific ground motions.

TABLE 1

Seismic Design Parameters

Selected Parameters from 2019 CBC, Section 1613 - Earthquake Loads	Seismic Design Values	Notes/Exceptions
Distance to applicable faults classifies the site as a "Near-Fault" site.		Section 11.4.1 of ASCE 7
Site Class	C	Chapter 20 of ASCE 7
Ss (Risk-Targeted Spectral Acceleration for Short Periods)	0.899g	From SEAOC, 2021
S_1 (Risk-Targeted Spectral Accelerations for 1-Second Periods)	0.331g	From SEAOC, 2021
F_a (per Table 1613.2.3(1))	1.2	For Simplified Design Procedure of Section 12.14 of ASCE 7, F_a shall be taken as 1.4 (Section 12.14.8.1)
F_v (per Table 1613.2.3(2))	1.5	-
S_{MS} for Site Class C [Note: $S_{MS} = F_aS_S$]	1.078g	-
S_{M1} for Site Class C [Note: $S_{M1} = F_vS_1$]	0.497g	-
S_{DS} for Site Class C [Note: $S_{DS} = (^2/_3)\ S_{MS}$]	0.719g	-
S_{D1} for Site Class C [Note: $S_{D1} = (^2/_3)\ S_{M1}$]	0.331g	-
C_{RS} (Mapped Risk Coefficient at 0.2 sec)	0.920	ASCE 7 Chapter 22
C_{R1}(Mapped Risk Coefficient at 1 sec)	0.922	ASCE 7 Chapter 22

A deaggregation of the PGA based on a 2,475-year average return period (MCE) indicates that an earthquake magnitude of 5.58 at a distance of approximately 18.10 km from the site would contribute the most to this ground motion. A deaggregation of the PGA based on a 475-year average return period (Design Earthquake) indicates that an earthquake magnitude of 5.63 at a distance of approximately 25.89 km from the site would contribute the most to this ground motion (USGS, 2014).

Section 1803.5.12 of the 2019 CBC (per Section 11.8.3 of ASCE 7) states that the maximum considered earthquake geometric mean (MCE_G) Peak Ground Acceleration (PGA) should be used for liquefaction potential. The PGA_M for the site is equal to 0.466g (SEAOC, 2021). The design PGA is equal to 0.311g (2/3 of PGA_M).

3.3 Landslides

Regional geologic mapping and local topographic expressions do not indicate the presence of large-scale landslides within the area of the subject site. Indications of deep-seated landsliding or gross slope instability of the existing natural slopes were not observed during our site

evaluation.

3.4 Groundwater

Shallow groundwater conditions were not encountered during the subject study, which included excavations up to 15.5 feet below the existing ground surface. In general, groundwater levels fluctuate with the seasons and local zones of perched groundwater may be present within the near-surface deposits due to local seepage or during rainy seasons. Local perched groundwater conditions may develop once site development is completed and landscape irrigation commences.

3.5 Faulting

California is located on the boundary between the Pacific and North American Tectonic Plates. The average motion along this boundary is on the order of 50-mm/yr in a right-lateral sense. The majority of the motion is expressed at the surface along the northwest trending San Andreas Fault Zone with lesser amounts of motion accommodated by sub-parallel faults located predominantly west of the San Andreas Fault including the Elsinore, Newport-Inglewood, Rose Canyon, and Coronado Bank Faults. Within Southern California, a large bend in the San Andreas Fault north of the San Gabriel Mountains has resulted in a transfer of a portion of the right-lateral motion between the plates into left-lateral displacement and vertical uplift. Compression south and west of the bend has resulted in folding, left-lateral reverse thrust faulting, and regional uplift creating the east-west trending Transverse Ranges and several east-west trending faults. Farther south, within the Los Angeles Basin, "blind thrust" faults are believed to have developed below the surface also as a result of this compression, which have resulted in earthquakes such as the 1994 Northridge event along faults with little to no surface expression.

Prompted by damaging earthquakes in Northern and Southern California, State legislation and policies concerning the classification and land-use criteria associated with faults have been developed. Their purpose was to prevent the construction of urban developments across the trace of active faults. The result is the Alquist-Priolo Earthquake Fault Zoning Act, which was most recently revised in 2007 (CGS, 2007). According to the State Geologist, an active fault is defined as one, which has had surface displacement within the Holocene Epoch (roughly the last 11,000 years). A potentially active fault is defined as any fault, which has had surface displacement during Quaternary time (last 1,600,000 years), but not within the Holocene. Earthquake Fault Zones have been delineated along the traces of active faults within California. Where developments for human occupation are proposed within these zones, the state requires detailed fault evaluations be performed so that engineering geologists can mitigate the hazards associated with active faulting by identifying the location of active faults and allowing for a setback from the zone of previous ground rupture.

The site is not located within a mapped Earthquake Fault Zone (Alquist-Priolo Special Studies Zone) and no known active or potentially active faults have been identified on or in the immediate vicinity of the site. The nearest known active or potentially active fault is the offshore portion of the Rose Canyon Fault located approximately 18.8 kilometers (11.7 miles) to the west.

Secondary effects of seismic shaking resulting from large earthquakes on the major faults in the

Southern California region, which may affect the site, include ground lurching and shallow ground rupture, soil liquefaction, dynamic settlement, seiches, and tsunamis. These secondary effects of seismic shaking are a possibility throughout the Southern California region and are dependant on the distance between the site and causative fault and the onsite geology. The nearest known major active faults that could produce these secondary effects include the Rose Canyon Fault, the Newport-Inglewood Fault and the Elsinore-Julian Fault. A discussion of these secondary effects is provided in the following sections.

3.5.1 Lurching and Shallow Ground Rupture

Soil lurching refers to the rolling motion on the ground surface by the passage of seismic surface waves. Effects of this nature are not likely to be significant where the thickness of soft sediments does not vary appreciably under structures. Minor cracking of near-surface soils, due to shaking from distant seismic events, is not considered a significant hazard, although it is a possibility at any site.

3.5.2 Liquefaction and Dynamic Settlement

Liquefaction is a seismic phenomenon in which loose, saturated, granular soils behave similarly to a fluid when subject to high-intensity ground shaking. Liquefaction occurs when three general conditions coexist: 1) shallow groundwater; 2) low density non-cohesive (granular) soils; and 3) high-intensity ground motion. Studies indicate that loose, saturated, near-surface, cohesionless soils exhibit the highest liquefaction potential, while dry, dense, cohesionless soils, and cohesive soils exhibit low to negligible liquefaction potential. In general, cohesive soils are not considered susceptible to liquefaction, depending on their plasticity and moisture content. Effects of liquefaction on level ground include settlement, sand boils, and bearing capacity failures below structures. Dynamic settlement of dry loose sands can also occur as the sand particles tend to settle and densify as a result of a seismic event.

Based on the lack of shallow groundwater (greater than 15.5 feet below ground surface), dense nature of the onsite soils (hollow-stem refusal at 15.5 feet below ground surface), and the presence of fine-grained soils, the potential for liquefaction or dynamic settlement to impact the site is considered very low.

3.5.3 Lateral Spreading

Lateral spreading is a type of liquefaction induced ground failure associated with the lateral displacement of surficial blocks of sediment resulting from liquefaction in a subsurface layer. Once liquefaction transforms the subsurface layer into a fluid mass, gravity plus the earthquake inertial forces may cause the mass to move downslope towards a free face (such as a river channel or an embankment). Lateral spreading may cause large horizontal displacements and such movement typically damages pipelines, utilities, bridges, and structures.

Due to the very low potential for liquefaction, the potential for lateral spreading is also considered very low.

3.5.4 Tsunamis and Seiches

Based on the distance of the site from the sea and other large bodies of water, the possibility of seiches and/or tsunamis affecting the site is considered to be very low.

3.6 Rippability

Based on our evaluation, rippability is not anticipated to be an issue during site construction. It is anticipated that the onsite materials may be excavated with conventional construction equipment.

3.7 Oversized Material

Significant amounts of oversized material (material larger than 8 inches in maximum dimension) were not encountered during the site subsurface evaluations. However, there is the potential for some oversized material to be encountered during site grading, in the form of cobbles or concretions within the site materials and/or concrete debris from previous site improvements. For any oversized material encountered that cannot be broken down to workable size, recommendations are provided for appropriate handling in Appendix D.

3.8 Expansive Soil Characteristics

Expansion potential testing of two samples obtained from borings HS-1 and I-2 yielded Expansion Index values of 32 and 55, respectively, classified as “Low” and “Medium” potential for expansion.

3.9 Corrosion Potential

Corrosion testing indicated a sulfate content of approximately 193 ppm (less than 0.019 percent), chloride content of 149 parts per million (ppm), a pH of 7.99 and a minimum resistivity of 740 ohm-cm. Based on Caltrans Corrosion Guidelines (Caltrans, 2021), soils are considered corrosive to structural elements if the pH is 5.5 or less, or the chloride concentration is 500 ppm or greater, or the sulfate concentration is 2,000 ppm (0.2 percent) or greater.

4.0 ***CONCLUSIONS***

Based on the results of our limited evaluation, review of the project geotechnical report, and our understanding of the proposed development, it is our opinion that the proposed development is feasible from a geotechnical standpoint, provided the recommendations contained in the following sections are incorporated during site design, grading, and construction.

The following is a summary of the primary geotechnical factors, which may affect future redevelopment of the site.

- The site is predominately underlain by competent older artificial fill which overlies Quaternary older alluvial material. Based on the Geologic Map of Oceanside 30' x 60' Quadrangle (CGS, 2007), the site is underlain at depth by hard bedrock consisting of Cretaceous age plutonic tonalite. This is not expected to impact site development.
- In general, our borings indicate that the site contains primarily medium dense to dense silty/clayey sands (artificial fill) underlain by dense clayey sands, silty sands, and sandy silts (older alluvium) to the maximum explored depth of approximately 15.5 feet below existing grade. The near-surface soils are not suitable for the planned improvements in their present condition.
- From a geotechnical perspective, the existing onsite soils are suitable material for use as general fill, provided that they are relatively free from rocks (larger than 8 inches in maximum dimension), construction debris, and significant organic material.
- The site contains soils that are not suitable for retaining wall backfill due to their fines content and expansion potential, therefore import will be required by the contractor for obtaining suitable backfill soil for any planned site retaining walls. The contractor should consider that import of sandy soils may be required for retaining wall backfill.
- Groundwater was not encountered to the maximum explored depth of approximately 15.5 feet below existing ground surface.
- The subject site is not located within an Alquist-Priolo Earthquake Fault Zone and no faults were identified on the site during our site evaluation. The possibility of damage due to ground rupture is considered low since no active faults are known to cross the site.
- The site will generally consist of compacted fill over existing medium dense to very dense/stiff soils. Due to the dense nature of site soils, the lack of shallow groundwater (greater than 15.5 feet below ground surface), and the presence of fine-grained soils the potential for liquefaction and dynamic settlement is considered very low.
- Based on preliminary laboratory testing, site soils are anticipated to have "Medium" expansion potential. Mitigation measures are required for foundations and site improvements like concrete flatwork to minimize the impacts of expansive soils. Final design expansion potential must be determined at the completion of grading.
- Generation of a surplus of oversized material (material greater than 8 inches in maximum dimension) is generally not anticipated during site grading.
- It is recommended that moisture content of the subgrade soils below slabs be maintained up to the time of concrete placement due to site expansive soils. The contractor should anticipate watering and wetting down subgrade soils to maintain the moisture content of the compacted fill soils and not allow the subgrade to dry out up until the placement of concrete.
- Three field percolation tests resulted in negligible infiltration. Site will consist of compacted fill over stiff cohesive soils; these soils have very low permeability and therefore have very low infiltration rates.

5.0 PRELIMINARY RECOMMENDATIONS

The following recommendations are to be considered preliminary and should be confirmed upon completion of earthwork operations. In addition, they should be considered minimal from a geotechnical viewpoint, as there may be more restrictive requirements from the architect, structural engineer, building codes, governing agencies, or the City. It is the responsibility of the owner to ensure these recommendations are provided to the appropriate parties.

It should be noted that the following geotechnical recommendations are intended to provide sufficient information to develop the site in general accordance with the 2019 California Building Code (CBC) requirements. With regard to the potential occurrence of potentially catastrophic geotechnical hazards such as fault rupture, earthquake-induced landslides, liquefaction, etc. the following geotechnical recommendations should provide adequate protection for the proposed redevelopment to the extent required to reduce seismic risk to an "acceptable level." The "acceptable level" of risk is defined by the California Code of Regulations as "the level that provides reasonable protection of the public safety, though it does not necessarily ensure continued structural integrity and functionality of the project" [Section 3721(a)]. Therefore, repair and remedial work of the proposed improvement may be required after a significant seismic event. With regards to the potential for less significant geologic hazards to the proposed redevelopment, the recommendations contained herein are intended as a reasonable protection against the potential damaging effects of geotechnical phenomena such as expansive soils, fill settlement, groundwater seepage, etc. It should be understood, however, that although our recommendations are intended to maintain the structural integrity of the proposed redevelopment and structures given the site geotechnical conditions, they cannot preclude the potential for some cosmetic distress or nuisance issues to develop as a result of the site geotechnical conditions.

The geotechnical recommendations contained herein must be confirmed to be suitable or modified based on the actual exposed conditions.

5.1 Site Earthwork

We anticipate that earthwork at the site will generally consist of excavation for the remedial removals, foundation construction, and utility line installation and backfill. We recommend that earthwork onsite be performed in accordance with the following recommendations, future grading plan review report(s), the 2019 CBC/City of San Marcos grading requirements, and the General Earthwork and Grading Specifications included in Appendix D. In case of conflict, the following recommendations shall supersede those included in Appendix D. The following recommendations should be considered preliminary and may be revised after review of the grading plans or based on the actual conditions encountered during site grading.

5.1.1 Site Preparation

Prior to grading of areas to receive structural fill or engineered improvements, the areas should be cleared of existing building structures, asphalt, surface obstructions, and demolition debris. Vegetation and debris should be removed and properly disposed of off-site. Holes resulting from the removal of buried obstructions, which extend below proposed removal bottoms, should be replaced with suitable compacted fill material. Any

abandoned utility lines should be completely removed and replaced with properly compacted fill.

5.1.2 Removal Depths

In order to provide a relatively uniform bearing condition for the planned building structures and improvements, we recommend the site native soils be removed and recompacted according to the criteria outlined below. All unsuitable near-surface soils within the influence of proposed structural improvements should be completely removed to suitable, competent native or existing artificial fill materials prior to placement of additional artificial fill to design grades. For preliminary planning purposes, the depth of required removals and recompaction may be estimated as indicated below. It should be noted that updated recommendations may be required based on changes to building layouts and/or grading plan or based on field observations once grading commences. In general, removal bottoms should be scarified a minimum of 6 inches before placement of structural fill.

Building Structures: We recommend that removals extend a minimum depth of 18 inches below the existing surface or 12 inches below proposed footings, whichever is greater. In general, the envelope for removals should extend laterally a minimum horizontal distance of 5 feet beyond the edges of the proposed improvements. Building lines may be defined as the perimeter of the building, plus attached or adjacent foundation supported features, including canopies, elevators, or walls.

Minor Site Structures: For minor site structures such as free-standing walls, retaining walls, trash enclosures, etc., we recommend removals extend a minimum of 18 inches below native soils or 12 inches below proposed footings, whichever is greater. In general, the envelope for removal and recompaction should extend laterally a minimum distance equal to the depth of removal or a minimum distance of 2 feet beyond the edges of the proposed foundations, whichever is larger, where space permits.

Pavement and Hardscape: We recommend removals should extend a minimum of 18 inches below the native soils or 12 inches below the proposed subgrade (i.e., below planned aggregate base/asphalt concrete section), whichever is greater. In general, the envelope for removals should extend laterally a minimum distance of 1-foot beyond the edges of the proposed pavement and hardscape improvements.

Local conditions may be encountered during excavation that could require additional over-excavation beyond the above-noted minimum in order to obtain an acceptable subgrade. The actual depths and lateral extents of grading will be determined by the geotechnical consultant based on subsurface conditions encountered during grading.

5.1.3 Cut/Fill Transitions

To reduce the potential for differential settlement, we recommend site foundations be founded either completely on suitable native material or completely on suitable compacted fill. If suitable native material is anticipated or encountered in any part of the proposed footings, either the entire footing of the structure should be deepened to the suitable native material or the area of native material should be over-excavated and

replaced with compacted fill to a depth resulting in at least 2 feet of compacted fill beneath the bottom of the proposed footings. The over-excavation should also extend horizontally outside of the perimeter of the portion of the proposed foundation to be undercut. The horizontal extent beyond the footings should be equal to the depth of the over-excavation. Where this condition is anticipated, it would be prudent to perform the over-excavation with heavy-duty equipment during site rough grading. The bottom of the over-excavation should be graded to flow towards deeper fill areas. The over-excavated material should then be replaced by compacted fill material to design grade.

5.1.4 Removal Bottoms and Subgrade Preparation

In general, removal bottom areas and any areas to receive compacted fill should be scarified to a minimum depth of 6 inches, brought to a near-optimum moisture condition, and recompacted per project recommendations.

Removal bottoms and areas to receive fill should be observed and accepted by the geotechnical consultant prior to subsequent fill placement. Soil subgrade for planned footings and improvements (e.g., slabs, etc.) should be firm and competent.

5.1.5 Temporary Excavation

Temporary excavations should be performed in accordance with project plans, specifications, and all Occupational Safety and Health Administration (OSHA) requirements. Excavations should be laid back or shored in accordance with OSHA requirements before personnel or equipment are allowed to enter. Excavations should be sloped back to 1:1 or flatter or be properly shored. Some sandy soils are present and should be considered susceptible to caving. Soil conditions should be regularly evaluated during construction to verify conditions are as anticipated. The contractor shall be responsible for providing the "competent person" required by OSHA standards to evaluate soil conditions. Close coordination with the geotechnical consultant should be maintained to facilitate construction while providing safe excavations. Excavation safety is the sole responsibility of the contractor.

Vehicular traffic, stockpiles, and equipment storage should be set back from the perimeter of excavations a distance equivalent to a 1:1 projection from the bottom of the excavation. Once an excavation has been initiated, it should be backfilled as soon as practical. Prolonged exposure of temporary excavations may result in some localized instability. Excavations should be planned so that they are not initiated without sufficient time to shore/fill them prior to weekends, holidays, or forecasted rain.

It should be noted that any excavation that extends below a 1:1 (horizontal to vertical) projection of an existing foundation will remove existing support of the structure foundation. If requested, temporary shoring parameters will be provided.

5.1.6 Material for Fill

From a geotechnical perspective, the onsite soils are generally considered suitable for use as general compacted fill (i.e., non-retaining wall backfill), provided they are screened of

organic materials, construction debris and any oversized material (8 inches in greatest dimension). Moisture conditioning of site soils should be anticipated as outlined in the section below.

From a geotechnical viewpoint, any required import soils for general fill (i.e., non-retaining wall backfill) should consist of clean, granular soils of "Medium" expansion potential (EI of 90 or less per ASTM D4829), and free of organic materials, construction debris and any material greater than 3 inches in maximum dimension. Import for retaining wall backfill should meet the criteria outlined in the following paragraph. Source samples should be provided to the geotechnical consultant for laboratory testing a minimum of four working days prior to any planned importation.

Retaining wall backfill should consist of sandy soils with a maximum of 35 percent fines (passing the No. 200 sieve) per American Society for Testing and Materials (ASTM) Test Method D1140 (or ASTM D6913/D422) and a Very Low expansion potential (EI of 20 or less per ASTM D4829). Soils should also be screened of organic materials, construction debris and any material greater than 3 inches in maximum dimension. The site contains soils that are not suitable for retaining wall backfill due to their fines content and expansion potential, therefore import will be required by the contractor for obtaining suitable backfill soil for planned site retaining walls.

Aggregate base (crushed aggregate base or crushed miscellaneous base) should conform to the requirements of Section 200-2 of the Standard Specifications for Public Works Construction ("Greenbook") for untreated base materials (except processed miscellaneous base) or Caltrans Class 2 aggregate base.

The placement of demolition materials in compacted fill is acceptable from a geotechnical viewpoint provided the demolition material is broken up into pieces not larger than typically used for aggregate base (approximately 2 inches in maximum dimension) and well blended into fill soils with essentially no resulting voids. Demolition material placed in fills must be free of construction debris (wood, organics, etc.) and reinforcing steel. If asphalt concrete fragments will be incorporated into the demolition materials, approval from an environmental viewpoint may be required and is not the purview of the geotechnical consultant. From our previous experience, we recommend that asphalt concrete fragments be limited to fill areas within planned street areas (i.e., not within building pad areas).

5.1.7 Fill Placement and Compaction

Material to be placed as fill should be brought to near-optimum moisture content (generally at about 2 percent above optimum moisture content) and recompacted to at least 90 percent relative compaction (per ASTM D1557). Moisture conditioning of site soils should be anticipated in order to achieve the required degree of compaction. The optimum lift thickness to produce a uniformly compacted fill will depend on the type and size of compaction equipment used. In general, fill should be placed in uniform lifts not exceeding 8 inches in compacted thickness. Each lift should be thoroughly compacted and accepted prior to subsequent lifts. Generally, placement and compaction of fill should be performed in accordance with local grading ordinances and with observation and testing by the geotechnical consultant. Oversized material as previously defined should be

removed from site fills.

Fill placed on any slopes greater than 5:1 (horizontal to vertical) should be properly keyed and benched into firm and competent soils as it is placed in lifts.

Aggregate base material should be compacted to a minimum of 95 percent relative compaction at or slightly above-optimum moisture content per ASTM D1557. Subgrade below aggregate base should be compacted to at least 90 percent relative compaction per ASTM D1557 near optimum moisture content (generally within optimum and 2 percent above optimum moisture content).

If gap-graded ¾-inch rock is used for backfill (around storm drain storage chambers, retaining wall backfill, storm drainpipe, etc.) it will require compaction. Rock shall be placed in thin lifts (typically not exceeding 6 inches) and mechanically compacted with observation by the geotechnical consultant. Rock backfill shall meet the requirements of ASTM D2321. Gap-graded rock is required to be wrapped in filter fabric (Mirafi 140N or approved alternative) to prevent the migration of fines into the rock backfill.

5.1.8 Trench Backfill and Compaction

If trenches are shallow or the use of conventional equipment may result in damage to the utilities, sand having a sand equivalent (SE) of 30 or greater (per Caltrans Test Method [CTM] 217) may be used to bed and shade the pipes within the bedding zone. Onsite soils are not anticipated to meet this criterion. The onsite soils may generally be suitable as subsequent trench backfill (zone defined as 12 inches above the pipe to subgrade), provided the soils are screened of rocks, construction debris, other material greater than 3 inches in diameter and significant organic matter. Trench backfill should be compacted in uniform lifts (as outlined above in Section "Material for Fill") by mechanical means to at least 90 percent relative compaction (per ASTM D1557).

Retaining wall backfill should consist of granular, sandy soils as outlined in Section 5.1.6. The limits of select sandy backfill should extend at minimum ½ the height of the retaining wall or the width of the heel (if applicable), whichever is greater (Refer to Figure 3). Retaining wall backfill soils should be compacted in relatively uniform thin lifts to a minimum of 90 percent relative compaction (per ASTM D1557). Jetting or flooding of retaining wall backfill materials should not be permitted.

In backfill areas where mechanical compaction of soil backfill is impractical due to space constraints, typically sand-cement slurry may be substituted for compacted backfill. The slurry should contain about one sack of cement per cubic yard. When set, such a mix typically has the consistency of compacted soil. Sand cement slurry placed near the surface within landscape areas should be evaluated for potential impacts on planned improvements.

A representative from LGC Geotechnical should observe, probe, and test the backfill to verify compliance with the project recommendations.

5.2 Slope Stability

Site slopes designed with a slope ratio of 2:1 (horizontal to vertical), are anticipated to be both grossly and surficially stable as built. Slopes should be protected with properly designed vegetative covers. If trees are planned on cut slopes, tree wells should be considered.

5.2.1 Slope Maintenance Guidelines

It is recommended that any graded slopes be planted with groundcover vegetation as soon as practical to protect against erosion by reducing runoff velocity. Deep-rooted vegetation should also be established to protect against surficial slumping. Irrigation levels should be kept to the minimum level necessary to establish a healthy plant growth. Slopes must not be overwatered. If automatic sprinklers are used, they must be adjusted during periods of rainfall. Continuous erosion control, rodent control, and maintenance are essential to the long-term stability of all slopes. A program for the elimination of burrowing animals in slope areas must be established to protect slope stability by reducing the potential for surface water to penetrate into the slope face. Observation/testing and acceptance by the geotechnical consultant during trench backfill are recommended. V-ditches should be inspected and cleared of loose soil and/or debris on a routine basis, especially prior to and during the rainy season.

5.3 Preliminary Foundation Design Parameters

Given that the expansion index exceeds 20, the foundation systems shall be designed for effects of expansive soil. Preliminary conventional and post-tensioned foundation recommendations are provided in the following sections. Recommended soil bearing and estimated static settlement are provided in Section 5.3.5. Please note that the following foundation recommendations are preliminary and must be confirmed by LGC Geotechnical at the completion of project plans (i.e., foundation, grading and site layout plans) as well as completion of earthwork.

5.3.1 Preliminary Conventional Foundation Design Parameters

Conventional foundations may be designed in accordance with Wire Reinforcement Institute (WRI) procedure for slab-on-ground foundations per Section 1808 of the 2019 CBC to resist expansive soils. The following preliminary soil parameters may be used:

- Effective Plasticity Index: 30
- Climatic Rating: Cw = 15
- Reinforcement: Per structural designer.
- Minimum Footing Depth: 24 inches below lowest adjacent grade.
- Moisture condition (presoak) slab subgrade to 140% of optimum moisture content to a minimum depth of 24 inches prior to trenching.

The recommended moisture content should be maintained up to the time of concrete placement. It should be noted that deepened footings may be required in certain areas in order to avoid surcharge loading adjacent existing retaining walls.

5.3.2 Preliminary Post-Tensioned Foundation Design Parameters

We recommend that post-tensioned slabs should be designed using the geotechnical parameters provided in Table 2. These parameters have been determined in general accordance with the Post-Tensioning Institute (PTI, 2012) Standard Requirements (PTI DC 10.5), referenced in Chapter 18 of the 2019 CBC. In utilizing these parameters, the foundation engineer should design the foundation system in accordance with the allowable deflection criteria of applicable codes and the requirements of the structural designer/architect. Other types of stiff slabs may be used in place of the CBC post-tensioned slab design provided that, in the opinion of the foundation structural designer, the alternative type of slab is at least as stiff and strong as that designed by the CBC/PTI method.

Soil-moisture change below slabs is the major factor in foundation damage relating to expansive soils. The PTI design methodology has no consideration for presoaking, homeowner irrigation, or other non-climate related influences on the moisture content of subgrade soils. In recognition of these factors, and our previous experience and work on the geotechnical PTI subcommittee, we have modified the geotechnical parameters obtained from this methodology to account for man-made conditions such as influence of irrigation. Our design parameters are based on our experience with similar residential projects and the anticipated nature of the soil (with respect to expansion potential). Please note that implementation of our recommendations will not eliminate foundation movement (and related distress) should the moisture content of the subgrade soils fluctuate. It is the intent of these recommendations to help maintain the integrity of the proposed structures and reduce (not eliminate) movement, based upon the anticipated site soil conditions. Should future owners not properly maintain the areas surrounding the foundation, for example by overwatering, then we anticipate for highly expansive soils the maximum differential movement of the perimeter of the foundation to the center of the foundation to be on the order of a couple of inches. Soils of lower expansion potential are anticipated to show less movement.

TABLE 2

Preliminary Geotechnical Parameters for Post-Tensioned Foundation Slab Design

Parameter	PT Slab with Perimeter Footing	PT Mat with Thickened Edge
Expansion Index	Medium[1]	Medium[1]
Thornthwaite Moisture Index	-20	-20
Constant Soil Suction	PF 3.9	PF 3.9
Center Lift Edge moisture variation distance, e_m Center lift, y_m	 9.0 feet 0.5 inch	 9.0 feet 0.6 inch
Edge Lift Edge moisture variation distance, e_m Edge lift, y_m	 4.7 feet 1.1 inch	 4.7 feet 1.3 inch
Modulus of Subgrade Reaction, k (assuming presoaking as indicated below)	150 pci	150 pci
Minimum perimeter footing/thickened edge embedment below finish grade	18 inches	6 inches

1. Assumed for preliminary design purposes. Further evaluation is needed at the completion of grading.
2. Recommendations for foundation reinforcement and slab thickness are ultimately the purview of the foundation engineer/structural engineer based upon geotechnical criteria and structural engineering considerations.
3. Recommendations for vapor retarders below slabs are also the purview of the foundation engineer/structural engineer and should be provided in accordance with applicable code requirements.
4. Moisture condition to 120 % of optimum moisture content to a depth of 18 inches prior to trenching.

5.3.3 Post Tensioned Foundation Subgrade Preparation and Maintenance

Presoaking of the subgrade soils is recommended prior to trenching the foundation. Presoak recommendations specific to the anticipated site soil conditions are presented in Table 2. The subgrade moisture condition of the building pad soils should be maintained at near optimum moisture content up to the time of concrete placement. This moisture content should be maintained around the immediate perimeter of the slab during construction and up to occupancy of the homes.

The geotechnical parameters provided in Table 2 assume that if the areas adjacent to the foundation are planted and irrigated, these areas will be designed with proper drainage and adequately maintained so that ponding, which causes significant moisture changes below the foundation, does not occur. Our recommendations do not account for excessive irrigation and/or incorrect landscape design. Plants should only be provided

with sufficient irrigation for life and not overwatered to saturate subgrade soils. Sunken planters placed adjacent to the foundation, should either be designed with an efficient drainage system or liners to prevent moisture infiltration below the foundation. Some lifting of the perimeter foundation beam should be expected even with properly constructed planters.

In addition to the factors mentioned above, future homeowners should be made aware of the potential negative influences of trees and/or other large vegetation. Roots that extend near the vicinity of foundations can cause distress to foundations. Future homeowners (and the owner's landscape architect) should not plant trees/large shrubs closer to the foundations than a distance equal to half the mature height of the tree or 20 feet, whichever is more conservative unless specifically provided with root barriers to prevent root growth below the house foundation.

It is the homeowner's responsibility to perform periodic maintenance during hot and dry periods to ensure that adequate watering has been provided to keep soil from separating or pulling back from the foundation. Future homeowners should be informed and educated regarding the importance of maintaining a constant level of soil-moisture. The owners should be made aware of the potential negative consequences of both excessive watering, as well as allowing potentially expansive soils to become too dry. Expansive soils can undergo shrinkage during drying, and swelling during the rainy winter season, or when irrigation is resumed. This can result in distress to building structures and hardscape improvements. The builder should provide these recommendations to future homeowners.

5.3.4 Slab Underlayment Guidelines

The following is for informational purposes only since slab underlayment (e.g., moisture retarder, sand or gravel layers for concrete curing and/or capillary break) is unrelated to the geotechnical performance of the foundation and thereby not the purview of the geotechnical consultant. Post-construction moisture migration should be expected below the foundation. The foundation engineer/architect should determine whether the use of a capillary break (sand or gravel layer), in conjunction with the vapor retarder, is necessary or required by code. Sand layer thickness and location (above and/or below vapor retarder) should also be determined by the foundation engineer/architect.

5.3.5 Soil Bearing

An allowable soil bearing pressure of 1,500 pounds per square foot (psf) may be used for the design of footings having a minimum width of 12 inches and minimum embedment of 12 inches below lowest adjacent ground surface. This value may be increased by 300 psf for each additional foot of embedment or 100 psf for each additional foot of foundation width to a maximum value of 2,500 psf. An allowable soil bearing pressure of 1,200 psf may be used for a mat post-tensioned slab a minimum of 6 inches below lowest adjacent grade. These allowable bearing pressures are applicable for level (ground slope equal to or flatter than 5H:1V) conditions only. Bearing values indicated are for total dead loads and frequently applied live loads and may be increased by ⅓ for short duration loading (i.e., wind or seismic loads).

In utilizing the above-mentioned allowable bearing capacity and provided our earthwork recommendations are implemented, foundation settlement due to structural loads is anticipated to be 1-inch. Differential settlement may be taken as half of the total settlement (i.e., ½-inch over a horizontal span of 40 feet).

Resistance to lateral loads can be provided by friction acting at the base of foundations and by passive earth pressure. For concrete/soil frictional resistance, an allowable coefficient of friction of 0.35 may be assumed with dead-load forces. An allowable passive lateral earth pressure of 250 psf per foot of depth (or pcf) to a maximum of 2,500 psf may be used for the sides of footings poured against properly compacted fill. This passive pressure is applicable for level (ground slope equal to or flatter than 5H:1V) conditions only. The passive pressure may be increased by one-third due to wind or seismic forces. We recommend that the upper foot of passive resistance be neglected if finished grade will not be covered with concrete or asphalt. Frictional resistance and passive pressure may be used in combination without reduction. The provided allowable passive pressures are based on a factor of safety of 1.5 and 1.1 for static and seismic loading conditions, respectively.

5.3.6 Foundation Setback from Top-of-Slope and Bottom-of-Slope

Foundations should have adequate setback from top and bottom of slopes in accordance with the city of San Marcos Grading Code and the 2019 CBC.

Building footings located at tops of slopes will require a minimum setback distance, as measured horizontally from the bottom of the foundation to the nearest slope or MSE wall face. In general, building setbacks should be at least one-third of the slope height, with a maximum required horizontal setback of 40 feet. When determining the height of the slope, retaining wall heights should be included in the total slope height. Setback requirements may be accomplished by construction of deepened footings. Foundation setback criteria should be reviewed based on the precise grading plans.

5.3.7 Footing/Foundation Excavations

Footing/foundation excavation bottoms should be firm, relatively unyielding, and free of loose material. Footing/foundation excavations should be observed and accepted by the geotechnical consultant prior to placement of steel reinforcement.

5.4 Lateral Earth Pressures and Retaining Wall Design Considerations

Retaining walls of any significance are not anticipated for this site. The following lateral earth pressures may be used for minor site retaining walls.

Lateral earth pressures for imported select sandy soils are provided below. Lateral earth pressures are provided as equivalent fluid unit weights, in psf per foot of depth (or pcf). These values do not contain an appreciable factor of safety, so the retaining wall designer should apply the applicable factors of safety and/or load factors during design. A soil unit weight of 120 pcf

may be assumed for calculating the actual weight of soil over the wall footing.

The following lateral earth pressures are presented on Table 4 for approved select granular soils with a maximum of 35 percent fines (passing the No. 200 sieve per ASTM D-421/422) and "Very Low" expansion potential (EI of 20 or less per ASTM D4829). The wall designer should clearly indicate on the retaining wall plans the required sandy soil backfill criteria.

TABLE 4

Lateral Earth Pressures – Select Sand Backfill

Condition	Equivalent Fluid Weight (pcf)
	Level Backfill
Active	35
At Rest	55

If the wall can yield enough to mobilize the full shear strength of the soil, it can be designed for "active" pressure. If the wall cannot yield under the applied load, the earth pressure will be higher. This would include 90-degree corners of retaining walls. Such walls should be designed for "at-rest." The equivalent fluid pressure values assume free-draining conditions. Retaining wall structures should be provided with appropriate drainage and appropriately waterproofed, refer to Figure 3. Please note that waterproofing and outlet systems are not the purview of the geotechnical consultant. If conditions other than those assumed above are anticipated, the equivalent fluid pressure values should be provided on an individual-case basis by the geotechnical consultant.

Surcharge loading effects from any adjacent structures should be evaluated by the retaining wall designer. In general, structural loads within a 1:1 (horizontal to vertical) upward projection from the bottom of the proposed retaining wall footing will surcharge the proposed retaining structure. In addition to the recommended earth pressure, retaining walls adjacent to streets should be designed to resist vehicular traffic if applicable. Uniform surcharges may be estimated using the applicable coefficient of lateral earth pressure using a rectangular distribution. A factor of 0.5 and 0.30 may be used for at-rest and active conditions, respectively. The vertical traffic surcharge may be determined by the structural designer. The structural designer should contact the geotechnical engineer for any required geotechnical input in estimating any applicable surcharge loads.

If retaining walls greater than 6 feet in height are proposed, the retaining wall designer should contact the geotechnical engineer for specific seismic lateral earth pressure increments based on the configuration of the planned retaining wall structures.

Soil bearing and lateral resistance (friction coefficient and passive resistance) are provided in Section 5.3.5.

5.5 Fences and Freestanding Walls

As their name indicates, freestanding walls are those walls not designed to retain soil and/or water. To reduce the potential for unsightly cracks, due to differential settlement, expansive soils or possible slope creep, we recommend the inclusion of construction joints at a maximum of 20 feet on-center. This spacing may be altered by the structural engineer based upon the wall reinforcement. If the soil-moisture content below the wall foundation varies significantly, some wall movement should be expected. However, this movement is unlikely to cause more than cosmetic distress. Allowable soil bearing values for wall footing design are provided in Section 5.3.5.

Additionally, for fences near the tops-of-slopes, the fence designer should engineer the construction of the fence to be as flexible as possible while still maintaining integrity. Typical design features should include such items as slip couplings at the junction of top-of-slope fences and fences/walls perpendicular to the slope.

5.6 Subsurface Water Infiltration

Recent regulatory changes mandate that storm water be infiltrated rather than discharged via conventional storm drainage systems, for sites underlain by appropriate soils. It should be noted that intentionally infiltrating storm water conflicts with the geotechnical engineering objective of directing surface water away from structures and improvements. The geotechnical stability and integrity of the project site is reliant upon appropriately handling surface water.

In general, the vast majority of geotechnical distress issues are directly related to improper drainage. Distress in the form of movement of foundations and other improvements could occur as a result of soil saturation and loss of soil support of foundations and pavements, settlement, collapse, internal soil erosion, and/or expansion. Additionally, off-site properties and improvements may be subjected to seeps, springs, slope instability, movements of foundations or other impacts as a result of water infiltration and migration. Infiltrated water may enter underground utility pipe zones and migrate along the pipe backfill, potentially impacting other improvements located far away from the point of infiltration.

Adequate distances should be maintained between infiltration locations and structures. The invert of any storm water infiltration system should be set back a minimum of 15 feet from building structures and outside a 1:1 plane drawn up from the bottom of adjacent foundations.

Based on the results of our field infiltration testing the observed infiltration rate (not including required factors of safety for design) for I-1, I-2, and I-3 are presented below.

TABLE 4

Summary of Field Percolation Testing

Infiltration Test Location	Percolation Rate* (inch/hr.)
I-1	0.02
I-2	0.04
I-3	0.02

*Normalized to One-Dimensional Flow, does not include any Factor of Safety.

TABLE 5

Infiltration Factors of Safety (SD, 2020)

Suitability Assessment Factors of Safety			
Consideration	**Weight**	**Factor Value**	**Product**
Infiltration Testing Method	0.25	2	0.50
Soil Texture Class	0.25	3	0.75
Soil Variability	0.25	1	0.25
Depth to Groundwater/Obstruction	0.25	2	0.50
Suitability Assessment Safety Factor (S_A)			**2**
Design Factors of Safety			
Pretreatment	0.50	To be Selected by Designer	TBD
Resiliency	0.25	To be Selected by Designer	TBD
Compaction	0.25	To be Selected by Designer	TBD
Suitability Assessment Safety Factor (S_A)			**TBD**

The factor of safety used to determine the design infiltration rate is determined by multiplying the calculated suitability assessment factor of safety of 2.00 by the design factor of safety which is to be determined by the infiltration system designer. The design infiltration rate is thereby equal to the observed infiltration rate (inch per hour) divided by the product of 2.0 times the calculated design factor of safety. The combined factor of safety must be a minimum of 2.0 but not greater than 9.0.

These values are for native materials only and are not to be utilized for compacted fill. Infiltration shall not be permitted directly on or into compacted fill soils. The infiltration values provided are based on clean water and this requires the removal of trash, debris, soil particles, etc., and on-going maintenance. Over time, siltation, plugging, and clogging of the system may reduce the infiltration rate and subsequently reduce the effectiveness of the infiltration system. It should be noted that methods to prevent this shall be the sole responsibility of the infiltration designer and are not the purview of the geotechnical consultant. If adequate measures cannot be incorporated into the design and maintenance of the system, then the infiltration rates may

need to be further reduced. These and other factors should be considered in selecting a design infiltration rate.

5.7 Preliminary Pavement Section

The following provisional minimum asphalt concrete (AC) pavement sections are provided in Table 6 based on a preliminary R-value of 20 for Traffic Indices (TI) of 5 through 7. These recommendations should be confirmed with R-value testing of representative near-surface soils at the completion of earthwork. Final pavement sections should be confirmed by the project civil engineer based upon the final design Traffic Index. Determination of the TI is not the purview of the geotechnical consultant. If requested, LGC Geotechnical will provide sections for alternate TI values.

TABLE 6

Paving Section Options

Assumed Traffic Index	5.0	5.0	7.0
AC Thickness	4.0 inches	4.0 inches	4.0
Aggregate Base Thickness	5.0 inches	8.5 inches	12.0 inches

The thicknesses shown are for minimum thicknesses. Increasing the thickness of any or all of the above layers will reduce the likelihood of the pavement experiencing distress during its service life. The above recommendations are based on the assumption that proper maintenance and irrigation of the areas adjacent to the roadway will occur through the design life of the pavement. Failure to maintain a proper maintenance and/or irrigation program may jeopardize the integrity of the pavement.

Earthwork recommendations regarding aggregate base and subgrade are provided in the Section 5.1 and the related sub-sections of this report.

5.8 Corrosivity to Concrete and Metal

Although not corrosion engineers (LGC Geotechnical is not a corrosion consultant), several governing agencies in Southern California require the geotechnical consultant to determine the corrosion potential of soils to buried concrete and metal facilities. We therefore present the results of our testing with regard to corrosion for the use of the client and other consultants, as they determine necessary.

Preliminary corrosion testing indicated a soluble sulfate content of approximately 0.019 percent, chloride content of 149 parts per million (ppm), pH value of 7.99, and a minimum resistivity value of 740 ohm-cm. Soils are considered corrosive to structural elements if the pH is 5.5 or less, or the chloride concentration is 500 ppm or greater, or the sulfate concentration is 2,000 ppm (0.2 percent) or greater (Caltrans, 2021).

Based on laboratory sulfate test results, the near-surface soils have a severity categorization of "Not Applicable" and are designated to a class "S0" per ACI 318, Table 4.2.1 with respect to

sulfates. Concrete in direct contact with the onsite soils can be designed according to ACI 318, Section 4.3 using the "S0" sulfate classification. This must be verified based on as-graded conditions.

At completion of grading, additional testing will be required to confirm the characteristics of the fill materials including expansion potential and corrosivity characteristics. While LGC Geotechnical does not provide recommendations for corrosion, based on our experience typical mitigation measures include increased compressive strength for structural concrete, decreased water-to-cement ratio for structural concrete and/or encapsulation of post-tensioned cables. A corrosion consultant should provide recommendations for mitigation of corrosivity based on laboratory testing results of near-surface soils at completion of grading.

5.9 Nonstructural Concrete Flatwork

Concrete flatwork (such as walkways, bicycle trails, patio slabs, etc.) has a high potential for cracking due to changes in soil volume related to soil-moisture fluctuations. To reduce the potential for excessive cracking and lifting, concrete may be designed in accordance with the minimum guidelines outlined in Table 7. These guidelines will reduce the potential for irregular cracking and promote cracking along construction joints, but will not eliminate all cracking or lifting. Thickening the concrete and/or adding additional reinforcement will further reduce cosmetic distress.

TABLE 7

Nonstructural Concrete Flatwork for Medium Expansion Potential

	Homeowner Sidewalks	Private Drives	Patios/Entryways	City Sidewalk Curb and Gutters
Minimum Thickness (in.)	4 (nominal)	5 (full)	5 (full)	City/Agency Standard
Presaturation	Wet down	Presoak to 12 inches	Presoak to 12 inches	City/Agency Standard
Reinforcement	—	No. 3 at 24 inches on-centers	No. 3 at 24 inches on-centers	City/Agency Standard
Thickened Edge (in.)	—	8 x 8	—	City/Agency Standard
Crack Control Joints	Saw cut or deep open tool joint to a minimum of 1/3 the concrete thickness	Saw cut or deep open tool joint to a minimum of 1/3 the concrete thickness	Saw cut or deep open tool joint to a minimum of 1/3 the concrete thickness	City/Agency Standard
Maximum Joint Spacing	5 feet	10 feet or quarter cut whichever is closer	6 feet	City/Agency Standard
Aggregate Base Thickness (in.)	—	—	2	City/Agency Standard

To reduce the potential for driveways to separate from the garage slab, the builder may elect to install dowels to tie these two elements together. Similarly, future homeowners should consider the use of dowels to connect flatwork to the foundation.

5.10 Control of Surface Water and Drainage Control

Positive drainage of surface water away from structures is very important. Water should not be allowed to pond adjacent to buildings or to flow freely down a graded slope. As a general guideline, positive drainage may be accomplished by providing drainage away from buildings at a gradient of at least 5 percent for earthen surfaces for a distance of at least 10 feet away from the face of wall. If a distance of 10 feet cannot be achieved, an alternative of a gradient of at least 5 percent to an area drain or swale having a gradient of 2 percent is acceptable. Where necessary, drainage paths may be shortened by use of area drains and collector pipes. Eave gutters are recommended and should reduce water infiltration into the subgrade soils if the downspouts are properly connected to appropriate outlets.

Planters with open bottoms adjacent to buildings should be avoided. Planters should not be designed adjacent to buildings unless provisions for drainage, such as catch basins, liners, and/or area drains, are made. Overwatering must be avoided.

5.11 Construction Observation and Testing

The recommendations provided in this report are based on limited subsurface observations and geotechnical analysis. The interpolated subsurface conditions should be checked in the field during construction by a representative of LGC Geotechnical.

Foundation plans, precise grading plans, and final project drawings should be reviewed by this office prior to construction to verify that our geotechnical recommendations have been incorporated.

Construction observation and testing should also be performed by the geotechnical consultant for the following:

- During grading activities;
- During utility trench backfill and compaction;
- During retaining wall backfill and compaction;
- During subgrade processing and roadway pavement section construction;
- After presoaking building pads and other concrete-flatwork subgrades, and prior to placement of aggregate base or concrete;
- After building and wall footing excavation and prior to placing concrete and/or reinforcement; and
- When any unusual soil conditions are encountered during any construction operation subsequent to issuance of this report.

6.0 LIMITATIONS

Our services were performed using the degree of care and skill ordinarily exercised, under similar circumstances, by reputable engineers and geologists practicing in this or similar localities. No other warranty, expressed or implied, is made as to the conclusions and professional advice included in this report. The samples taken and submitted for laboratory testing, the observations made, and the in-situ field testing performed are believed representative of the entire project; however, soil and geologic conditions revealed by excavation may be different than our preliminary findings. If this occurs, the changed conditions must be evaluated by the project soils engineer and geologist and design(s) adjusted as required or alternate design(s) recommended.

This report is issued with the understanding that it is the responsibility of the owner, or of his/her representative, to ensure that the information and recommendations contained herein are brought to the attention of the architect and/or project engineer and incorporated into the plans, and the necessary steps are taken to see that the contractor and/or subcontractor properly implements the recommendations in the field. The contractor and/or subcontractor should notify the owner if they consider any of the recommendations presented herein to be unsafe.

The findings of this report are valid as of the present date. However, changes in the conditions of a property can and do occur with the passage of time, whether they be due to natural processes or the works of man on this or adjacent properties. Therefore, the findings, conclusions, and recommendations presented in this report can be relied upon only if LGC Geotechnical has the opportunity to observe the subsurface conditions during grading and construction of the project, in order to confirm that our preliminary findings are representative for the site.

In addition, changes in applicable or appropriate standards may occur, whether they result from legislation or the broadening of knowledge. Accordingly, the findings of this report may be invalidated wholly or partially by changes outside our control. Therefore, this report is subject to review and modification, and should not be relied upon after a period of 3 years.

Appendix A
References

APPENDIX A

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Appendix B
Boring & Test Pit Logs

Geotechnical Boring Log Borehole HS-1

Date: 6/7/2021	**Drilling Company:** Pacific Drilling
Project Name: Meritage - Las Posas	**Type of Rig:** M10 (Truck Mounted)
Project Number: 21138-01	**Drop:** 30 **Hole Diameter:** 8"
Elevation of Top of Hole: ~575' MSL	**Drive Weight:** 140 pounds
Hole Location: See Geotechnical Map	Page 1 of 1

Logged By MJG
Sampled By MJG
Checked By BPG

Elevation (ft)	Depth (ft)	Graphic Log	Sample Number	Blow Count	Dry Density (pcf)	Moisture (%)	USCS Symbol	DESCRIPTION	Type of Test
	0	B-1				9.0	SC	***Artificial Fill (Afo):*** @1'- Clayey SAND: brown, moist	EI CR
			R-1	8 21 32	120.7	8.4	ML	***Quaternary Older Alluvium (Qoa):*** @2.5'- SILT:brown, slightly moist, hard, well indurated	
570	5		R-2	18 50/3"	97.6	8.7		@5'- Sandy SILT: gray/brown with red/orange mottling, slightly moist, hard, trace pinhole porosity, well indurated	
								Total Depth = 6' Groundwater Not Encountered Backfilled with Cuttings on 6/7/2021	
565	10								
560	15								
555	20								
550	25								
	30								

LGC Geotechnical, Inc.

THIS SUMMARY APPLIES ONLY AT THE LOCATION OF THIS BORING AND AT THE TIME OF DRILLING. SUBSURFACE CONDITIONS MAY DIFFER AT OTHER LOCATIONS AND MAY CHANGE AT THIS LOCATION WITH THE PASSAGE OF TIME. THE DATA PRESENTED IS A SIMPLIFICATION OF THE ACTUAL CONDITIONS ENCOUNTERED. THE DESCRIPTIONS PROVIDED ARE QUALITATIVE FIELD DESCRIPTIONS AND ARE NOT BASED ON QUANTITATIVE ENGINEERING ANALYSIS.

SAMPLE TYPES:

B	BULK SAMPLE
R	RING SAMPLE (CA Modified Sampler)
G	GRAB SAMPLE
SPT	STANDARD PENETRATION TEST SAMPLE
▽	GROUNDWATER TABLE

TEST TYPES:

DS	DIRECT SHEAR
MD	MAXIMUM DENSITY
SA	SIEVE ANALYSIS
S&H	SIEVE AND HYDROMETER
EI	EXPANSION INDEX
CN	CONSOLIDATION
CR	CORROSION
AL	ATTERBERG LIMITS
CO	COLLAPSE/SWELL
RV	R-VALUE
-#200	% PASSING # 200 SIEVE

Last Edited: 7/8/2021

Geotechnical Boring Log Borehole HS-2

Date: 6/7/2021 | **Drilling Company:** Pacific Drilling

Project Name: Meritage - Las Posas | **Type of Rig:** M10 (Truck Mounted)

Project Number: 21138-01 | **Drop:** 30" | **Hole Diameter:** 8"

Elevation of Top of Hole: ~575' MSL | **Drive Weight:** 140 pounds

Hole Location: See Geotechnical Map

Logged By MJG
Sampled By MJG
Checked By BPG

Elevation (ft)	Depth (ft)	Graphic Log	Sample Number	Blow Count	Dry Density (pcf)	Moisture (%)	USCS Symbol	DESCRIPTION	Type of Test
	0							***Quaternary Older Alluvium (Qoa)***	
			R-1	12 13 16	109.2	10.6	ML	@2.5'- Sandy SILT: gray/brown, moist, very stiff	-#200
570	5		R-2	5 10 13	107.4	12.4	SC	@5'- Clayey SAND: olive brown, slightly moist, medium dense	AL CN
			R-3	8 15 15	115.6	12.9	CL	@7.5'- Sandy CLAY: dusky brown, slightly moist, very stiff	
565	10		R-4	7 31 49	123.4	8.2	GC	@10'- Clayey GRAVEL: pinkish brown, moist, very dense, well indurated	
560	15		R-5	50/3"				@15'- No recovery/Hardrock	
								Total Depth = 15.5' (Refusal) Groundwater Not Encountered Backfilled with Cuttings on 6/7/2021	
555	20								
550	25								
	30								

LGC Geotechnical, Inc.

THIS SUMMARY APPLIES ONLY AT THE LOCATION OF THIS BORING AND AT THE TIME OF DRILLING. SUBSURFACE CONDITIONS MAY DIFFER AT OTHER LOCATIONS AND MAY CHANGE AT THIS LOCATION WITH THE PASSAGE OF TIME. THE DATA PRESENTED IS A SIMPLIFICATION OF THE ACTUAL CONDITIONS ENCOUNTERED. THE DESCRIPTIONS PROVIDED ARE QUALITATIVE FIELD DESCRIPTIONS AND ARE NOT BASED ON QUANTITATIVE ENGINEERING ANALYSIS.

SAMPLE TYPES:

B	BULK SAMPLE
R	RING SAMPLE (CA Modified Sampler)
G	GRAB SAMPLE
SPT	STANDARD PENETRATION TEST SAMPLE
▽	GROUNDWATER TABLE

TEST TYPES:

DS	DIRECT SHEAR
MD	MAXIMUM DENSITY
SA	SIEVE ANALYSIS
S&H	SIEVE AND HYDROMETER
EI	EXPANSION INDEX
CN	CONSOLIDATION
CR	CORROSION
AL	ATTERBERG LIMITS
CO	COLLAPSE/SWELL
RV	R-VALUE
-#200	% PASSING # 200 SIEVE

Last Edited: 7/8/2021

Geotechnical Boring Log Borehole HS-3

Date: 6/7/2021 | **Drilling Company:** Pacific Drilling

Project Name: Meritage - Las Posas | **Type of Rig:** M10 (Truck Mounted)

Project Number: 21138-01 | **Drop:** 30" | **Hole Diameter:** 8"

Elevation of Top of Hole: ~574' MSL | **Drive Weight:** 140 pounds

Hole Location: See Geotechnical Map

Logged By MJG
Sampled By MJG
Checked By BPG

Elevation (ft)	Depth (ft)	Graphic Log	Sample Number	Blow Count	Dry Density (pcf)	Moisture (%)	USCS Symbol	DESCRIPTION	Type of Test
570	0	B-1				8.0	SM	***Artificial Fill - Older (Afo):*** @1'- Silty SAND: brown, moist	MD
			R-1	10 20 34	118.4	6.6		@2.5- Silty SAND: dusky gray and brown mottled, slightly moist, dense	
	5		R-2	7 15 20	105.4	6.7	SM/SP	***Quaternary Older Alluvium (Qoa):*** @5'- Silty SAND/SAND: light brown, slightly moist, medium dense, well indurated	
565	10							Total Depth = 6.5' Groundwater Not Encountered Backfilled with Cuttings on 6/7/2021	
560	15								
555	20								
550	25								
	30								

LGC Geotechnical, Inc.

THIS SUMMARY APPLIES ONLY AT THE LOCATION OF THIS BORING AND AT THE TIME OF DRILLING. SUBSURFACE CONDITIONS MAY DIFFER AT OTHER LOCATIONS AND MAY CHANGE AT THIS LOCATION WITH THE PASSAGE OF TIME. THE DATA PRESENTED IS A SIMPLIFICATION OF THE ACTUAL CONDITIONS ENCOUNTERED. THE DESCRIPTIONS PROVIDED ARE QUALITATIVE FIELD DESCRIPTIONS AND ARE NOT BASED ON QUANTITATIVE ENGINEERING ANALYSIS.

SAMPLE TYPES:

B	BULK SAMPLE
R	RING SAMPLE (CA Modified Sampler)
G	GRAB SAMPLE
SPT	STANDARD PENETRATION TEST SAMPLE
⏚	GROUNDWATER TABLE

TEST TYPES:

DS	DIRECT SHEAR
MD	MAXIMUM DENSITY
SA	SIEVE ANALYSIS
S&H	SIEVE AND HYDROMETER
EI	EXPANSION INDEX
CN	CONSOLIDATION
CR	CORROSION
AL	ATTERBERG LIMITS
CO	COLLAPSE/SWELL
RV	R-VALUE
-#200	% PASSING # 200 SIEVE

Last Edited: 7/8/2021

Geotechnical Boring Log Borehole HS-4

Date: 6/7/2021	**Drilling Company:** Pacific Drilling
Project Name: Meritage - Las Posas	**Type of Rig:** M10 (Truck Mounted)
Project Number: 21138-01	**Drop:** 30" **Hole Diameter:** 8"
Elevation of Top of Hole: ~574' MSL	**Drive Weight:** 140 pounds
Hole Location: See Geotechnical Map	Page 1 of 1

Logged By MJG
Sampled By MJG
Checked By BPG

Elevation (ft)	Depth (ft)	Graphic Log	Sample Number	Blow Count	Dry Density (pcf)	Moisture (%)	USCS Symbol	DESCRIPTION	Type of Test
	0							***Artificial Fill - Older (Afo):***	
			R-1	9 13 14	112.1	8.7	CL	@2.5'- Sandy CLAY: gray/brown mottled, slightly moist, very stiff	
570	5		R-2	12 17 14	114.4	8.3	SC	@5'- Clayey SAND: yellow-gray to brown, moist, medium dense, well indurated, homogenous	
565	10							Total Depth = 6.5' Groundwater Not Encountered Backfilled with Cuttings on 6/7/2021	
560	15								
555	20								
550	25								
	30								

LGC Geotechnical, Inc.

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SAMPLE TYPES:

B	BULK SAMPLE
R	RING SAMPLE (CA Modified Sampler)
G	GRAB SAMPLE
SPT	STANDARD PENETRATION TEST SAMPLE
⏚	GROUNDWATER TABLE

TEST TYPES:

DS	DIRECT SHEAR
MD	MAXIMUM DENSITY
SA	SIEVE ANALYSIS
S&H	SIEVE AND HYDROMETER
EI	EXPANSION INDEX
CN	CONSOLIDATION
CR	CORROSION
AL	ATTERBERG LIMITS
CO	COLLAPSE/SWELL
RV	R-VALUE
-#200	% PASSING # 200 SIEVE

Last Edited: 7/8/2021

Geotechnical Boring Log Borehole HS-5

Date: 6/7/2021 | **Drilling Company:** Pacific Drilling

Project Name: Meritage - Las Posas | **Type of Rig:** M10 (Truck Mounted)

Project Number: 21138-01 | **Drop:** 30" | **Hole Diameter:** 8"

Elevation of Top of Hole: ~573' MSL | **Drive Weight:** 140 pounds

Hole Location: See Geotechnical Map

Logged By MJG
Sampled By MJG
Checked By BPG

Elevation (ft)	Depth (ft)	Graphic Log	Sample Number	Blow Count	Dry Density (pcf)	Moisture (%)	USCS Symbol	DESCRIPTION	Type of Test
570	0		R-1	9 11 17	116.0	7.4	SM/ML	***Quaternary Older Alluvium (Qoa):*** @2.5'- Silty SAND/Sandy SILT: brown/red-brown, slightly moist, medium dense/stiff, well indurated, trace pinhole porosity @5'- Silty SAND/Sandy SILT: rusty brown, slightly moist, medium dense/very stiff, some dark brown speckled staining, trace pinhole porosity, well indurated	
565	5		R-2	10 18 18	112.9	7.0			
560	10							Total Depth = 6.5' Groundwater Not Encountered Backfilled with Cuttings on 6/7/2021	
555	15								
550	20								
	25								
	30								

LGC Geotechnical, Inc.

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SAMPLE TYPES:

B	BULK SAMPLE
R	RING SAMPLE (CA Modified Sampler)
G	GRAB SAMPLE
SPT	STANDARD PENETRATION TEST SAMPLE
▽	GROUNDWATER TABLE

TEST TYPES:

DS	DIRECT SHEAR
MD	MAXIMUM DENSITY
SA	SIEVE ANALYSIS
S&H	SIEVE AND HYDROMETER
EI	EXPANSION INDEX
CN	CONSOLIDATION
CR	CORROSION
AL	ATTERBERG LIMITS
CO	COLLAPSE/SWELL
RV	R-VALUE
-#200	% PASSING # 200 SIEVE

Last Edited: 7/8/2021

Geotechnical Boring Log Borehole HS-6

Date: 6/7/2021 | **Drilling Company:** Pacific Drilling

Project Name: Meritage - Las Posas | **Type of Rig:** M10 (Truck Mounted)

Project Number: 21138-01 | **Drop:** 30" | **Hole Diameter:** 8"

Elevation of Top of Hole: ~572' MSL | **Drive Weight:** 140 pounds

Hole Location: See Geotechnical Map

Logged By MJG
Sampled By MJG
Checked By BPG

Elevation (ft)	Depth (ft)	Graphic Log	Sample Number	Blow Count	Dry Density (pcf)	Moisture (%)	USCS Symbol	DESCRIPTION	Type of Test
570	0							***Quaternary Older Alluvium (Qoa):***	
			R-1	10 22 22			ML/CL	@2.5'- SILT/CLAY: red-brown, dry, hard, well indurated	
	5		R-2	5 10 22			CL	@5'- CLAY/Sandy CLAY: red-brown, slightly moist, very stiff, well indurated	
565								Total Depth = 6.5' Groundwater Not Encountered Backfilled with Cuttings on 6/7/2021	
	10								
560									
	15								
555									
	20								
550									
	25								
	30								

LGC Geotechnical, Inc.

THIS SUMMARY APPLIES ONLY AT THE LOCATION OF THIS BORING AND AT THE TIME OF DRILLING. SUBSURFACE CONDITIONS MAY DIFFER AT OTHER LOCATIONS AND MAY CHANGE AT THIS LOCATION WITH THE PASSAGE OF TIME. THE DATA PRESENTED IS A SIMPLIFICATION OF THE ACTUAL CONDITIONS ENCOUNTERED. THE DESCRIPTIONS PROVIDED ARE QUALITATIVE FIELD DESCRIPTIONS AND ARE NOT BASED ON QUANTITATIVE ENGINEERING ANALYSIS.

SAMPLE TYPES:

B	BULK SAMPLE
R	RING SAMPLE (CA Modified Sampler)
G	GRAB SAMPLE
SPT	STANDARD PENETRATION TEST SAMPLE
▽	GROUNDWATER TABLE

TEST TYPES:

DS	DIRECT SHEAR
MD	MAXIMUM DENSITY
SA	SIEVE ANALYSIS
S&H	SIEVE AND HYDROMETER
EI	EXPANSION INDEX
CN	CONSOLIDATION
CR	CORROSION
AL	ATTERBERG LIMITS
CO	COLLAPSE/SWELL
RV	R-VALUE
-#200	% PASSING # 200 SIEVE

Last Edited: 7/8/2021

Geotechnical Boring Log Borehole I-2

Date: 6/7/2021 | **Drilling Company:** Pacific Drilling

Project Name: Meritage - Las Posas | **Type of Rig:** M10 (Truck Mounted)

Project Number: 21138-01 | **Drop:** 30" | **Hole Diameter:** 8"

Elevation of Top of Hole: ~571' MSL | **Drive Weight:** 140 pounds

Hole Location: See Geotechnical Map

Logged By MJG
Sampled By MJG
Checked By BPG

Elevation (ft)	Depth (ft)	Graphic Log	Sample Number	Blow Count	Dry Density (pcf)	Moisture (%)	USCS Symbol	DESCRIPTION	Type of Test
570	0	B-1						***Artificial Fill - older (Afo):***	EI
			SPT-1	4 4 3			SC	@2.5'- SAND with Clay: gray/tan, slightly moist, loose	
565	5		SPT-2	2 4 4				@5'- SAND with Clay: olive gray to tan, slightly moist, medium dense	
			SPT-3	7 6 7			CL	***Quaternary Older Alluvium (Qoa):*** @7.5'- CLAY with Gravel: brown/red, slightly moist, very stiff, well indurated	
560	10							Total Depth = 10' Groundwater Not Encountered Pipe Pulled and Backfilled with Cuttings on 6/8/21	
555	15								
550	20								
	25								
	30								

LGC Geotechnical, Inc.

THIS SUMMARY APPLIES ONLY AT THE LOCATION OF THIS BORING AND AT THE TIME OF DRILLING. SUBSURFACE CONDITIONS MAY DIFFER AT OTHER LOCATIONS AND MAY CHANGE AT THIS LOCATION WITH THE PASSAGE OF TIME. THE DATA PRESENTED IS A SIMPLIFICATION OF THE ACTUAL CONDITIONS ENCOUNTERED. THE DESCRIPTIONS PROVIDED ARE QUALITATIVE FIELD DESCRIPTIONS AND ARE NOT BASED ON QUANTITATIVE ENGINEERING ANALYSIS.

SAMPLE TYPES:

B	BULK SAMPLE
R	RING SAMPLE (CA Modified Sampler)
G	GRAB SAMPLE
SPT	STANDARD PENETRATION TEST SAMPLE
▽	GROUNDWATER TABLE

TEST TYPES:

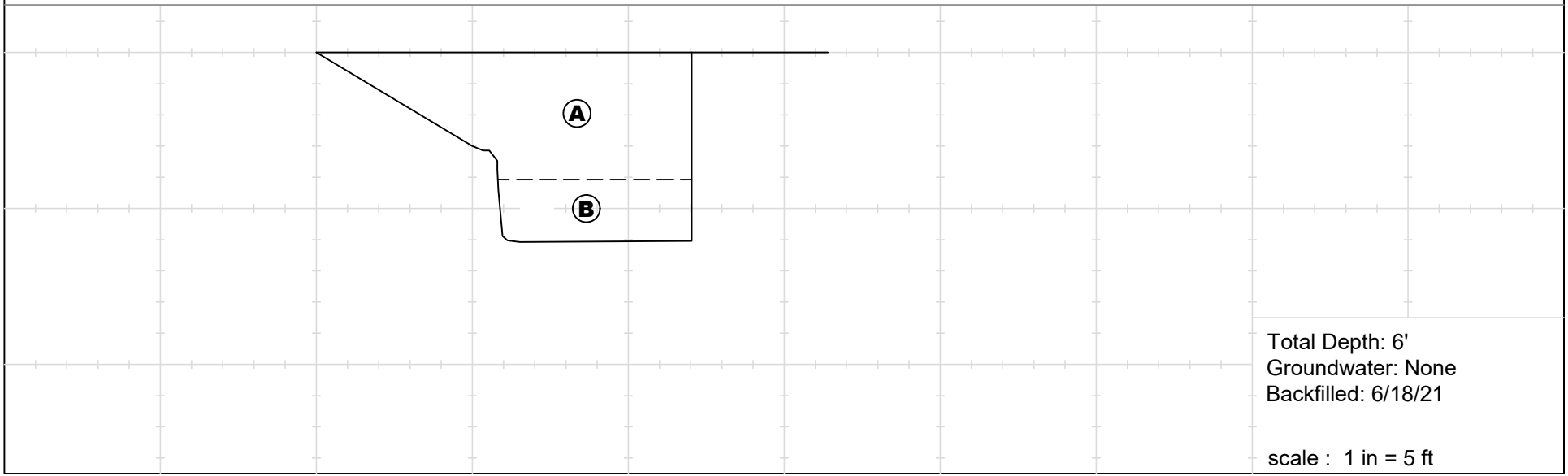
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MD	MAXIMUM DENSITY
SA	SIEVE ANALYSIS
S&H	SIEVE AND HYDROMETER
EI	EXPANSION INDEX
CN	CONSOLIDATION
CR	CORROSION
AL	ATTERBERG LIMITS
CO	COLLAPSE/SWELL
RV	R-VALUE
-#200	% PASSING # 200 SIEVE

Last Edited: 7/8/2021

Project Name: Las Posas	Logged By: MJG	Trench No: TP-1	LGC Geotechnical, Inc.
Project Number : 21138-01	Date : 6/18/2021	Engineering Properties:	
Equipment: Backhoe	Location: See Geotechnical Map		

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	DRY DENSITY (PCF)
		Artificial fill - older					
	A	@ 0 to 4' Silty SAND: light and dark brown, red/brown, and olive gray mottled, slightly moist, medium dense to dense, some gravel and cobbles (3" to 12"' across), some trash at surface	Afo	SM	G-1 @ 1-4'		
	B	@ 4' to 6' Sandy CLAY: dark brown to olive gray, slightly moist to moist, medium dense, 3" to 6" gravels and cobbles		SC	G-1 @ 4-6'		

GRAPHICAL REPRESENTATION BELOW: **Elevation : ~576' AMSL** **Surface Slope: 0 deg.** **Trend: N25E**



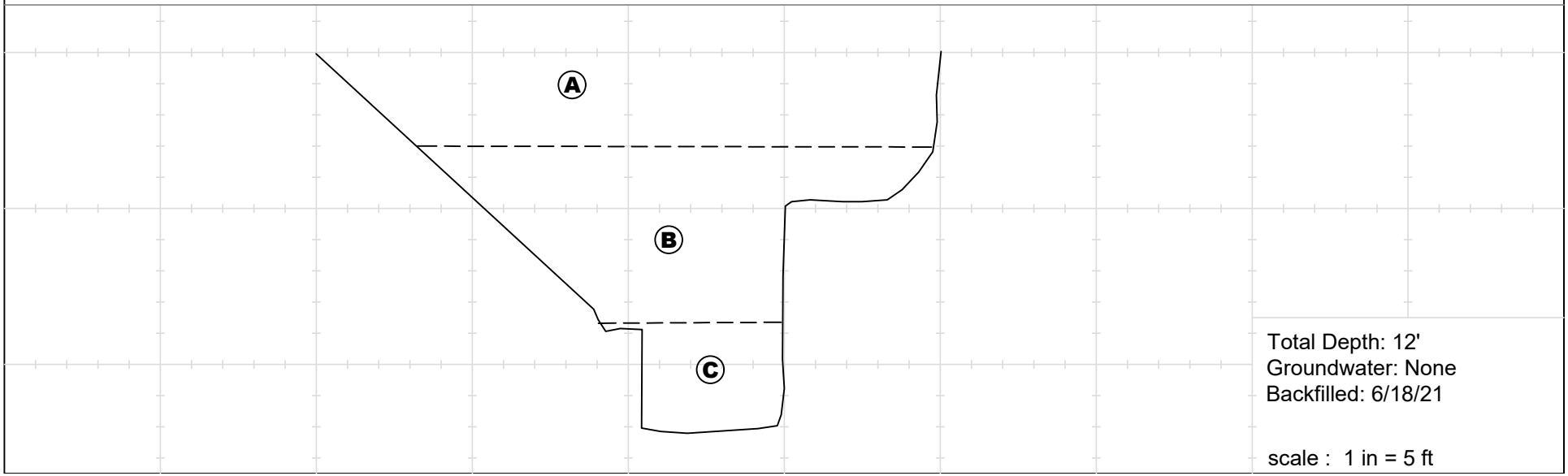
Last Edited: 6/15/2021

Project Name: Las Posas	**Logged By: MJG**	**Trench No: TP-2**
Project: Number: 21138-01	**Date : 6/18/2021**	**Engineering Properties:**
Equipment: Backhoe	**Location: See Geotechnical Map**	

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Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	DRY DENSITY (PCF)
		Artifical Fill - older	Afo				
	A	@ 0 to 3' Silty SAND: light brown to red brown mottled, dry, medium dense to dense, some gravel & cobbles, and some asphalt rubble, dead vegetation/grass at surface		SM	G-1 @ 0-3'		
	B	@ 3' to 8' Sandy CLAY: brown & red brown mottled, medium dense, moist, few gravels		SC	G-2 @ 5-8'		
		Quaternary Older Alluvium	Qoa				
	C	@ 8 to 12' Clayey SAND to Sandy CLAY: light brown/yellow w/gray mottling, moist, softer than above, poorly sorted			G-3 @ 9-12'		

GRAPHICAL REPRESENTATION BELOW: **Elevation : ~ 574 AMSL** **Surface Slope: 0 deg.** **Trend: N75E**

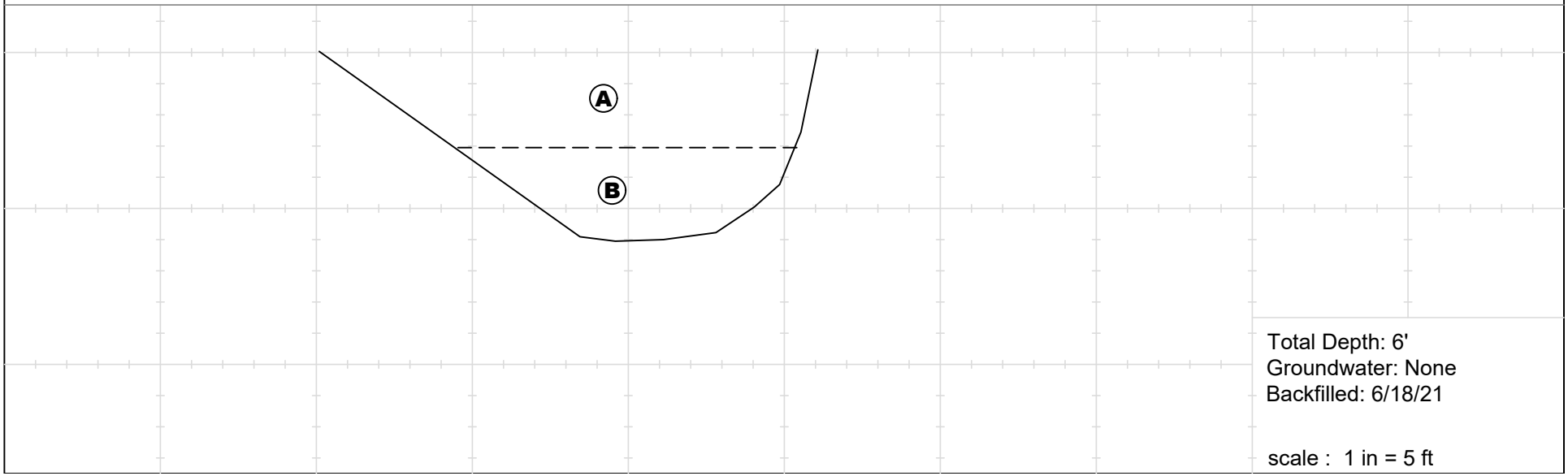


Last Edited: 6/15/2021

Project Name: Las Posas	**Logged By: MJG**	**Trench No: TP-3**	
Project Number : 21138-01	**Date : 6/18/2021**	**Engineering Properties:**	
Equipment: Backhoe	**Location: See Geotechnical Map**		

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	DRY DENSITY (PCF)
	A	***Artificial Fill - older*** **@ 0 to 2.5' Silty SAND: mottled shades of brown, dry, dense, some gravel, indurated**	**Afo**	**SM**			
	B	***Quaternary Older Alluvium*** **@ 2.5' to 6' SAND with Clay: light brown, moist, soft/medium dense to loose,some angular cobbles 3" to 6" across**	**Qoa**	**SC**	**B-1 @ 2.5-6'**		

GRAPHICAL REPRESENTATION BELOW: **Elevation : ~571' AMSL** **Surface Slope: Approx. 2 deg.** **Trend: N75E**



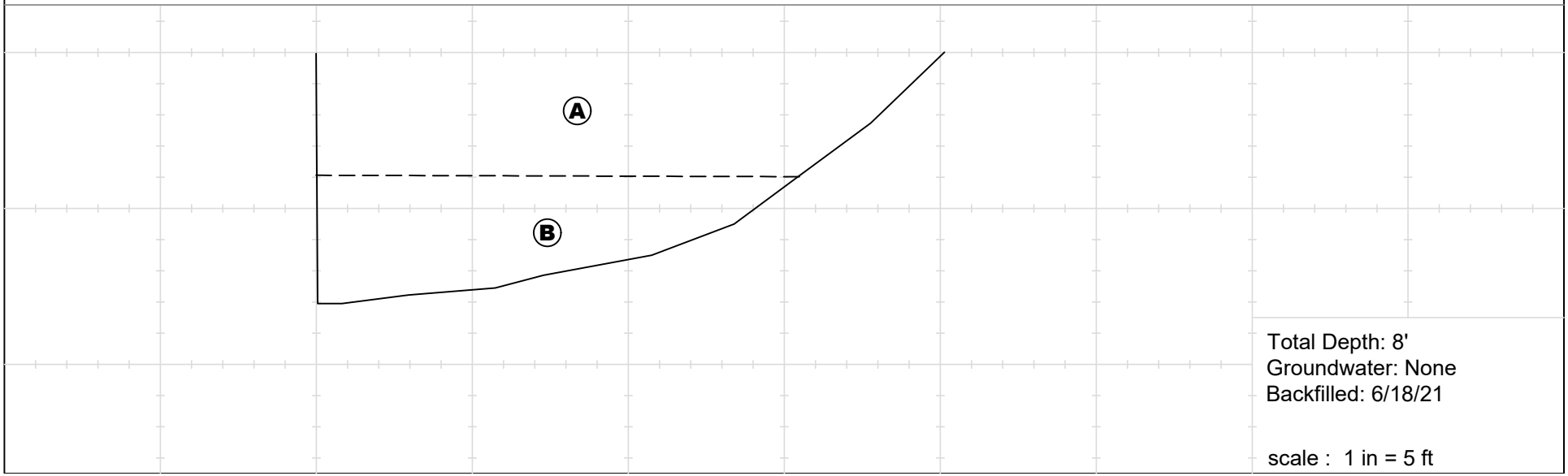
Last Edited: 6/15/2021

Project Name: Las Posas	**Logged By: MJG**	**Trench No: TP-4**
Project Number : 21138-01	**Date : 6/18/2021**	**Engineering Properties:**
Equipment: Backhoe	**Location: See Geotechnical Map**	

LGC Geotechnical, Inc.

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	DRY DENSITY (PCF)
	A	***Artificial Fill - older*** **@ 0 to 4' Sandy CLAY: red brown, slightly moist, medium dense to dense, some asphalt and concrete rubble**	**Afo**	**SC**			
	B	***Quaternary Older Alluvium*** **@ 4' to 8' SAND: light brown to light gray, moist, medium dense, trace clay/silt laminations, some cobbles to 6" across**	**Qoa**				

GRAPHICAL REPRESENTATION BELOW: **Elevation : ~ 570' AMSL** **Surface Slope: 0 deg.** **Trend: N25E**

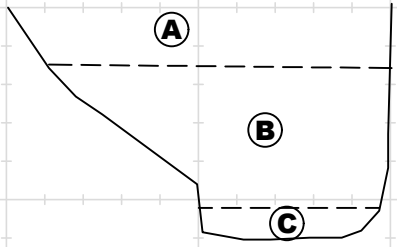


Last Edited: 6/15/2021

Project Name: Las Posas	Logged By: MJG	Trench No: TP-5	LGC Geotechnical, Inc.
Project Number : 21138-01	Date : 6/18/2021	Engineering Properties:	
Equipment: Backhoe	Location: See Geotechnical Map		

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	DRY DENSITY (PCF)
		Artificial Fill - older	Afo				
	A	@ 0' to 1.5' Silty SAND: light brown, dry, medium dense to dense, rootlets, some gravel		SM	G-1 @ 0-1'		
		Quaternary Older Alluvium	Qoa				
	B	@ 1.5' to 5.5' Silty SAND: gray to dark brown mottled, dry to slightly moist, dense			G-2 @ 2-4'		
	C	@ 6' Clayey SAND: red-brown, light brown and gray, slightly moist, very dense, well indurated		SC	G-1 @ 6'		

GRAPHICAL REPRESENTATION BELOW: **Elevation : ~575' AMSL** **Surface Slope: 0 deg.** **Trend: N75E**



Total Depth: 6'
Groundwater: None
Backfilled: 6/18/21

scale : 1 in = 5 ft

Last Edited: 6/15/2021

Appendix C
Laboratory Test Results

APPENDIX C

Laboratory Test Results

The laboratory testing program was formulated towards providing data relating to the relevant engineering properties of the soils with respect to residential construction. Samples considered representative of site conditions were tested in general accordance with American Society for Testing and Materials (ASTM) procedure and/or California Test Methods (CTM), where applicable. The following summary is a brief outline of the test type and a table summarizing the test results.

Moisture and Density Determination Tests: Moisture content (ASTM D2216) and dry density determinations (ASTM D2937) were performed on driven samples obtained from the test borings. The results of these tests are presented in the boring logs. Where applicable, only moisture content was determined from undisturbed or disturbed samples.

Grain Size Distribution/Fines Content: Representative samples were dried, weighed, and soaked in water until individual soil particles were separated (per ASTM D421) and then washed on a No. 200 sieve (ASTM D1140). Where applicable, the portion retained on the No. 200 sieve was dried and then sieved on a U.S. Standard brass sieve set in accordance with ASTM D6913 (sieve) or ASTM D422 (sieve and hydrometer).

Sample Location	**Description**	**% Passing # 200 Sieve**
HS-2, R-1	Sandy SILT	45

Atterberg Limits: The liquid and plastic limits ("Atterberg Limits") were determined in accordance with ASTM Test Method D4318 for engineering classification of fine-grained material and presented in the table below:

Sample Location	Liquid Limit (%)	Plastic Limit (%)	Plasticity Index (%)	USCS Soil Classification
HS-2, R-2	35	12	23	CL

Laboratory Compaction: The maximum dry density and optimum moisture content of typical materials were determined in accordance with ASTM D1557. The results of these tests are presented in the table below.

Sample Location	**Sample Description**	**Maximum Dry Density (pcf)**	**Optimum Moisture Content (%)**

HS-3, B-1 @ 1-5’	Brown Silty Sand	125.5	10.0

Expansion Index: The expansion potential of selected samples were evaluated by the Expansion Index Test, Standard ASTM D4829. Specimens are molded under a given compactive energy to approximately the optimum moisture content and approximately 50 percent saturation or approximately 90 percent relative compaction. The prepared 1-inch-thick by 4-inch-diameter specimens are loaded to an equivalent 144 psf surcharge and are inundated with tap water until volumetric equilibrium is reached. The results of these tests are presented in the table below.

Sample Location	Expansion Index	Expansion Potential
HS-1, B-1 @ 1-5’	32	Low
I-1 @ 1-5’	55	Medium

Consolidation: A consolidation test was performed per ASTM D2435. A Sample (2.4 inches in diameter and 1 inch in height) was placed in a consolidometer and increasing loads were applied. The sample was allowed to consolidate under “double drainage” and total deformation for each loading step was recorded. The percent consolidation for each load step was recorded as the ratio of the amount of vertical compression to the original sample height. The consolidation pressure curves are provided in this Appendix.

Soluble Sulfates: The soluble sulfate contents of selected samples were determined by standard geochemical methods (CTM 417). The test results are presented in the table below.

Sample Location	Sulfate Content (ppm)	Sulfate Exposure Class*
HS-1, B-1 @ 1-5’	193	S0

Chloride Content: Chloride content was tested per CTM 422. The results are presented below.

Sample Location	Chloride Content, ppm
HS-1, B-1 @ 1-5’	149

Minimum Resistivity and pH Tests: Minimum resistivity and pH tests were performed in general accordance with CTM 643 and standard geochemical methods. The results are presented in the table below.

Sample Location	pH	Minimum Resistivity (ohms-cm)
HS-1, B-1 @ 1-5’	8.2	740

Appendix D
General Earthwork and Grading Specifications for Rough Grading

General Earthwork and Grading Specifications for Rough Grading

1.0 General

1.1 Intent

These General Earthwork and Grading Specifications are for the grading and earthwork shown on the approved grading plan(s) and/or indicated in the geotechnical report(s). These Specifications are a part of the recommendations contained in the geotechnical report(s). In case of conflict, the specific recommendations in the geotechnical report shall supersede these more general Specifications. Observations of the earthwork by the project Geotechnical Consultant during the course of grading may result in new or revised recommendations that could supersede these specifications or the recommendations in the geotechnical report(s).

1.2 The Geotechnical Consultant of Record

Prior to commencement of work, the owner shall employ a qualified Geotechnical Consultant of Record (Geotechnical Consultant). The Geotechnical Consultant shall be responsible for reviewing the approved geotechnical report(s) and accepting the adequacy of the preliminary geotechnical findings, conclusions, and recommendations prior to the commencement of the grading.

Prior to commencement of grading, the Geotechnical Consultant shall review the "work plan" prepared by the Earthwork Contractor (Contractor) and schedule sufficient personnel to perform the appropriate level of observation, mapping, and compaction testing.

During the grading and earthwork operations, the Geotechnical Consultant shall observe, map, and document the subsurface exposures to verify the geotechnical design assumptions. If the observed conditions are found to be significantly different than the interpreted assumptions during the design phase, the Geotechnical Consultant shall inform the owner, recommend appropriate changes in design to accommodate the observed conditions, and notify the review agency where required.

The Geotechnical Consultant shall observe the moisture-conditioning and processing of the subgrade and fill materials and perform relative compaction testing of fill to confirm that the attained level of compaction is being accomplished as specified. The Geotechnical Consultant shall provide the test results to the owner and the Contractor on a routine and frequent basis.

1.3 The Earthwork Contractor

The Earthwork Contractor (Contractor) shall be qualified, experienced, and knowledgeable in earthwork logistics, preparation and processing of ground to receive fill, moisture-conditioning and processing of fill, and compacting fill. The Contractor shall review and accept the plans, geotechnical report(s), and these Specifications prior to commencement of grading. The Contractor shall be solely responsible for performing the grading in accordance with the project plans and specifications. The Contractor shall prepare and submit to the owner and the Geotechnical Consultant a work plan that indicates the sequence of earthwork grading, the number of “equipment” of work and the estimated quantities of daily earthwork

contemplated for the site prior to commencement of grading. The Contractor shall inform the owner and the
Geotechnical Consultant of changes in work schedules and updates to the work plan at least 24 hours in advance of such changes so that appropriate personnel will be available for observation and testing. The Contractor shall not assume that the Geotechnical Consultant is aware of all grading operations.

The Contractor shall have the sole responsibility to provide adequate equipment and methods to accomplish the earthwork in accordance with the applicable grading codes and agency ordinances, these Specifications, and the recommendations in the approved geotechnical report(s) and grading plan(s). If, in the opinion of the Geotechnical Consultant, unsatisfactory conditions, such as unsuitable soil, improper moisture condition, inadequate compaction, insufficient buttress key size, adverse weather, etc., are resulting in a quality of work less than required in these specifications, the Geotechnical Consultant shall reject the work and may recommend to the owner that construction be stopped until the conditions are rectified. It is the contractor's sole responsibility to provide proper fill compaction.

2.0 Preparation of Areas to be Filled

2.1 Clearing and Grubbing

Vegetation, such as brush, grass, roots, and other deleterious material shall be sufficiently removed and properly disposed of in a method acceptable to the owner, governing agencies, and the Geotechnical Consultant.

The Geotechnical Consultant shall evaluate the extent of these removals depending on specific site conditions. Earth fill material shall not contain more than 1 percent of organic materials (by volume). Nesting of the organic materials shall not be allowed.

If potentially hazardous materials are encountered, the Contractor shall stop work in the affected area, and a hazardous material specialist shall be informed immediately for proper evaluation and handling of these materials prior to continuing to work in that area.

As presently defined by the State of California, most refined petroleum products (gasoline, diesel fuel, motor oil, grease, coolant, etc.) have chemical constituents that are considered to be hazardous waste. As such, the indiscriminate dumping or spillage of these fluids onto the ground may constitute a misdemeanor, punishable by fines and/or imprisonment, and shall not be allowed. The contractor is responsible for all hazardous waste relating to his work. The Geotechnical Consultant does not have expertise in this area. If hazardous waste is a concern, then the Client should acquire the services of a qualified environmental assessor.

2.2 Processing

Existing ground that has been declared satisfactory for support of fill by the Geotechnical Consultant shall be scarified to a minimum depth of 6 inches. Existing ground that is not satisfactory shall be over-excavated as specified in the following section. Scarification shall continue until soils are broken down and free of oversize material and the working surface is reasonably uniform, flat, and free of uneven features that would inhibit uniform compaction.

2.3 Over-excavation

In addition to removals and over-excavations recommended in the approved geotechnical report(s) and the grading plan, soft, loose, dry, saturated, spongy, organic-rich, highly fractured or otherwise unsuitable ground shall be over-excavated to competent ground as evaluated by the Geotechnical Consultant during grading.

2.4 Benching

Where fills are to be placed on ground with slopes steeper than 5:1 (horizontal to vertical units), the ground shall be stepped or benched. Please see the Standard Details for a graphic illustration. The lowest bench or key shall be a minimum of 15 feet wide and at least 2 feet deep, into competent material as evaluated by the Geotechnical Consultant. Other benches shall be excavated a minimum height of 4 feet into competent material or as otherwise recommended by the Geotechnical Consultant. Fill placed on ground sloping flatter than 5:1 shall also be benched or otherwise over-excavated to provide a flat subgrade for the fill.

2.5 Evaluation/Acceptance of Fill Areas

All areas to receive fill, including removal and processed areas, key bottoms, and benches, shall be observed, mapped, elevations recorded, and/or tested prior to being accepted by the Geotechnical Consultant as suitable to receive fill. The Contractor shall obtain a written acceptance from the Geotechnical Consultant prior to fill placement. A licensed surveyor shall provide the survey control for determining elevations of processed areas, keys, and benches.

3.0 Fill Material

3.1 General

Material to be used as fill shall be essentially free of organic matter and other deleterious substances evaluated and accepted by the Geotechnical Consultant prior to placement. Soils of poor quality, such as those with unacceptable gradation, high expansion potential, or low strength shall be placed in areas acceptable to the Geotechnical Consultant or mixed with other soils to achieve satisfactory fill material.

3.2 Oversize

Oversize material defined as rock, or other irreducible material with a maximum dimension greater than 8 inches, shall not be buried or placed in fill unless location, materials, and placement methods are specifically accepted by the Geotechnical Consultant. Placement operations shall be such that nesting of oversized material does not occur and such that oversize material is completely surrounded by compacted or densified fill. Oversize material shall not be placed within 10 vertical feet of finish grade or within 2 feet of future utilities or underground construction.

3.3 Import

If importing of fill material is required for grading, proposed import material shall meet the requirements of the geotechnical consultant. The potential import source shall be given to the Geotechnical Consultant at least 48 hours (2 working days) before importing begins so that its suitability can be determined and appropriate tests performed.

4.0 Fill Placement and Compaction

4.1 Fill Layers

Approved fill material shall be placed in areas prepared to receive fill (per Section 3.0) in near-horizontal layers not exceeding 8 inches in loose thickness. The Geotechnical Consultant may accept thicker layers if testing indicates the grading procedures can adequately compact the thicker layers. Each layer shall be spread evenly and mixed thoroughly to attain relative uniformity of material and moisture throughout.

4.2 Fill Moisture Conditioning

Fill soils shall be watered, dried back, blended, and/or mixed, as necessary to attain a relatively uniform moisture content at or slightly over optimum. Maximum density and optimum soil moisture content tests shall be performed in accordance with the American Society of Testing and Materials (ASTM Test Method D1557).

4.3 Compaction of Fill

After each layer has been moisture-conditioned, mixed, and evenly spread, it shall be uniformly compacted to not less than 90 percent of maximum dry density (ASTM Test Method D1557). Compaction equipment shall be adequately sized and be either specifically designed for soil compaction or of proven reliability to efficiently achieve the specified level of compaction with uniformity.

4.4 Compaction of Fill Slopes

In addition to normal compaction procedures specified above, compaction of slopes shall be accomplished by backrolling of slopes with sheepsfoot rollers at increments of 3 to 4 feet in fill elevation, or by other methods producing satisfactory results acceptable to the Geotechnical Consultant. Upon completion of grading, relative compaction of the fill, out to the slope face, shall be at least 90 percent of maximum density per ASTM Test Method D1557.

4.5 Compaction Testing

Field tests for moisture content and relative compaction of the fill soils shall be performed by the Geotechnical Consultant. Location and frequency of tests shall be at the Consultant's discretion based on field conditions encountered. Compaction test locations will not necessarily be selected on a random basis. Test locations shall be selected to verify adequacy of compaction levels in areas that are judged to be prone to inadequate compaction (such as close to slope faces and at the fill/bedrock benches).

4.6 Frequency of Compaction Testing

Tests shall be taken at intervals not exceeding 2 feet in vertical rise and/or 1,000 cubic yards of compacted fill soils embankment. In addition, as a guideline, at least one test shall be taken on slope faces for each 5,000 square feet of slope face and/or each 10 feet of vertical height of slope. The Contractor shall assure that fill construction is such that the testing schedule can be accomplished by the Geotechnical Consultant. The Contractor shall stop or slow down the earthwork construction if these minimum standards are not met.

4.7 Compaction Test Locations

The Geotechnical Consultant shall document the approximate elevation and horizontal coordinates of each test location. The Contractor shall coordinate with the project surveyor to assure that sufficient grade stakes are established so that the Geotechnical Consultant can determine the test locations with sufficient accuracy. At a minimum, two grade stakes within a horizontal distance of 100 feet and vertically less than
5 feet apart from potential test locations shall be provided.

5.0 Subdrain Installation

Subdrain systems shall be installed in accordance with the approved geotechnical report(s), the grading plan, and the Standard Details. The Geotechnical Consultant may recommend additional subdrains and/or changes in subdrain extent, location, grade, or material depending on conditions encountered during grading. All subdrains shall be surveyed by a land surveyor/civil engineer for line and grade after installation and prior to burial. Sufficient time should be allowed by the Contractor for these surveys.

6.0 Excavation

Excavations, as well as over-excavation for remedial purposes, shall be evaluated by the Geotechnical Consultant during grading. Remedial removal depths shown on geotechnical plans are estimates only. The actual extent of removal shall be determined by the Geotechnical Consultant based on the field evaluation of exposed conditions during grading. Where fill-over-cut slopes are to be graded, the cut portion of the slope shall be made, evaluated, and accepted by the Geotechnical Consultant prior to placement of materials for construction of the fill portion of the slope, unless otherwise recommended by the Geotechnical Consultant.

7.0 Trench Backfills

7.1 The Contractor shall follow all OHSA and Cal/OSHA requirements for safety of trench excavations.

7.2 All bedding and backfill of utility trenches shall be done in accordance with the applicable provisions of Standard Specifications of Public Works Construction. Bedding material shall have a Sand Equivalent greater than 30 (SE>30). The bedding shall be placed to 1 foot over

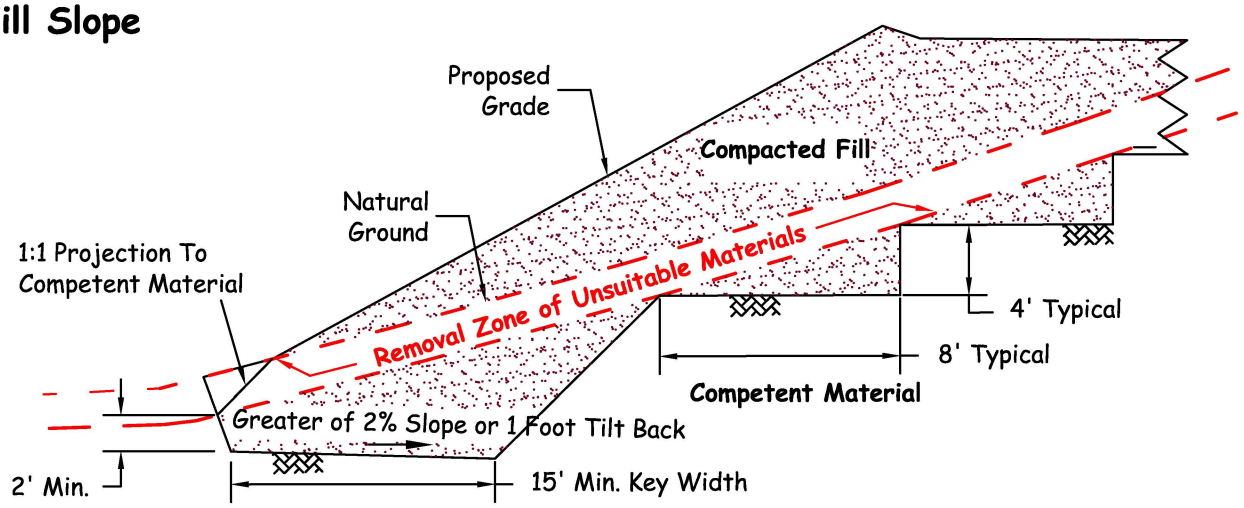
the top of the conduit and densified by jetting. Backfill shall be placed and densified to a minimum of 90 percent of maximum from 1 foot above the top of the conduit to the surface.

7.3 The jetting of the bedding around the conduits shall be observed by the Geotechnical Consultant.

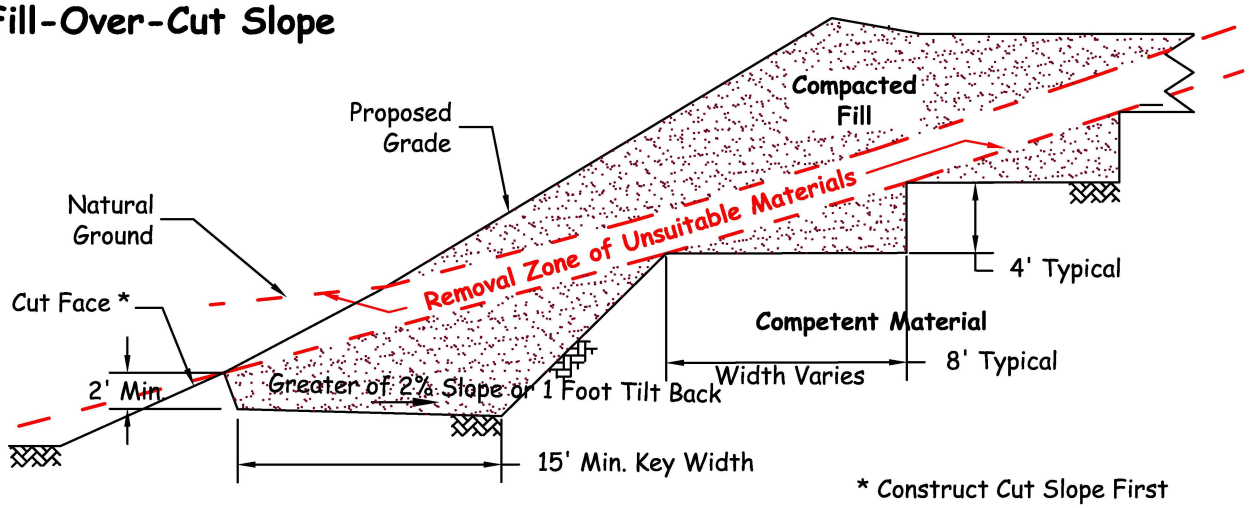
7.4 The Geotechnical Consultant shall test the trench backfill for relative compaction. At least one test should be made for every 300 feet of trench and 2 feet of fill.

7.5 Lift thickness of trench backfill shall not exceed those allowed in the Standard Specifications of Public Works Construction unless the Contractor can demonstrate to the Geotechnical Consultant that the fill lift can be compacted to the minimum relative compaction by his alternative equipment and method.

Fill Slope

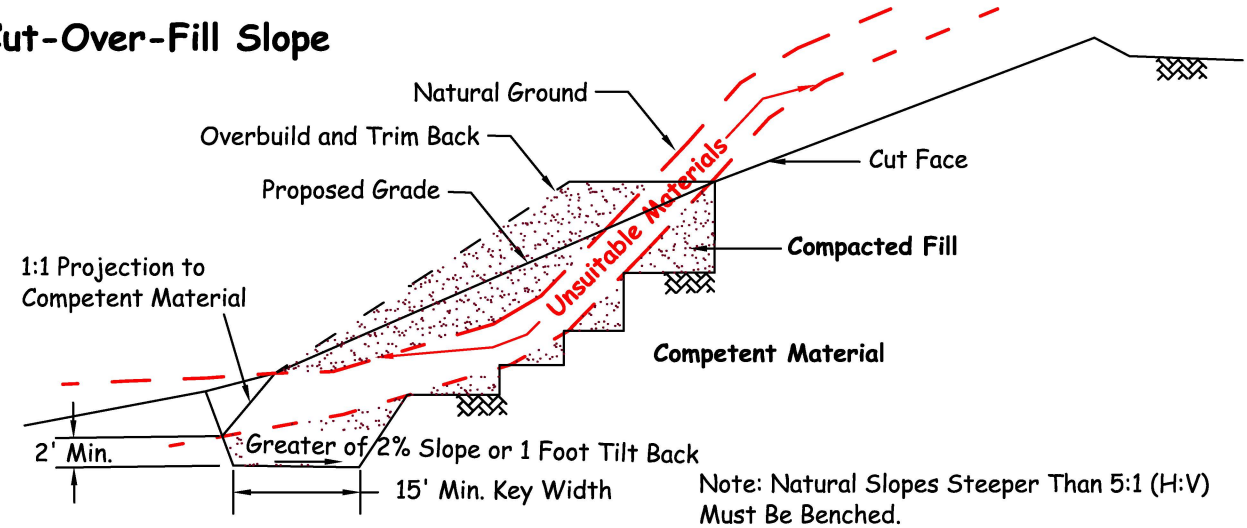


Fill-Over-Cut Slope



* Construct Cut Slope First

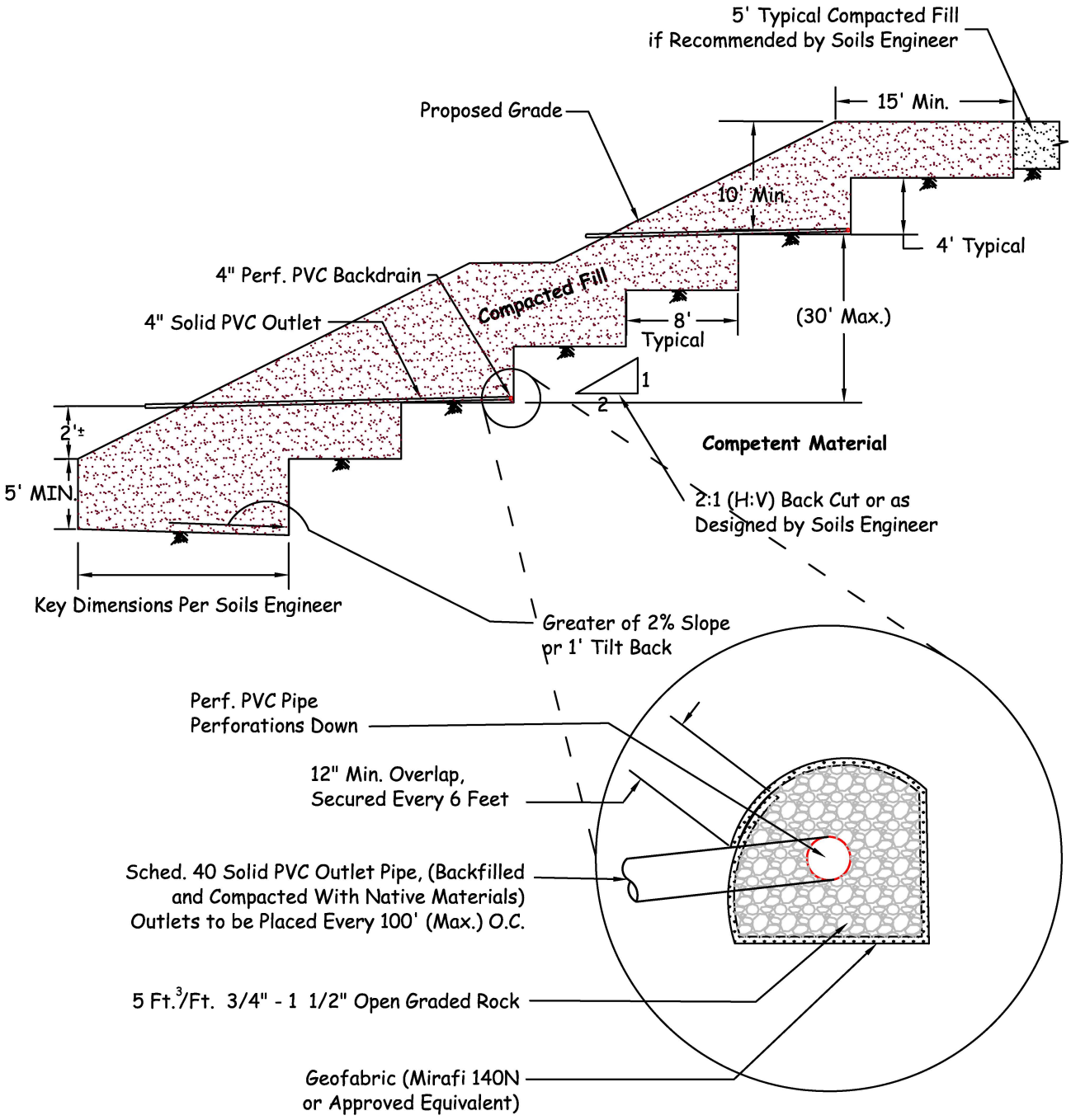
Cut-Over-Fill Slope



Note: Natural Slopes Steeper Than 5:1 (H:V) Must Be Benched.

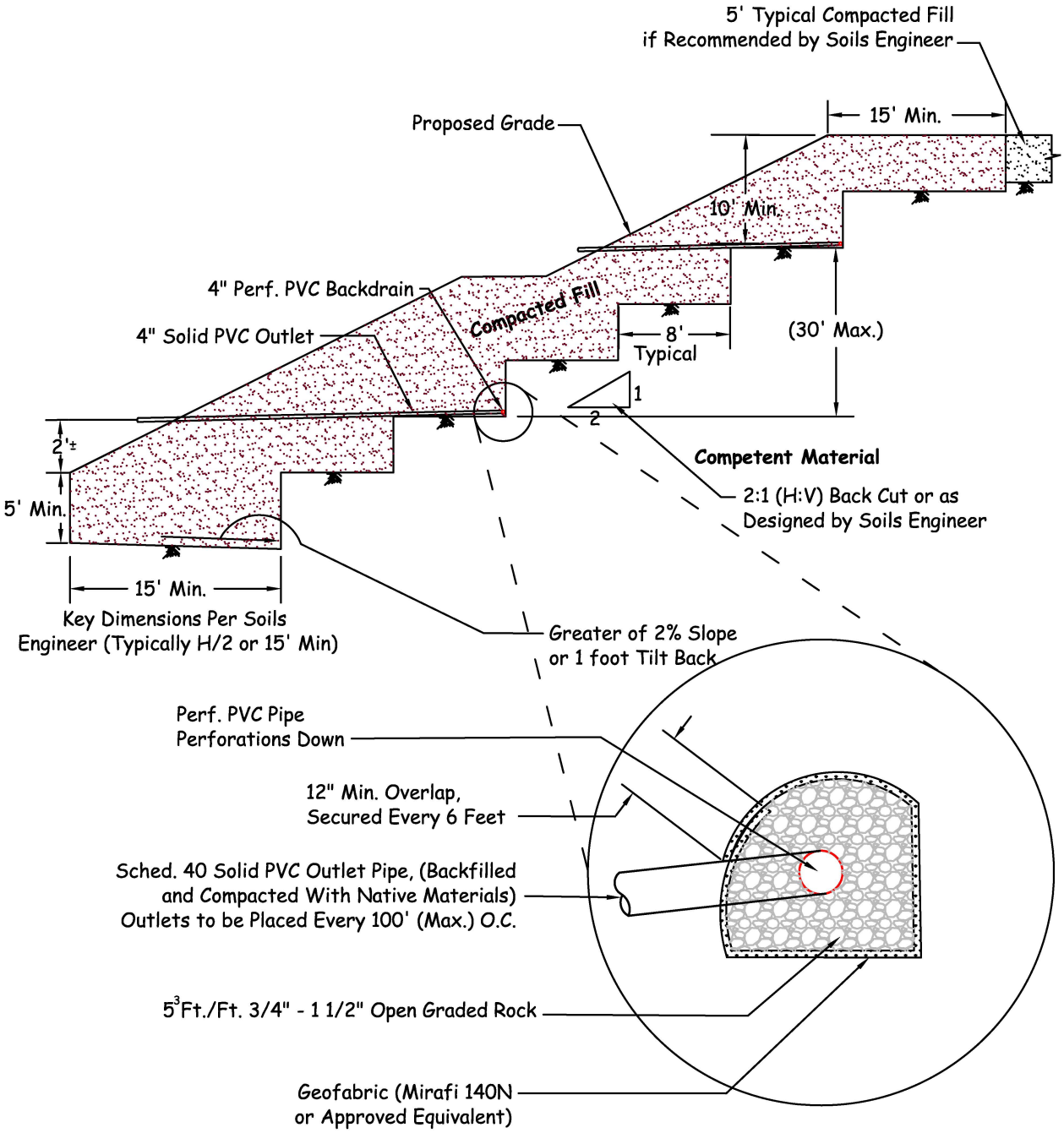
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KEYING AND BENCHING



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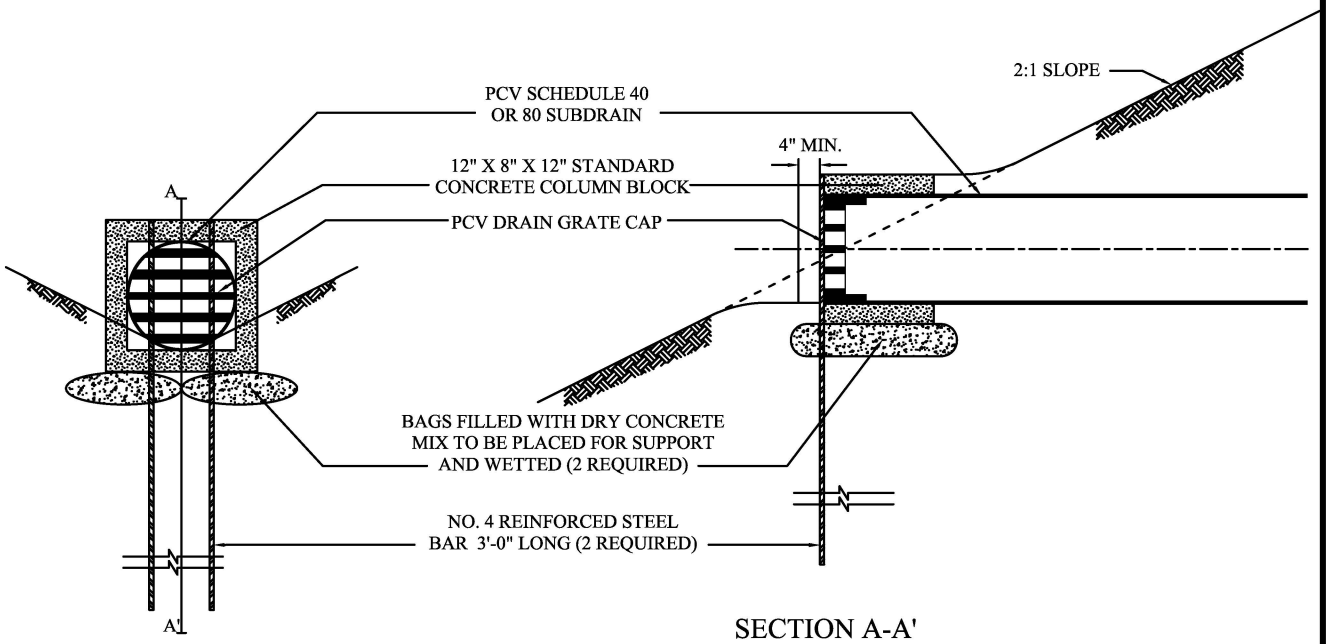
TYPICAL BUTTRESS DETAIL



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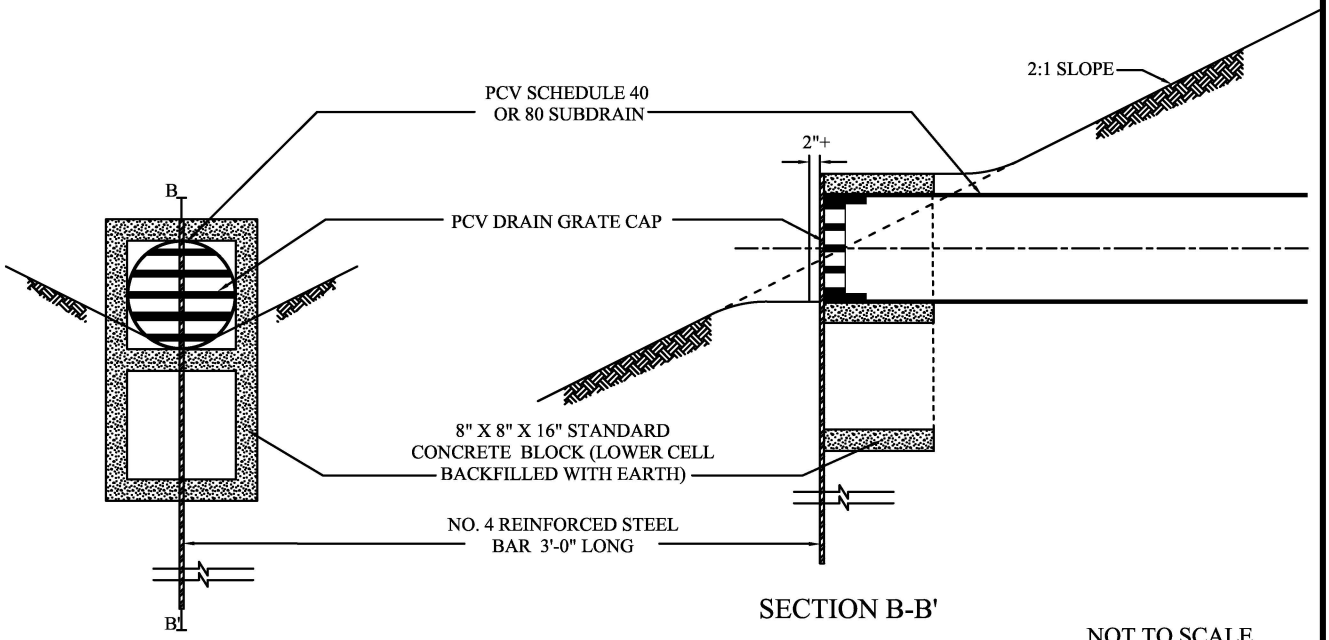
TYPICAL STABILIZATION FILL DETAIL

SUBDRAIN OUTLET MARKER -6" & 8" PIPE



SECTION A-A'

SUBDRAIN OUTLET MARKER -4" PIPE



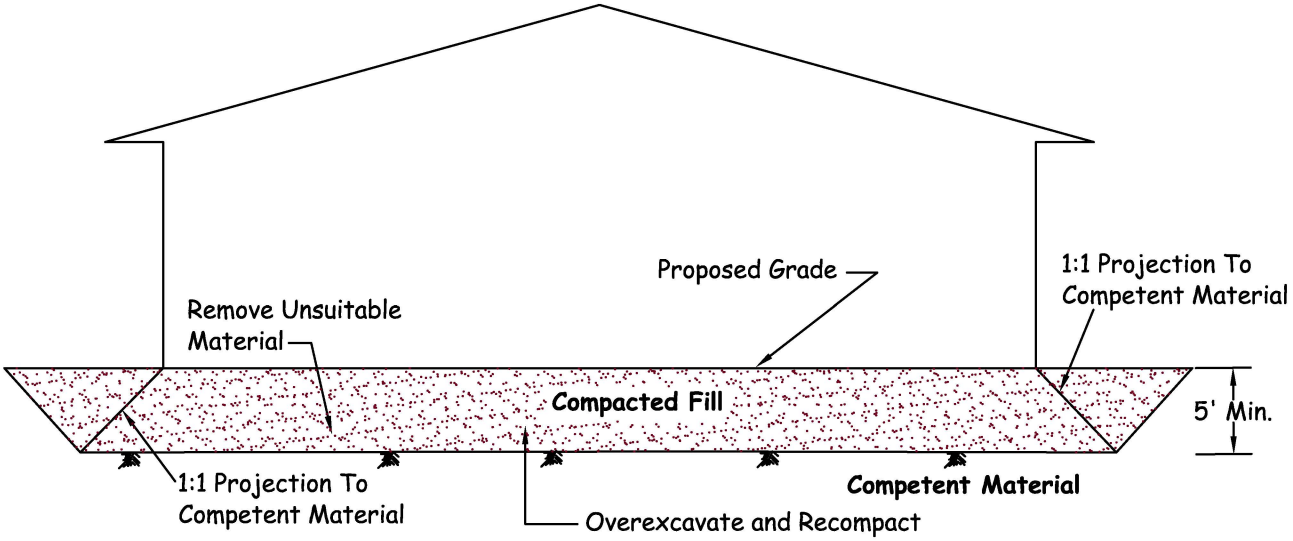
SECTION B-B'

NOT TO SCALE

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SUBDRAIN OUTLET MARKER DETAIL

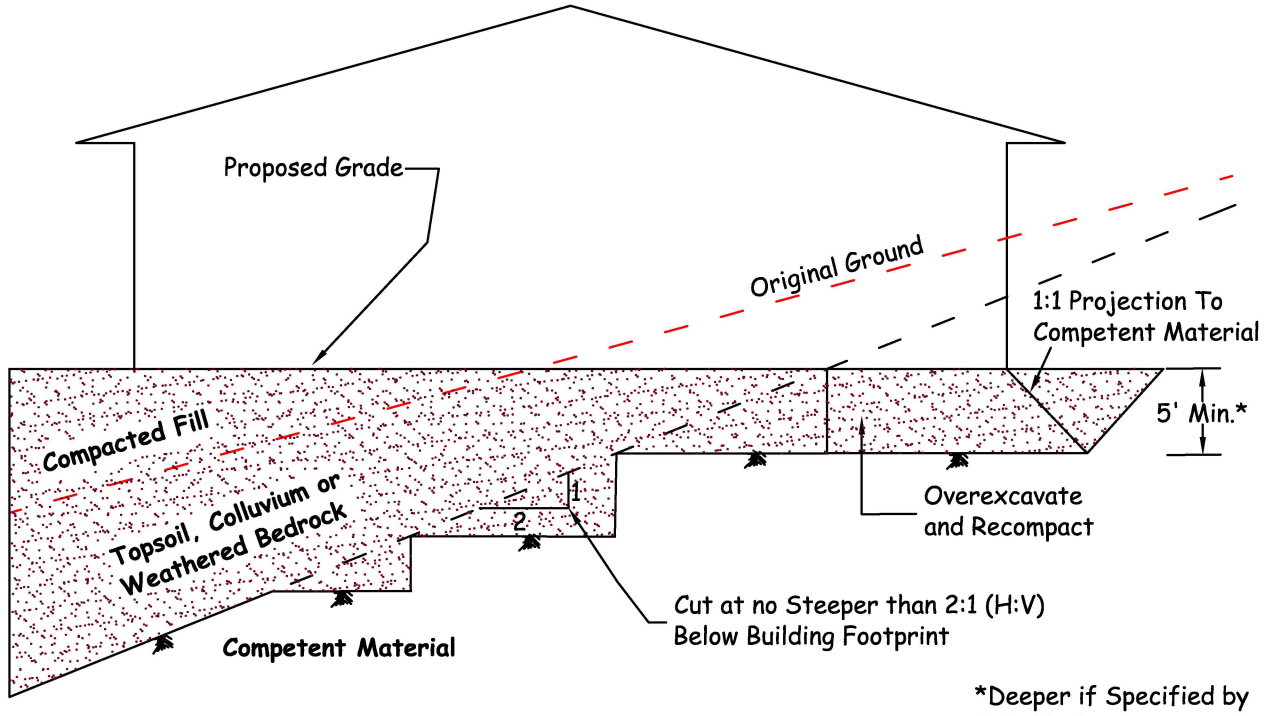
Cut Lot
(Exposing Unsuitable Soils at Design Grade)



Note 1: Removal Bottom Should be Graded With Minimum 2% Fall Towards Street or Other Suitable Area (as Determined by Soils Engineer) to Avoid Ponding Below Building

Note 2: Where Design Cut Lots are Excavated Entirely Into Competent Material, Overexcavation May Still be Required for Hard-Rock Conditions or for Materials With Variable Expansion Characteristics.

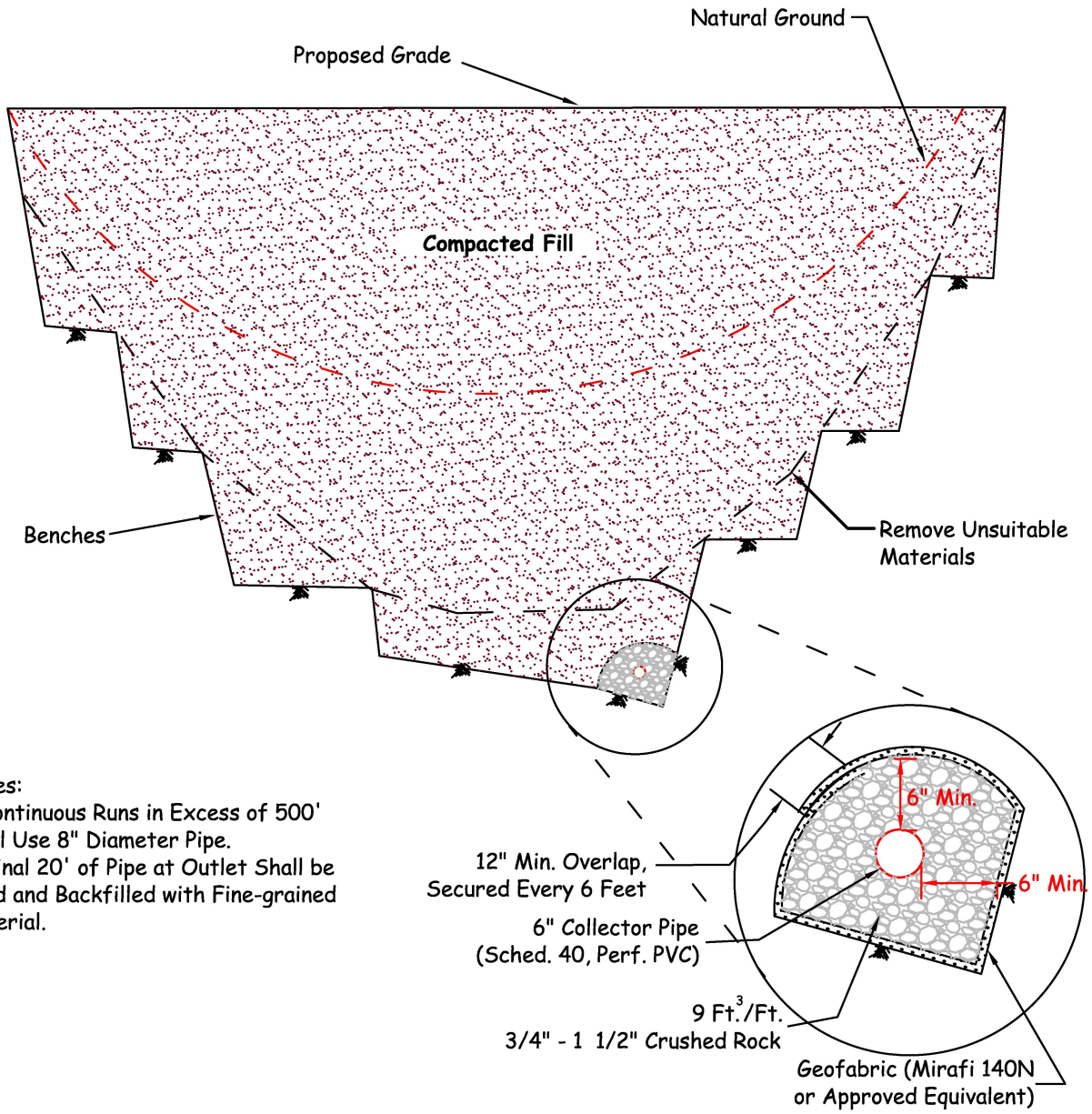
Cut/Fill Transition Lot



*Deeper if Specified by Soils Engineer

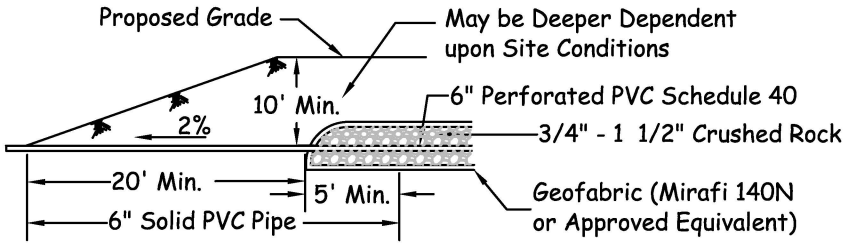
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CUT AND TRANSITION LOT OVEREXCAVATION DETAIL



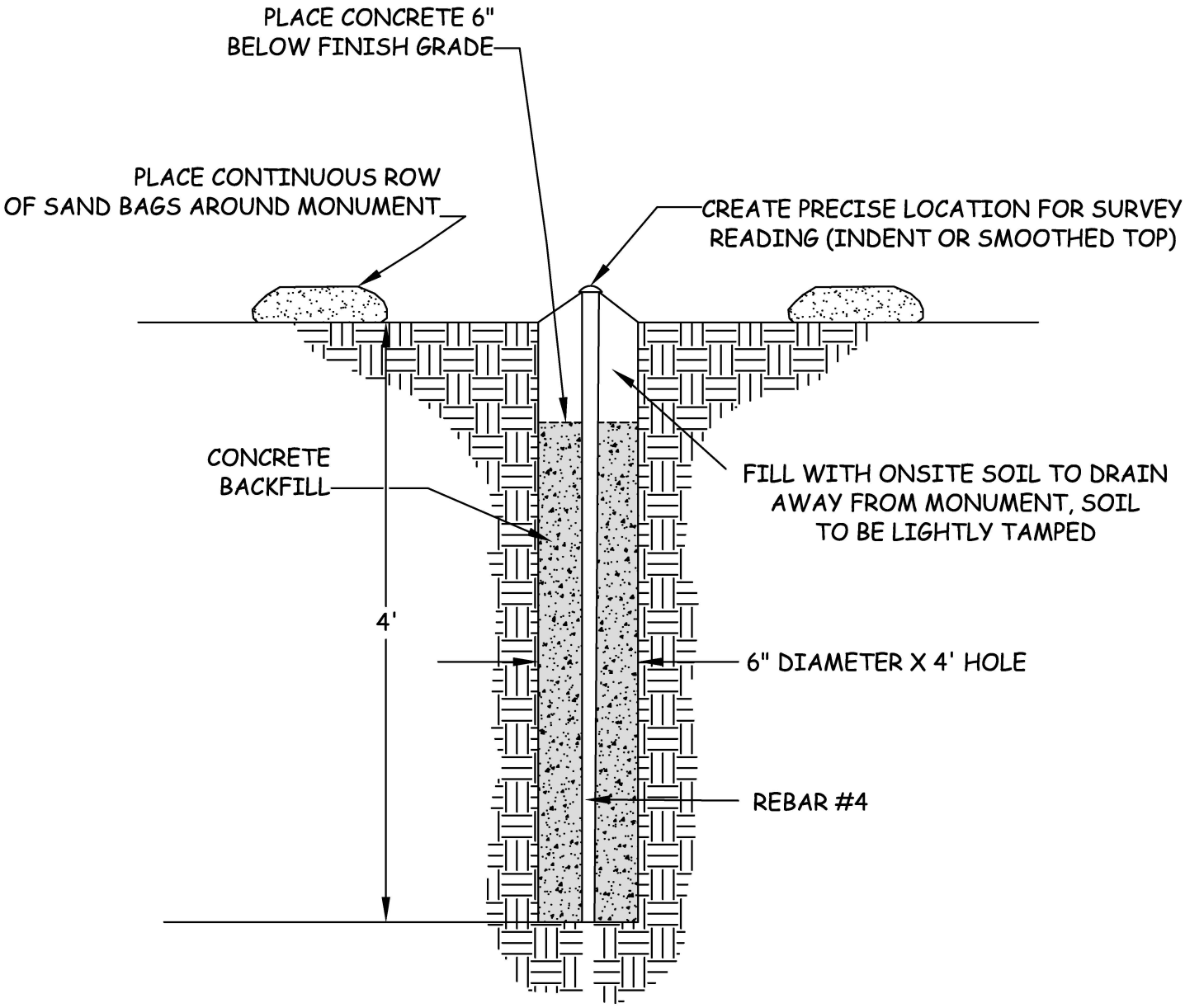
Notes:
1) Continuous Runs in Excess of 500' Shall Use 8" Diameter Pipe.
2) Final 20' of Pipe at Outlet Shall be Solid and Backfilled with Fine-grained Material.

Proposed Outlet Detail



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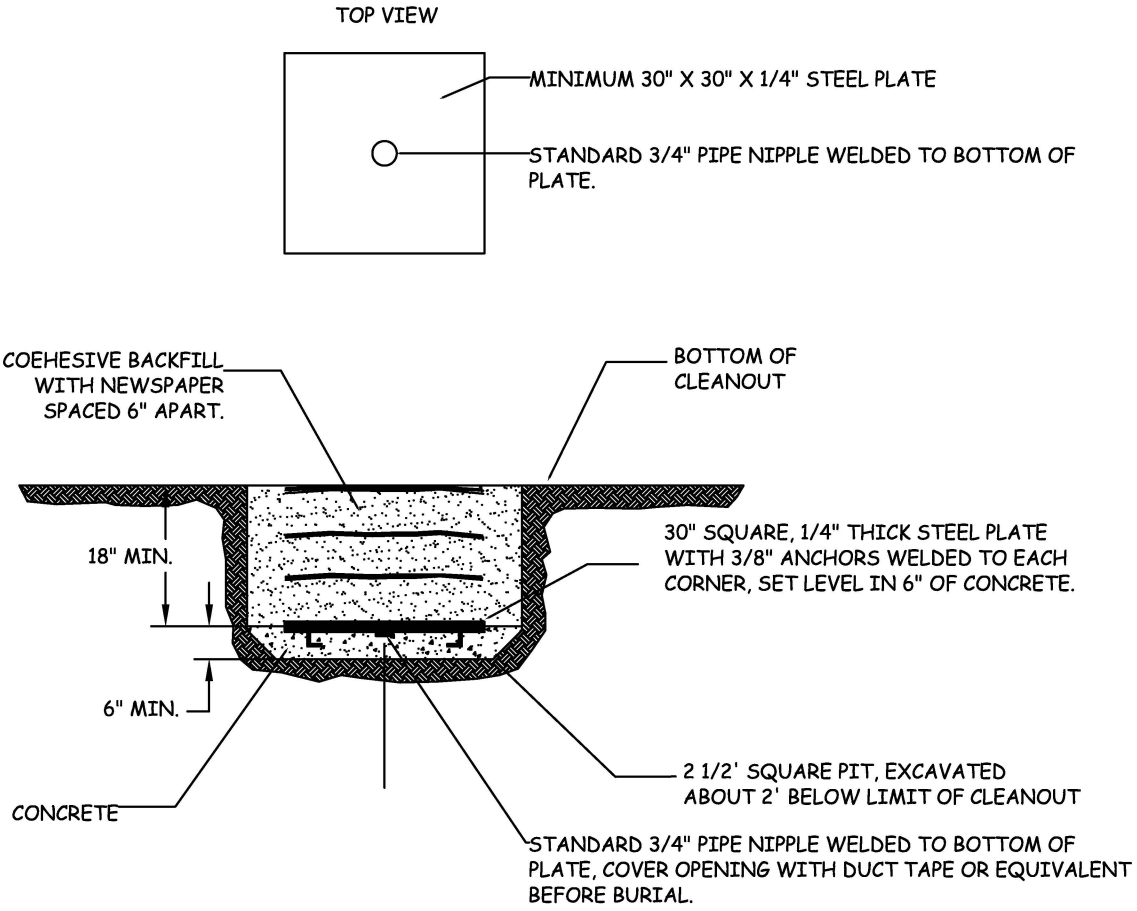
CANYON SUBDRAINS



NO CONSTRUCTION EQUIPMENT WITHIN 25 FEET
OF ANY INSTALLED SETTLEMENT MONUMENTS

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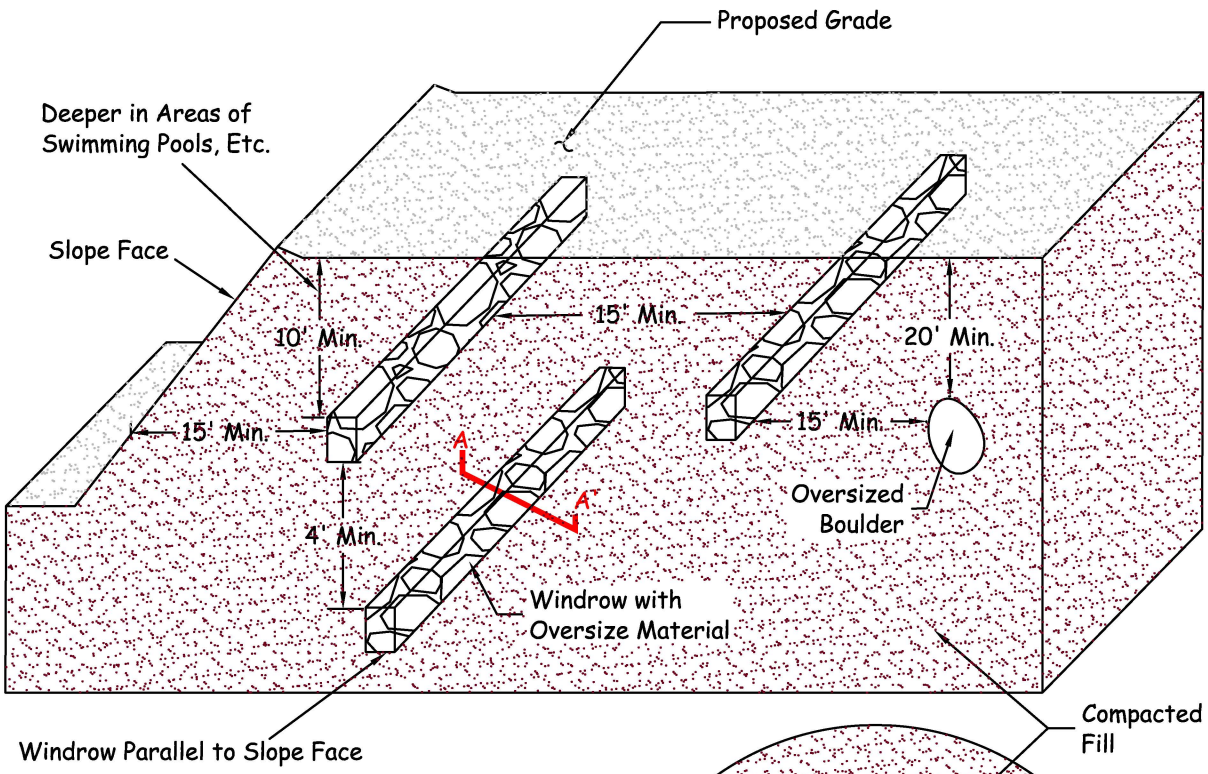
TYPICAL SURFACE SETTLEMENT MONUMENT

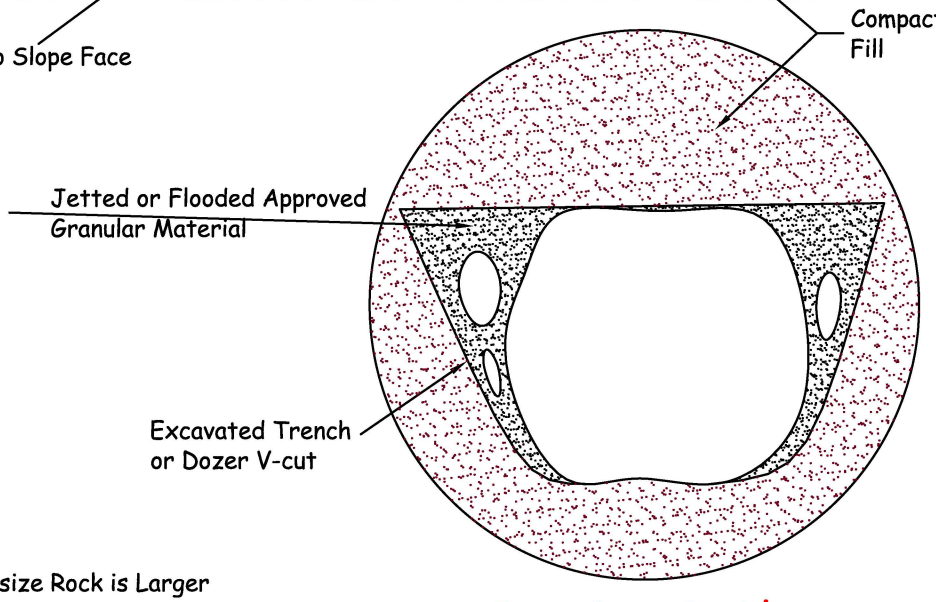


1. SURVEY FOR HORIZONTAL AND VERTICAL LOCATION TO NEAREST .01 INCH PRIOR TO BACKFILL USING KNOW LOCATIONS THAT WILL REMAIN INTACT DURING THE DURATION OF THE MONITORING PROGRAM. KNOW POINTS EXPLICITELY NOT ALLOWED ARE THOSE LOCATED ON FILL OR THAT WILL BE DESTROYED DURING GRADING.
2. IN THE EVENT OF DAMAGE TO SETTLEMENT PLATE DURING GRADING, CONTRACTOR SHALL IMMEDIATELY NOTIFY THE GEOTECHNICAL ENGINEER AND SHALL BE RESPONSIBLE FOR RESTORING THE SETTLEMENT PLATES TO WORKING ORDER.
3. DRILL TO RECOVER AND ATTACH RISER PIPE.

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TYPICAL SETTLEMENT PLATE AND RISER



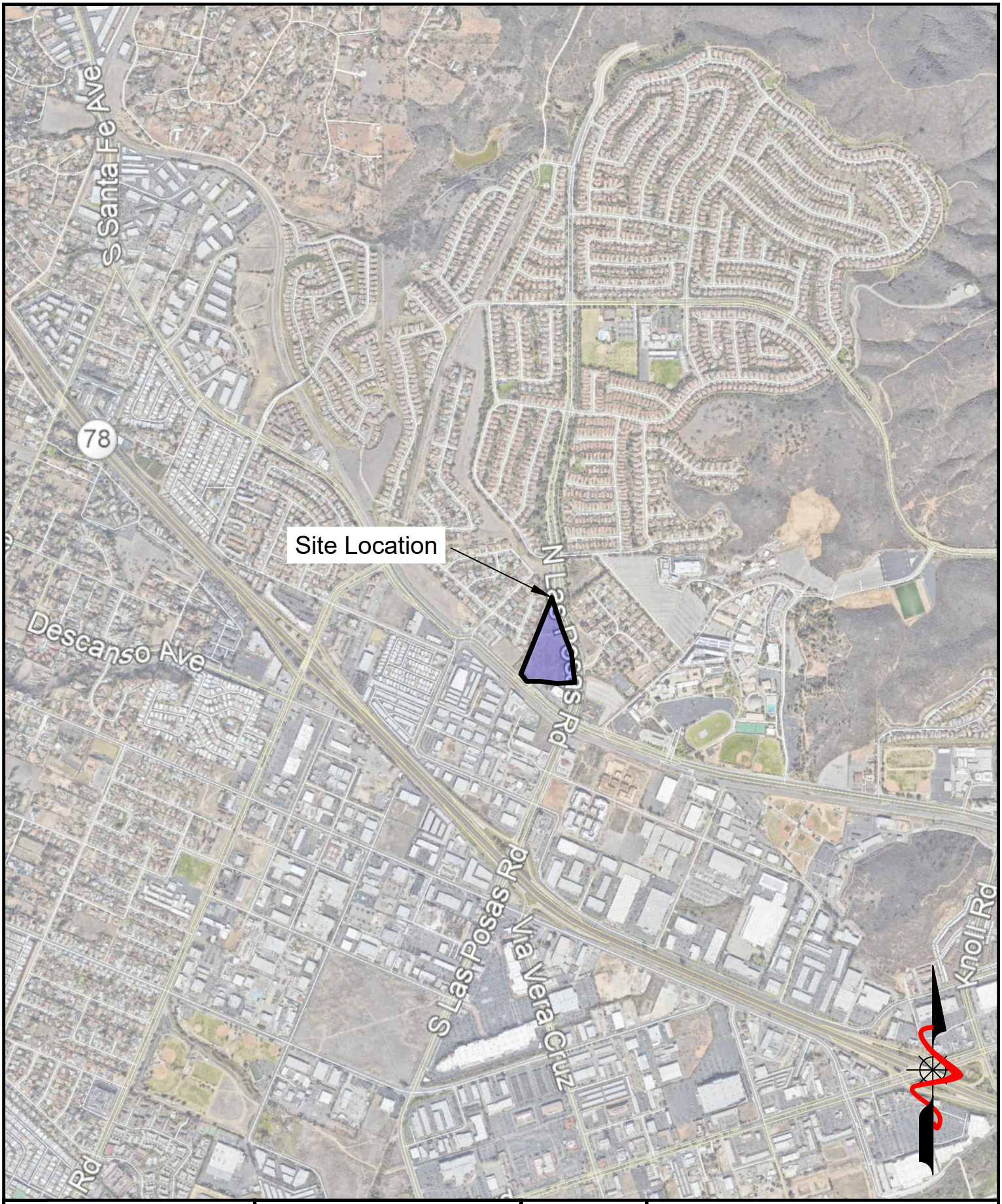


Note: Oversize Rock is Larger
than 8" in Maximum Dimension.

Section A-A'

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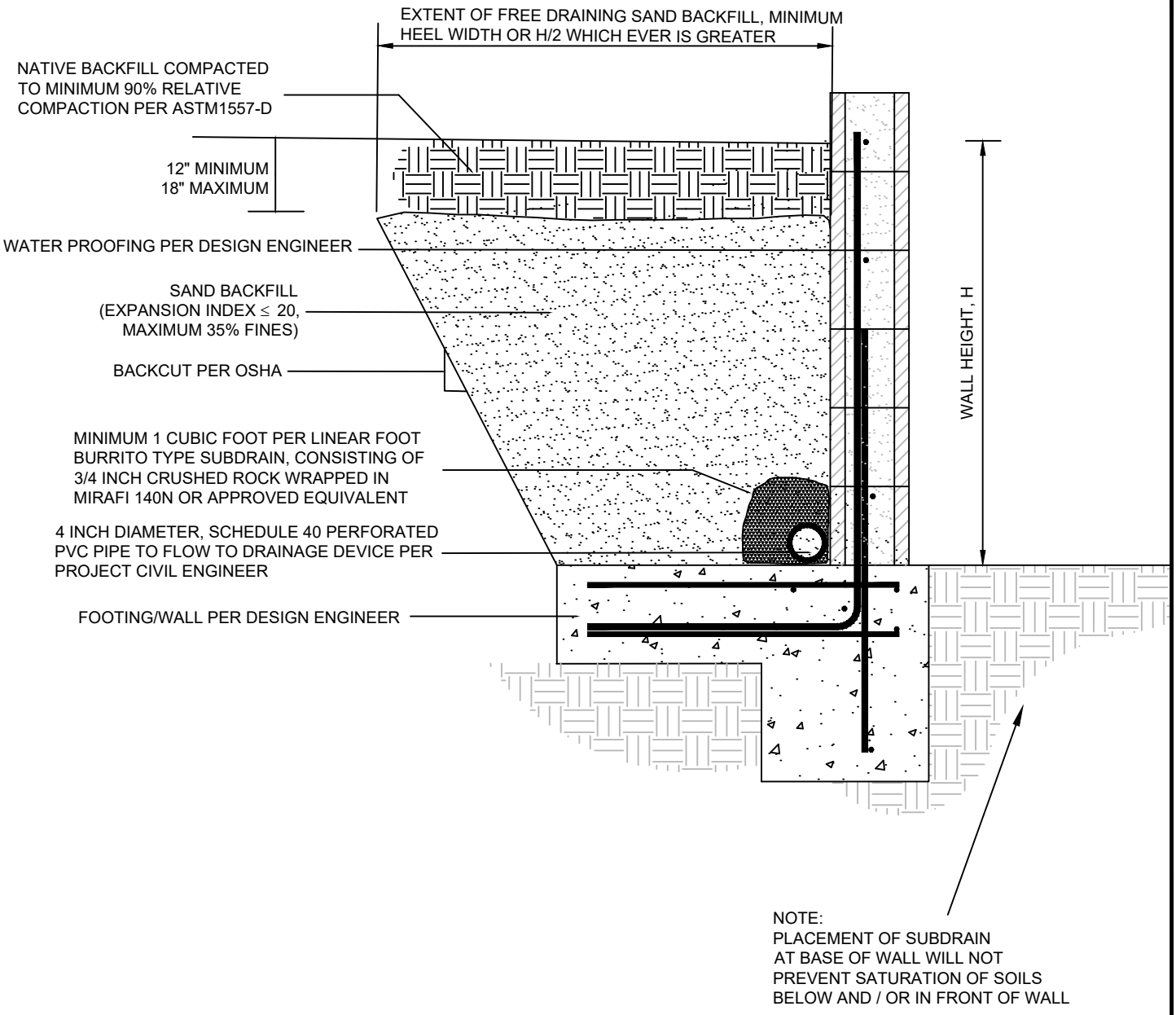
OVERSIZE ROCK DISPOSAL DETAIL



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FIGURE 1
Site Location Map

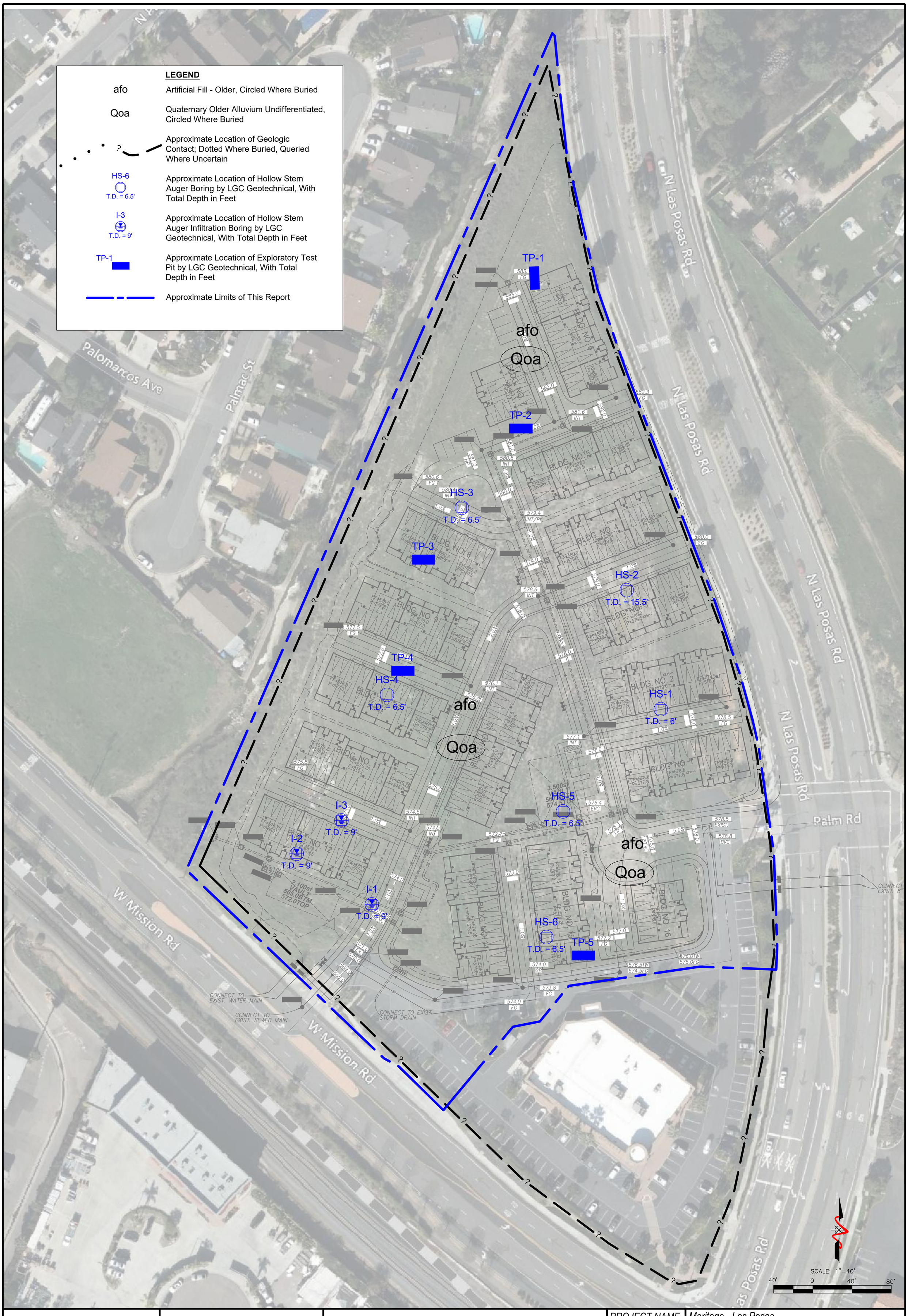
PROJECT NAME	Meritage - Las Posas
PROJECT NO.	21138-01
ENG. / GEOL.	KMS / BPG
SCALE	Not to Scale
DATE	July 2021



LGC Geotechnical, Inc.

FIGURE 2
Retaining Wall Backfill Detail

PROJECT NAME	Meritage - Las Posas
PROJECT NO.	21138-01
ENG. / GEOL.	KMS/BPG
SCALE	Not to Scale
DATE	July 2021



LGC Geotechnical, Inc.	LGC Geotechnical, Inc. 131 Calle Iglesia, Ste. 200 San Clemente, CA 92672 TEL (949) 369-6141 FAX (949) 369-6142	**Geotechnical Map**	PROJECT NAME: Meritage - Las Posas PROJECT NO.: 21138-01 ENG. / GEOL.: KMS / BPG SCALE: 1" = 40' DATE: July 2021 **SHEET 1 of 1**

Appendix F
Phase I ESA

HILLMANN
CONSULTING

PHASE I ENVIRONMENTAL SITE ASSESSMENT



Las Posas Road and West Mission Road
San Marcos, California 92069

Prepared For:

MLC Holdings Inc
5 Peters Canyon Road, Suite 310
Irvine, CA 92606

June 23, 2021

Hillmann Project Number C3-8450

Your Property. Our Priority.
Making a better future for all the communities we touch.
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CONSULTING

June 23, 2021

Ms. Johanna Crooker
MLC Holdings Inc
5 Peters Canyon Road, Suite 310
Irvine, CA 92606

RE: Phase I Environmental Site Assessment
Las Posas Road and West Mission Road
San Marcos, California 92069
Hillmann Project No: C3-8450

Dear Ms. Crooker:

Hillmann Consulting LLC is pleased to provide the results of our Phase I Environmental Site Assessment of the above referenced property. This assessment was performed in general accordance with the scope and limitations of ASTM Practice E1527-13, which is the latest version of the E1527 standard published by the ASTM.

We appreciate the opportunity to provide environmental due diligence services. If you have any questions concerning this report, or if we can assist you in any other matter, please contact our office at 714-634-9500.

Sincerely,

Hillmann Consulting, LLC

Shilpa Sunil
Senior Due Diligence Manager

Ryan Terwilliger
Western Operations Manager

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List of Abbreviations/Acronyms

Hillmann may use the following abbreviations and acronyms for common terminology described in our report. Not all abbreviations or acronyms may be applicable to this report:

ACM	– Asbestos Containing Material
AOC	– Area of Concern
AST	– Aboveground Storage Tank
ASTM	– American Society for Testing Materials
BER	– Business Environmental Risk
CEA	– Classification Exception Area
CERCLA	– Comprehensive Environmental Response Compensation and Liability Act
CERCLIS	– Comprehensive Environmental Response Compensation and Liability Information System
CESQG	– Conditionally Exempt Small Quantity Generator
COC	– Chemicals of Concern
CORRACTS	– Corrective Action Sites
CREC	– Controlled Recognized Environmental Condition
DNPL	– Delisted National Priority List
DTSC	– Department of Toxic Substances Control
ENG	– Engineering
ERNS	– Emergency Response Notification System
FDEP	– Florida Department of Environmental Protection
FDNY	– Fire Department, City of New York
FDOT	– Florida Department of Transportation
FOI/FOIA/FOIL	– Freedom of Information / Freedom of Information Act / Freedom of Information Letter
HVAC	– Heating Ventilation & Air Conditioning
HREC	– Historic Recognized Environmental Condition
IAQ	– Indoor Air Quality
ISRA	– Industrial Site Recovery Act
LBP	– Lead-Based Paint
LQG	– Large Quantity Generator
LTANK	– Leaking Storage Tank
LUST	– Leaking Underground Storage Tank
MassDEP	– Massachusetts Department of Environmental Protection
SDS/MSDS	– Safety Data Sheet / Material Safety Data Sheet
NA	– Not Applicable
NCDOH	– Nassau County Department of Health
NFA	– No Further Action
NFRAP	– No Further Remedial Actions Planned
NJDEP	– New Jersey Department of Environmental Protection
NPDES	– National Pollutant Discharge Elimination System
NPL	– National Priority List
NYCDEP	– New York City Department of Environmental Protection
NYCDOB	– New York City Department of Buildings
NYCOER	– New York City Office of Environmental Remediation
NYSDEC	– New York State Department of Environmental Conservation
OPRA	– Open Public Records Act
PADEP	– Pennsylvania Department of Environmental Protection
PAH	– Polycyclic Aromatic Hydrocarbon
PCE	– Perchloroethylene
RAO	– Response Action Outcome
RCRA	– Resource Conservation and Recovery Act
RCRIS	– Resource Conservation and Recovery Information System
REC	– Recognized Environmental Condition
RWQCB	– Regional Water Quality Control Board
SCAQMD	– South Coast Air Quality Management District
SCDHS	– Suffolk County Department of Health Services
SDG	– Significant Data Gap
SEMS	– Superfund Enterprise Management System
SRP	– Site Remediation Program
SQG	– Small Quantity Generator
SVOC	– Semi-Volatile Organic Compound
TCE	– Trichloroethylene
TSDF	– Treatment Storage and/or Disposal Facility
USEPA	– United States Environmental Protection Agency
UST	– Underground Storage Tank
VEC	– Vapor Encroachment Condition
VOC	– Volatile Organic Compound

1.0 FINDINGS, OPINIONS, AND CONCLUSIONS

Hillmann Consulting, LLC (Hillmann) performed a Phase I Environmental Site Assessment (ESA) of Las Posas Road and West Mission Road , San Marcos, California (the Property). The assessment has been conducted in accordance with our contracted scope of work and the ASTM Standard Practice E 1527-13 for Phase I Environmental Site Assessments and All Appropriate Inquiries (AAI) Final Rule 40 CFR Part 312. This section contains a summary of findings, opinions and conclusions made by this assessment. However, this section, alone, does not constitute the complete assessment. The report must be read in its entirety.

1.1 Summary of Project Details

Primary Street Address:		Las Posas Road and West Mission Road			
City:	San Marcos	**County:**	San Diego	**State:**	California
Tax ID/Parcel Number:		219-121-1500 and 219-121-1600			
Property Owner:		WPI- Las Posas and Mission LLC			
Zoning Designation:		Commercial			
Approx. Property Area:		7.59 acres			
Buildings/# of Floors		N/A			
Approx. Building Area:		N/A			
Approx. Year Built:		N/A			
Commercial Occupants:		None - vacant			
Current Use:		Undeveloped			
Prior Uses:		Agricultural			
Inspected By:		Ms. Gabriela Cyrulik			
Site Contact/Company:		Ms. Johanna Crooker/MLC Holdings, LLC			
Site Escort/Company:		Unescorted			
Inspection Date:		June 8, 2021			
Weather Conditions:		Fair, 60 degrees F			

1.2 Findings Summary Table

Assessment Subject	No REC	REC	CREC	HREC	Rpt. Ref.
Property Regulatory Records Review:	X				4.3
Property Historical Records Review:	X				4.2
Bulk Petroleum Storage:	X				5.3
On-Site Operations:	X				5.3
On-Site Haz-Mat Storage/Use/Spills:	X				5.3
Transformers/Hydraulic Systems:	X				5.3
Waste Discharges:	X				5.3
Interviews:	X				6.0
Adjoining & Nearby Properties:	X				4.3 5.2
Prior Env. Reports/User Provided Info:	X				3.0
Data Gaps:	X				2.3

1.3 Findings, Opinions and Conclusions

1.3.1 Recognized Environmental Conditions

Hillmann has performed a Phase I Environmental Site Assessment in accordance with the scope and limitations of ASTM Practice E1527-13 of the Property as described in Section 2 of this report. Any additions to, exceptions to, or deletions from this practice are also described in Section 2 of this report. This assessment has revealed no evidence of *recognized environmental conditions* in connection with the Property, except for the following:

RECOGNIZED ENVIRONMENTAL CONDITIONS	
	No RECs were identified.
HISTORICAL RECOGNIZED ENVIRONMENTAL CONDITIONS	
	No HRECs were identified.
CONTROLLED RECOGNIZED ENVIRONMENTAL CONDITIONS	
	No CRECs were identified.
SIGNIFICANT DATA GAPS	
	No SDGs were identified.

1.3.2 REC Response Action Recommendations

The following table presents recommended response actions to the identified RECs for further investigation and/or corrective action:

REC RESPONSE ACTION SUMMARY TABLE	
REC	**Response Action**
	None identified

1.3.3 Notable Environmental Conditions / De Minimis Conditions

The following environmental conditions were identified, but are not considered to be a REC in connection with the Property:

NOTABLE ENVIRONMENTAL CONDITIONS / DE MINIMIS CONDITIONS	
1.	Multiple large stockpiles of undocumented soil fill material were observed at the southwest boundary of the Property. Due to a concern of undocumented soil piles on the Property, a limited soil sampling and analysis was conducted at the time of the site inspection. Four (4) soil samples were collected from each of the undocumented soil piles, and analyzed for organochlorine pesticide (OCP) via EPA method 8081A, heavy metals, and VOCs. The analytical results indicated only minor detections of OCPs and heavy metals, all below the RSLs for residential use, and no TPH and/or VOCs were detected in any of the soil samples. Therefore, the undocumented soil piles do not indicate a REC with connection to the Property.
2.	Continental Cleaners at 1342 W. Mission Road is reportedly adjoining to the south-southwest of the Property. This site was listed as a garment pressing and cleaners' agent in 1994. However, no such structures were adjoining to the south-southwest during the time period when this site was listed as a historical cleaner and may have been mis-mapped. Additionally, there have been no commercial development adjoining to the Property until the CVS was developed in the mid-2000s. As such, this site is not considered to be a REC in connection with the Property.

1.3.4 Environmental Professional Statement

I declare that, to the best of my professional knowledge and belief, I meet the definition of *Environmental Professional* as defined in §312.10 of 40 CFR 312. I have the specific qualifications based on education, training and experience to assess a *property* of the nature, history and setting of the subject *property*. I have developed and performed all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.



Ryan Terwilliger
Environmental Professional

1.4 Business Environmental Risks / Non-ASTM Scope

Hillmann has performed a limited review of the following potential Business Environmental Risks (BER), also known as "Non-ASTM Scope concerns", in accordance with the contracted scope of work scope for this assessment. The following is a summary of findings for applicable BERs. For a more detailed discussion of the findings and contracted scope of work, please see the referenced report section.

BUSINESS ENVIRONMENTAL RISKS / NON-ASTM SCOPE			
Subject	**Findings**	**Not Appl.**	**Rpt. Ref.**
Asbestos		X	7.1
Lead Paint		X	7.2
Radon	Property is located in the USEPA radon designation Zone 3 or 'low risk' area for radon.		7.3
Mold / Microbial Damage		X	7.4
NWI Wetlands	No mapped wetland areas were depicted at the Property.		7.5
Lead in Drinking Water	No potable water service at the Property is provided at the Property.		7.6

2.0 INTRODUCTION

2.1 Purpose and Scope

This assessment was conducted utilizing generally accepted Phase I ESA industry standards in accordance with the ASTM Standard Practice E1527-13. The ASTM describes these methodologies as representing good commercial and customary practice in the United States of America for conducting an environmental site assessment of a parcel of commercial real estate with respect to the range of contaminants within the scope of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and petroleum products. As such, this practice is intended to permit a user to satisfy one of the requirements to qualify for the innocent landowner, contiguous property owner or bona fide prospective purchaser limitations on CERCLA liability (hereinafter, the "landowner liability protections," or "LLPs"): that is, the practice that constitutes all appropriate inquiries into the previous ownership and uses the property consistent with good commercial and customary practice as defined at 42 U.S.C. §9601(35) (B). The primary goal of the processes established by ASTM E1527-13 is to identify *recognized environmental conditions* in connection with the Property.

The term *recognized environmental condition (REC)* is defined by the ASTM as the presence or likely presence of any hazardous substances or petroleum products in, on or at a property: (1) due to a release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment.

The ASTM has also defined the terms *historical recognized environmental conditions* and *controlled recognized environmental conditions* as two additional types of RECs. The term *historical recognized environmental condition (HREC)* is defined as a past release of any hazardous substances or petroleum products that has occurred in connection with the Property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the Property to any required controls (for example, property use restrictions, activity and use limitations, institutional controls or engineering controls).

The term *controlled recognized environmental condition (CREC)* is defined as a recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority, with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls.

Conditions determined to be *"de minimis conditions"* are not considered to be RECs, HRECs or CRECs. *De minimis condition* is defined by the ASTM, "…as a condition that generally does not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies."

The chief components of this assessment are generally described as follows:

- A non-invasive visual reconnaissance of the Property and adjoining properties in accordance with ASTM guidelines for evidence of RECs.

- Interviews of past and present owners and occupants and state and local government officials, seeking information related to the potential presence of RECs at the Property.

- A review of standard physical record sources for available topographic, geologic and groundwater data.

- A review of standard historic record sources, such as fire insurance maps, city directories, aerial photographs, prior reports and interviews, etc., to determine prior uses of the Property from the present, back to the Property's first developed use, or back to 1940, whichever is earlier.

- A review of standard environmental record sources including federal and state environmental databases, and additional environmental record sources, to identify potential regulatory concerns with the Property, adjoining properties and properties located within the surrounding area.

An evaluation of environmental or other regulatory compliance matters is excluded from the scope of this assessment.

These methodologies are described as representing good commercial and customary practice for conducting an Environmental Site Assessment of a property for the purpose of identifying recognized environmental conditions.

2.1.1 Business Environmental Risks/Non-ASTM Scope Considerations

In accordance with our contract agreement, Hillmann may have addressed the following potential environmental subject matters that are outside of the requirements of the ASTM E1527-13 standard:

Asbestos-Containing Materials (ACM): A cursory non-intrusive visual screening for the presence of suspect ACM within the accessed areas of buildings built prior to 1990 on the Property. It is emphasized that this cursory non-intrusive visual screening does not constitute an asbestos survey/inspection of the premises. An asbestos survey/inspection should be sought by the report User(s) if more certainty is desired regarding ACM and potential asbestos hazards at the Property. Furthermore, a review of regulatory compliance matters pertaining to asbestos is excluded from the scope of work.

Lead-Based Paint (LBP): A cursory non-intrusive visual screening of the condition of painted surfaces in the accessed areas of residential buildings/units built prior to 1980 on the Property. It is emphasized that this cursory non-intrusive visual screening does not constitute a comprehensive survey for LBP or potential lead hazards. A comprehensive inspection should be sought by the report User(s) if more certainty is desired regarding LBP at the Property. Furthermore, a review of regulatory compliance matters pertaining to lead-based paint is excluded from the scope of work.

USEPA Designated Radon Potential: Review of general non-site specific data published by the USEPA regarding the Radon Zone classification for the area of the Property.

Mold/Microbial Damage: A cursory non-intrusive visual screening within the accessed areas of buildings on the Property for evidence of systemic microbial problems, including visible mold

growth, water damaged building materials or musty odors. It is emphasized that this cursory non-intrusive visual screening does not constitute a comprehensive survey for moisture/mold/microbial damage. A more comprehensive inspection should be sought by the report User(s) if more certainty is desired regarding the potential for moisture/mold/microbial damages at the Property.

NWI Wetlands: Review of US Fish and Wildlife Service National Wetland Inventory digitized data of mapped wetlands as presented in the attached EDR Radius Map plus Geocheck Report.

It is emphasized that, regardless of the wetlands data obtained via the EDR Geocheck-Physical Setting Source Addendum, a delineation of regulated wetlands by a qualified professional would be warranted to determine the presence or absence of regulated wetlands at the Property.

Lead in Drinking Water: Review of the potential for elevated levels of lead in the drinking water by determining the source of the drinking water supply and a review of available testing or compliance data reports.

2.2 Property Location/Legal Description

Property location and legal description details are described as follows:

Primary Street Address:	Las Posas Road and West Mission Road				
City:	San Marcos	**County:**	San Diego	**State:**	California
Tax ID/Parcel Number:	219-121-1500 and 219-121-1600				
Approx. Land Area:	7.59 acres				
Apprx. Latitude/Longitude:	North 33.1504410 degrees/West 117.1896180 degrees				
Additional Details (if appl.):	NA				
Property Owner:	WPI- Las Posas and Mission LLC				
Zoning Designation:	Commercial				

2.3 Data Gaps

A *data gap* is defined by the ASTM as a lack of or inability to obtain information required by this practice despite good faith efforts by the environmental professional to gather such information. A data gap is only significant if other information and/or professional experience raises reasonable concerns involving the data gap and the ability to determine the presence or absence of recognized environmental conditions. The following table summarizes data gaps encountered during the assessment as well as a discussion of their significance.

Data Gap:	Significant (Yes/No)?	Discussion
Historical records data failure	No	The date and/or type of the first developed use of the Property was not documented.

		Record gaps exceeding five years were encountered; however, no significant site use changes are suspected during these intervals.
Response to agency records requests not received as of date of report.	No	Any additional information indicative of a REC will be forwarded upon receipt.

2.4 User Reliance

This report is for the exclusive use of the User(s) named on the front cover. No other party(ies) shall have any right to rely on the content of this report without first obtaining the consent of the original report User; and without obtaining written consent from Hillmann in the form of a letter of reliance or report recertification.

2.5 Significant Assumptions

The following significant assumptions are made:

- The site operations at the time of the site visit are assumed to reflect typical site conditions relative to potential environmental conditions and that no concealment of environmental conditions or releases by site owners or occupants has occurred. Likewise, it is assumed that no areas of the Property with potential environmental concerns or RECs were concealed or otherwise not reported, intentionally or unknowingly, by the Property owners/occupants and/or site escort at the time of the site visit.

- For the purpose of estimating the approximate direction of groundwater flow in the absence of site specific groundwater data, unless indicated otherwise, an assumption has been made that the gradient of groundwater flow follows the surface topography of the Property and immediate surrounding area.

2.6 General Limitations and Exceptions

2.6.1 Limitations

The report turnaround time specified by the contract agreement for this assessment may present a limitation to the availability of pertinent regulatory agency records. Such limitations, if encountered, are further specified in Section 4.4.

Significant limitations related to the condition or accessibility of the Property at the time of the site reconnaissance, if encountered, are reported in Section 5.1.

2.6.2 Other Exceptions or Deletions

No other exceptions or deletions from the ASTM Standard E1527-13 are reported.

2.6.3 Special Terms and Conditions

This Phase I Environmental Site Assessment has been prepared using reasonable efforts in each phase of its work to identify recognized environmental conditions associated with hazardous substances, wastes and petroleum products at the Property. Findings within this report are based on information collected from observations made on the day of the site reconnaissance and from reasonably ascertainable information obtained from governing public agencies and private sources.

This report is not definitive and should not be assumed to be a complete or specific definition of the conditions above or below grade. Information in this report is not intended to be used as a construction document and should not be used for demolition, renovation, site development, redevelopment, or other construction purposes. No representation or warranty is made that the past or current operations at the Property are, or have been, in compliance with all applicable federal, state and local laws, regulations and codes.

Findings, conclusions and recommendations presented in this report are based on visual observations of the Property, interviews conducted, the records reviewed, information provided by the Client, and/or a review of readily available and supplied drawings and documents. Information obtained during the assessment, whether written, graphic or verbal, provided by the Property contact(s) or as shown on any documents reviewed or received from the Property contact, owner or agent, or government agency source; is assumed to be accurate except as specifically stated otherwise in this report. Independent verification of the accuracy or completeness of all information reviewed or received during the course of this assessment is not made and excluded from the scope of work for this assessment. No warranty or guarantee is made of the accuracy or completeness of information that was obtained from ostensibly knowledgeable individuals, regulatory agency representatives or other secondary sources.

Regardless of the findings stated in this report, Hillmann is not responsible for consequences or conditions arising from facts that were concealed, withheld or not fully disclosed at the time the assessment was conducted.

This report does not warrant against future operations or conditions, nor does it warrant against operations or conditions present of a type or at a location not investigated.

The regulatory database report provided is based on an evaluation of the data collected and compiled by a contracted data research company. The regulatory research is designed to meet the requirements of ASTM Standard E1527-13. Hillmann can neither warrant nor guarantee the accuracy or completeness of the information obtained from the regulatory database report provider during the course of this assessment.

Subsurface conditions may differ from the conditions implied by the surface observations and can only be reliably evaluated through intrusive techniques.

Reasonable efforts have been made during this assessment to identify aboveground and underground storage tanks and ancillary equipment. Reasonable efforts are limited to information gained from visual observation of largely unobstructed areas, recorded database information held in public record and available information gathered from interviews. Such methods may not identify

surficial and subsurface features that may have been hidden from view due to parked automobiles and other vehicles, snow cover, vegetative growth, pavement, construction or debris pile storage or incorrect information from sources.

No guarantee, explicit or implied, is made that the records pertaining to historical ownership or occupancy which were reviewed represent a comprehensive or precise delineation of past Property ownership or tenancy for legal purposes.

The ASTM E1527-13 standard states that recommendations are not required to be included in a Phase I ESA report; however, further that recommendations are an additional service that may be useful in the User's analysis of landowner liability protections or business environmental risks; and that the User should consider whether recommendations for additional inquiries or other services are desired.

The recommended response actions to the identified RECs presented in Section 1.3, if any, are not intended to represent the only course(s) of action to take; nor does it imply any opinion as to the timing of the action. Furthermore, it is emphasized that additional response actions may become warranted depending on the outcome of the initial action(s) taken. Hillmann advises that consultation with legal counsel familiar with environmental and real estate law may be beneficial to the decision making process for the type and timing of a response action to identified RECs, if any.

Due to the limited nature of our review of potential Business Environmental Risks, the User of the report should consider whether to take additional action(s) to further define, properly manage and/or mitigate potential BERs.

In the event of any conflict between the terms and conditions of this report and the terms and conditions of the consulting services agreement for this project, the consulting services agreement shall control.

3.0 USER PROVIDED INFORMATION

The term "User" is defined by ASTM as the party seeking to use Practice E1527 to complete an environmental site assessment of the Property; specifically, the entities named on the front cover to which the report has been addressed.

3.1 Prior Environmental Reports/Documentation

The following prior environmental reports/documentation was provided:

Phase I Environmental Site Assessment Report for vacant parcel northwest corner of West Mission Road and Las Posas Road, San Marcos, CA 92069; prepared by Krazan and Associates, Inc. and dated October 15, 2003. The report concluded the following:

"This assessment has revealed no evidence of RECs in connection with the subject site."

3.2 User Questionnaire

Section 6 of the ASTM E1527-13 standard describes certain tasks required to be performed by the report User in order to qualify for landowner liability protections to CERCLA liability. To assist the report User to meet these requirements, the ASTM E1527-13 standard recommends a questionnaire of inquiries (User Questionnaire) specified in 40 CFR 312.25, 312.28, 312.29, 312.30, and 312.31 be provided to the original report User. The following is a summary of the User's response:

Question:	Yes/No:	Detail:
Environmental liens that are filed or recorded against the property: Did a search of recorded land title records identify any environmental liens filed or recorded against the property under federal, tribal, state or local law?	No	
Activity and use limitations that are in place on the property or that have been filed or recorded against the property: Did a search of recorded land title records (or judicial records where appropriate, identify any AULs, such as engineering controls, land use restrictions or institutional controls that are in place at the property and/or have been filed or recorded against the property under federal, tribal, state or local law?	No	
Specialized knowledge or experience of the person seeking to qualify for the LLP: Do you have any specialized knowledge or experience related to the property or nearby properties? For example, are you involved in the same line of business as the current or former occupants of the property or an adjoining property so that you would have specialized knowledge of the chemicals and processes used by this type of business?	No	
Relationship of the purchase price to the fair market value of the property if it were not contaminated: Does the purchase price being paid for this property reasonably reflect the fair market value of the property? If you conclude that there is a difference, have you considered whether the lower	Yes	

Question:	Yes/No:	Detail:
purchase price is because contamination is known or believed to be present at the property?		
Commonly Known or Reasonably Ascertainable Information: Are you aware of commonly known or reasonably ascertainable information about the property that would help the environmental professional to identify conditions indicative of releases or threatened releases? For example,		
-Do you know the past uses of the property?	No	
-Do you know of specific chemicals that are present or were once present at the property?	No	
-Do you know of spills or other chemical releases that have taken place at the property?	No	
-Do you know of any environmental cleanups that have taken place at the property?	No	
The degree of obviousness of the presence or likely presence of contamination at the property, and the ability to detect the contamination by appropriate investigation: Based on your knowledge and experience related to the property are there any obvious indicators that point to the presence or likely presence of releases at the property?	No	
Litigation/Administrative Proceedings/Government Notices As the User of this ESA, do you have knowledge of (1) any pending, threatened, or past litigation relevant to hazardous substances or petroleum products in, on, or from the property; (2) any pending, threatened, or past administrative proceedings relevant to hazardous substances or petroleum products in, on or from the property; and (3) any notices from any governmental entity regarding any possible violation of environmental laws or possible liability relating to hazardous substances or petroleum products.	No	

NR-no response

3.3 Reason for Performing Phase I ESA

The User did not indicate the purpose of the assessment. In accordance with ASTM E1527-13, it is assumed that the Phase I ESA was being performed in order to qualify for landowner liability protection to CERCLA liability.

4.0 RECORDS REVIEW

4.1 Physical Setting Sources

The following physical setting sources were reviewed:

Source	Discussion
USGS 7.5 minute Topographic Map Data: (EDR Geocheck-Physical Setting Source Addendum)	The Property lies at an elevation of approximately 575 feet above mean sea level. An interpretation of topographic contour lines as well as a review of the EDR Geocheck-General Topographic Gradient suggested terrain sloping downward towards the south-southwest.
USDA SCS Soil Data: (EDR Geocheck-Physical Setting Source Addendum)	The soil type at the Property is classified as "Escondido". This soil type is described as soils with layers impending downward movement of water, or soils with moderately fine or fine texture that have very fine sandy loam texture.
Geologic Data: (EDR Geocheck-Physical Setting Source Addendum)	The geologic formation in the vicinity of the Property is described as eugeosynclinal deposits of the Mesozoic Era, Lower Jurassic and Upper Triassic System, and Lower Mesozoic Series.
Prior Env. Reports: (Section 3.1)	No additional relevant site specific geologic data was noted from a review of the prior environmental reports listed in Section 3.1.
Additional Sources/ Data:	No additional physical setting sources or data was obtained.
Groundwater Flow Discussion:	Based on a review of the above information as well as observation of the site, the direction of shallow groundwater flow at the site is inferred to be towards the south-southwest.
NWI Wetlands Data: (EDR Geocheck-Physical Setting Source Addendum)	No NWI mapped wetlands areas were depicted at the Property.

4.2 Historical Use – Property and Adjoining Properties

Research has been conducted in an attempt to develop a history of the previous uses of the property and surrounding area, in order to help identify the likelihood of past uses having led to RECs in connection with the property. Standard historical sources have been sought in an attempt to document the past uses of the Property as far back as it can be shown that the Property contained structures; or from the time the Property was first used for residential, agricultural, commercial, industrial or governmental purposes.

4.2.1 Fire Insurance Maps

A Certified Sanborn Map Report was obtained from EDR for a review of published historic fire insurance maps for the Property and surrounding area. The following is a summary of site uses and notable details depicted by the available maps:

Year(s)	Prop/Adj	Depicted Use(s)	Notable Details
	Property:	None	None
	Adjoining:	None	None

A copy of the Certified Sanborn Map Report is attached in Appendix D.

4.2.2 City Directories

An EDR City Directory Abstract report was reviewed for data of former occupants of the Property's street address. The following is a generalized summary of the findings of city directory research for past occupants of the Property.

Property	
Use(s) / Occupant(s):	**Years**
None identified	

The EDR City Directory Abstract report was also reviewed for listings of historic occupants of the adjoining properties. The following is a general summary of listings of historic adjoining property occupants:

Adjoining Properties	
Use and/or Occupant(s)	**Years**
Pioneer Mills	1971-1992

A copy of the EDR City Directory report is attached in Appendix D.

4.2.3 Historical Topographic Maps

Historical topographic maps of the Property and vicinity obtained from an EDR Historical Topographic Map report (as attached in Appendix D) have been reviewed. The following interpretation of land usage was made by review of the maps:

Year(s)	Summary	
1893, 1901	**Property:**	No improvements or other special depictions are shown.
	Adjoining:	A structure is adjacent to the northeast and northwest.
1947, 1948, 1949,	**Property:**	A creek runs through the Property.
	Adjoining	Undeveloped, a railroad track to the south and unpaved road to the north. A structure depicted to the southeast.
1968, 1983	**Property:**	No improvements or other specific depictions are shown.
	Adjoining:	Northwest, west, and northeast adjacent properties are depicted with multiple structures.
1996	**Property:**	The Property is shaded, indicating a developed area.
	Adjoining:	The remainder of the adjacent properties are shaded, indicating a developed area.
2012	**Property:**	No improvements or other special depictions are shown.
	Adjoining:	No improvements or other special depictions are shown.

4.2.4 Historical Aerial Photographs

Historical aerial photographs of the Property and vicinity obtained from an EDR Aerial Photo Decade Package report, as attached in Appendix D, were reviewed. The following interpretation of land usage was made by review of the aerial photographs:

Year(s)	Summary of Interpretation	
1928,1939, 1946,1953	**Property:**	Undeveloped land
	Adjoining:	Small structure depicted to the north. Two lane road depicted to the south.
1964, 1967, 1970, 1979, 1985, 1989, 1990	**Property:**	Undeveloped land
	Adjoining:	Residential homes, commercial structures, vacant land; including industrial uses to the southwest with multiple large ASTs
2005, 2009, 2012, 2016	**Property:**	Undeveloped
	Adjoining:	Residential, commercial, and industrial

4.2.5 EDR High-Risk Historical Records

The EDR Radius Map™ report, which is discussed in greater detail in Section 4.3, provided a search of proprietary databases of potential historical high-risk uses at or in the vicinity of the Property. These databases include EDR Historic Cleaners – a database of property addresses with records of historical occupancy by suspected cleaners businesses; EDR Historic Auto – a database of property addresses with records of historical occupancy by potential automotive gas/filling stations and repair facilities; and EDR MGP- a database of sites historically occupied by manufactured gas plants and related facilities.

EDR Database	On-site Listings:	Adjoining/Off-Site Listings
Historic Cleaners: (on-site/adjoining only)	None	Continental Cleaners at 1342 W. Mission Road is reportedly adjoining to the south-southwest of the Property. This site is listed as a garment pressing and cleaners' agent in 1994. However, no such structures were adjoining to the south-southwest during the time period when this site was listed as a historical cleaner and may have been mis-mapped. Additionally, there have been no adjoining commercial development adjoining to the Property until the CVS was developed in in the mid-2000s. As such, this site is not considered to be a REC in connection with the Property.
Historic Auto: (on-site/adjoining only)	None	Harms Don Inc at 1290 W. Mission Road is located approximately 382 feet to the southeast and is listed from 1994 to 2014 as a gasoline service station. This site is listed on the LUST database and received regulatory closure on 07/15/2013, based on the regulatory closure received and the cross-gradient position, this site is not considered to be a REC in connection with the Property at this time.

MGP: (1-mile distance)	None	None

4.2.6 Petroleum/Natural Gas Well Review

The historical record sources and the California Geologic Energy Management Division (CalGEM) online mapping application were reviewed for records of historic petroleum and/or natural gas wells at the Property. No record of any historical petroleum/natural gas wells at or adjoining the Property was identified.

4.2.7 Additional Historical Data

Where applicable, the following additional pertinent historical data was obtained:

Interviews/Anecdotal:	No additional pertinent historical data was obtained.
Local Gov't Records:	No additional pertinent historical data was obtained.
Prior Env. Reports: (Section 3.1)	Prior environmental reports reviewed as part of this assessment, as detailed in Section 3.1, did not provide additional pertinent detail of historical site usage.
Site Observations:	Indications of historic uses of the Property or adjoining properties were not observed during the site reconnaissance.
Other Sources:	No additional pertinent historical data was obtained.

4.2.8 Summary of Identified Historic Uses

The following table presents a summary of the types and approximate date ranges of identified prior uses of the Property:

Property	
Date Range	**Use**
1928-2005	Undeveloped land
2009	Graded staging area for construction of the south adjoining CVS
2012-present	Vacant land

The following table presents a summary of the types of identified prior uses of the adjoining properties:

Adjoining Properties	
Date Range	**Use**
1928-1953	Undeveloped land
1964-2005	Vacant land, residential and industrial uses
2009-present	Vacant land, residential, commercial, and industrial uses; including an HVAC and plumping manufacturing facility to the southwest

4.2.9 Historical Records Data Failure

The ASTM E1527-13 standard defines data failure as a failure to achieve the ASTM specified historical research objectives after reviewing the standard historical sources that are reasonably ascertainable and likely to be useful. The objective is to identify all obvious uses of the property from the present, back to the property's first developed use, or back to 1940, whichever is earlier. Furthermore, records of historic use/conditions should be sought in intervals no less than approximately five years, unless the property conditions appear unchanged over a longer interval.

Objective	Met?	Detail	Significant?
First developed use/date determined?	No	No indication of any prior use or development of the Property was identified.	No
Record sources at 5-year intervals back to 1940 or first developed use?	Yes	Historical record gaps exceeding five years were encountered. However, significant site-use changes or undiscovered site uses appear unlikely to have occurred during the record gaps.	No
All obvious prior uses identified?	Yes	See Section 4.2.8.	NA

Please refer to Section 2.3 for additional discussion of data gaps and their significance to the findings of the assessment.

4.2.10 Historic Uses REC Discussion

Multiple large stockpiles of undocumented soil fill material were observed at the southwest boundary of the Property. Due to a concern of undocumented soil piles on the Property, a limited soil sampling and analysis was conducted at the time of the site inspection. Four (4) soil samples were collected from each of the undocumented soil piles, and analyzed for organochlorine pesticide (OCP) via EPA method 8081A, heavy metals, and VOCs. The analytical results indicated only minor detections of OCPs and heavy metals, all below the RSLs for residential use, and no TPH and/or VOCs were detected in any of the soil samples. Therefore, the undocumented soil piles do not indicate a REC with connection to the Property.

The review of historical records did not indicate evidence of a REC in connection with the Property.

4.3 Standard Environmental Record Sources

A regulatory database report, titled EDR Radius Map™ Report, prepared by Environmental Data Resources of Shelton, CT was obtained and reviewed. The report provided a search of standard environmental record sources for listings of the Property, adjoining properties and sites within the surrounding area; and has been reviewed for the purpose of identifying listings suggesting a potential impact to the Property due to presence or migration of hazardous substances and/or petroleum products. Additional descriptions of the meaning and significance of the regulatory databases can be found in the regulatory database report in Appendix E. The EDR Radius Map™ Report provided a search of the following database categories in accordance with the requirements of the ASTM Standard E1527-13:

Regulatory Database	Search Distance
Fed. National Priorities List (NPL/a.k.a. "Superfund" sites) & Proposed NPL	1-mile
Fed. Delisted NPL	½-mile
Fed. Superfund Enterprise Management System (SEMS; formerly CERCLIS)	½-mile
Fed. SEMS-ARCHIVE (formerly known as CERCLIS NFRAP)	½-mile
Fed. RCRA Corrective Action Sites (CORRACTS)	1-mile
Fed. RCRA Transport/Storage/Disposal (TSD) sites	½-mile
Fed. RCRA Generators (LQG, SGQ & CESQG)	Site & Adjoining
Fed. Institutional Control/Engineering Control (IC/EC) Registries	Site only
Fed. Emergency Response Notification System (ERNS)	Site only
State/Tribal Hazardous Waste Sites (SHWS)	1-mile
State/Tribal Landfill and/or Solid Waste Disposal (LF/SWF)	½-mile
State/Tribal Leaking Storage Tanks	½-mile
State/Tribal Registered Storage Tanks	Site & Adjoining
State/Tribal IC/EC Registries	Site
State/Tribal Voluntary Cleanup Sites	½-mile
State/Tribal Brownfields	½-mile
Additional Federal, State, Tribal and Local Environmental Databases	Variable

Reported distances for adjoining listings discussed in Section 4.3.4, if applicable, are approximate and indicative of the presence of a public roadway or right-of-way between the adjoining site and Property.

The reported gradients indicated where applicable in Sections 4.3.4 and 4.3.5 have been estimated based on a number of factors including but not necessarily limited to field observation, review of topographic maps, database listing details and/or site specific geo-technical data.

4.3.1 Supplemental Database Listings

The regulatory database report was also reviewed for listings on supplemental databases, in addition to the Standard Environmental Record Sources. Any property or adjoining property listings on such databases of significant concern, if identified, is discussed in Sections 4.3.3 and 4.3.4. Otherwise, none of the other supplemental database listings identified by the regulatory database report are considered to be a REC in connection with the Property.

4.3.2 Limited Tier I Vapor Encroachment Screening

Limited analysis of the details of on-site, adjoining and vicinity database sites was conducted to identify potential sources of sub-surface vapor encroachment. This review was based on elements of the ASTM "Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions" (ASTM E 2600-15); and also on elements of "Methodology for Identifying the Area of Concern Around a Property Potentially Impacted by Vapor Migration from Nearby Contaminated Sources" (Buonicore, 2011-S-103-AWMA). Vicinity database sites pertaining to non-petroleum product releases within 1,760 feet of the Property in the up-gradient direction, 365 feet of the Property in the cross gradient direction and 100 feet of the Property in the down gradient direction; and vicinity database sites pertaining to petroleum product releases within 528 feet of the Property in the up-gradient direction, 165 feet of the Property in the cross gradient direction and

100 feet of the Property in the down gradient direction were reviewed to identify active contamination sites with the potential to affect subsurface vapor conditions at the subject property. The potential for vapor encroachment was considered in assessing whether or not a REC exists in connection with the Property when reviewing applicable sites within those distances.

Regulatory database sites with active petroleum or non-petroleum releases that are considered to constitute a vapor encroachment condition (VEC) to the Property, if any, are identified and discussed in Sections 4.3.3, 4.3.4 and 4.3.5.

4.3.3 Property Listings

The following listings of the Property were identified:

Name/Address:	None
Database(s):	
Data Discussion:	
REC Discussion:	
VEC Discussion:	

4.3.4 Adjoining Property Listings

The following adjoining property listings were identified. Reported distances, where applicable, are approximate and indicative of the presence of a public roadway or right-of-way between the adjoining site and Property. The reported gradient has been estimated based on a number of factors including but not necessarily limited to field observation, review of topographic maps, database listing details and/or site specific geo-technical data.

Name/Address:	Continental Cleaners/ 1342 W Mission Road				
Database(s):	EDR HIST Cleaners				
Distance in feet:	6	**Direction:**	SSW	**Gradient:**	Down/Cross
Data Discussion:	The site is listed as historic cleaners in 1994. No other pertinent information is provided.				
REC Discussion:	Based on the details provided above, a REC is not suspected in connection with the Property.				
VEC Discussion:	Based on the available data, a VEC is not suspected.				

Name/Address:	Pioneer Mills/ 1329 W Mission Road				
Database(s):	LUST, SAN DIEGO CO. SAM, San Diego Co. HMMD, SWEEPS UST, HIST UST, CORTESE, HIST CORTESE, San Diego CO LOP and CERS				
Distance in feet:	469	**Direction:**	S	**Gradient:**	Down/Cross
Data Discussion:	It should be noted that EDR incorrectly lists this site as adjoining to the southwest; however, the site was formerly located 469 feet to the south and is now currently vacant land. The UST and LUST listing indicates that the site removed three (3) USTs from the site with a Completed-Case Closed with no further action as of 02/12//1993. The SAN DIEGO CO. SAM listing indicates that drinking water aquifer was affected on-site, with a Completed-Case Closed as of 02/12/1993. The UST listings shows the site was registered with two (2) 2,000-gallon diesel underground storage tanks and was removed in 1988. The SWEEPS/HIST UST listing indicates that the site had two (2) 2,000 USTs containing M.V. Fuel were installed in 1973. The CERS HAZ WATE listing indicates that the site was registered under using Hazardous Waste Generator, with no violations noted. The CERS TANK listing indicates that the site is on the Underground Storage Tank database. The CERS identifies the site as leaking				

	underground storage tank cleanup site. The SAN DIEGO CO LOP listing indicates that the site is on the Local Oversight Program database with a completed status case closed. Due to the closed status and all violations appear to be relatively minor in scale, these listings are not considered to be a REC in connection with the Property.
REC Discussion:	Based on the details provided above, a REC is not suspected in connection with the Property.
VEC Discussion:	Based on the available data, a VEC is not suspected.

Name/Address:	CVS Pharmacy/ 1302 W Mission Road				
Database(s):	LQG, FINDS, ECHO, San Diego Co HMMD, CERS HAZWASTE and CERS				
Distance in feet:	127	**Direction:**	SSE	**Gradient:**	Down/Cross
Data Discussion:	The RCRA-LQG identified the Property as a large quantity generator of hazardous waste, no violations were listed. The FINDS listing merely refences the RCRA database. The ECHO database identifies enforcement and compliance history of the Property in the past 5 years, no violations were listed. The SAN DIEGO HMMD listing indicates that the Property name, address, and an EPA ID of CAR000233858. The CERS HAZ WASTE database lists the Property as a hazardous waste generator with several administrative violations that have since achieved compliance. The CERS database listing indicated that the Property is on the Chemical Storage Facilities database, with no violations noted.				
REC Discussion:	Based on the details provided above, a REC is not suspected in connection with the Property.				
VEC Discussion:	Based on the available data, a VEC is not suspected.				

Name/Address:	Padilla Construction DBA Garris Plastering/ 1390 Armorlite Drive				
Database(s):	RCRA-NonGen / NLR				
Distance in feet:	Adjoining	**Direction:**	SW	**Gradient:**	Down
Data Discussion:	The RCRA-NonGen / NLR lists this site as a non-generator of hazardous waste in 2009, no violations were listed. Based on the absence of reported violations, this listing is not considered to be a REC in connection with the Property.				
REC Discussion:	Based on the details provided above, a REC is not suspected in connection with the Property.				
VEC Discussion:	Based on the available data, a VEC is not suspected.				

4.3.5 ASTM Search Distance Findings

The following is a discussion of non-adjoining sites identified as located within the ASTM specified search distance surrounding the Property. In order to keep this discussion informative and concise, discussion(s) is/are provided of the listed site(s) for each database category that appears most likely to impact the Property based on distance, area topography and/or regulatory status. Listings of sites within the applicable search distances not specifically discussed below were reviewed and concluded not to be RECs in connection with the Property or VECs based on various factors including distance, area topography, known or inferred groundwater flow direction and/or regulatory status. Listings for the following databases, if identified, have been discussed above in Sections 4.3.3 and 4.3.4: Registered Storage Tanks, Federal RCRA Generators, Federal and State EC/IC, ERNS. A copy of the full regulatory database report, including available details of all listed sites, is included in Appendix E.

Federal NPL				**# of sites:**	0	**Search Distance:**	1-mile
Notable Listing:	None						
Distance in feet:		**Direction:**		**Gradient:**			
Data Discussion:							
REC Discussion:							
VEC Discussion:							

Federal Delisted NPL				**# of sites:**	0	**Search Distance:**	1-mile
Notable Listing:	None						
Distance in feet:		**Direction:**		**Gradient:**			
Data Discussion:							
REC Discussion:							
VEC Discussion:							

Federal SEMS				**# of sites:**	0	**Search Distance:**	½-mile
Notable Listing:	None						
Distance in feet:		**Direction:**		**Gradient:**			
Data Discussion:							
REC Discussion:							
VEC Discussion:							

Federal SEMS-ARCHIVE				**# of sites:**	3	**Search Distance:**	½-mile
Notable Listing:	Torrey Chemical Company at 217 Las Posas Road						
Distance in feet:	735	**Direction:**	S	**Gradient:**	None, due to hydrologic barrier.		
Data Discussion:	NFRAP-Site does not qualify for the NPL based on existing information.						
REC Discussion:	Based on the details provided above, a REC is not suspected in connection with the Property.						
VEC Discussion:	Based on the available data, a VEC is not suspected.						

Federal CORRACTS				**# of sites:**	1	**Search Distance:**	1-mile
Notable Listing:	Signet Armorlite at 1001 Armorlite Dr						
Distance in feet:	2,184	**Direction:**	SE	**Gradient:**	None, due to hydrologic barrier.		
Data Discussion:	Site is not on a the NPL.						
REC Discussion:	Based on the details provided above, a REC is not suspected in connection with the Property.						
VEC Discussion:	Based on the available data, a VEC is not suspected.						

Federal RCRA-TSD				**# of sites:**	1	**Search Distance:**	½-mile
Notable Listing:	Signet Armorlite at 1001 Armorlite Dr						
Distance in feet:	2,184	**Direction:**	SE	**Gradient:**	None, due to hydrologic barrier.		
Data Discussion:	The site identifies it is not on the NPL.						
REC Discussion:	Based on the details provided above, a REC is not suspected in connection with the Property.						
VEC Discussion:	Based on the available data, a VEC is not suspected.						

State HAZARDOUS WASTE SITE				**# of sites:**	0	**Search Distance:**	1-mile
Notable Listing:	Torrey Chemical Company/ 217 Las Posas Road						
Distance in feet:	735	**Direction:**	S	**Gradient:**	Down		
Data Discussion:	The site is a chemical company with 550 gallons above ground storage tanks. The site screening was completed and a NFA was issued as of 10/25/1994.						
REC Discussion:	Based on the details provided above, a REC is not suspected in connection with the Property.						
VEC Discussion:	Based on the available data, a VEC is not suspected.						

State SOLID WASTE FACILITY/LANDFILL				**# of sites:**	1	**Search Distance:**	½-mile
Notable Listing:	Benchmark Landscape Inc/ 145 N Pacific Street						
Distance in feet:	793	**Direction:**	SW	**Gradient:**	Down		

Data Discussion:	The site is listed with a Facility ID 37-AA-0986 as a solid waste operation. The CERS listing indicates multiple administrative violations, some violations include failure to maintain uniform hazardous waste manifest, consolidated manifest, or bills of lading copies for three years that returned to compliance on 09/06/2014.
REC Discussion:	Based on the details provided above, a REC is not suspected in connection with the Property.
VEC Discussion:	Based on the available data, a VEC is not suspected.

State LEAKING STORAGE TANKS				**# of sites:**	20	**Search Distance:**	½-mile
Notable Listing:	Mashburn Waste/ 224 Las Posas Rd S						
Distance in feet:	683	**Direction:**	S	**Gradient:**	Down/Cross		
Data Discussion:	The LUST indicates that soil and groundwater was affected on-site, with a Completed-Case Closed as of 09/16/1992. Geotracker records identified the site is listed with a ECDO Waste and Recycling Services was identified with a second case ID T0607302493 with a case closed status of 1/21/2009.						
REC Discussion:	Based on the details provided above, a REC is not suspected in connection with the Property.						
VEC Discussion:	Based on the available data, a VEC is not suspected.						

State VOLUNTARY CLEANUP SITES				**# of sites:**	0	**Search Distance:**	½-mile
Notable Listing:	None						
Distance in feet:		**Direction:**		**Gradient:**			
Data Discussion:							
REC Discussion:							
VEC Discussion:							

State BROWNFIELD SITES				**# of sites:**	0	**Search Distance:**	½-mile
Notable Listing:							
Distance in feet:		**Direction:**		**Gradient:**			
Data Discussion:							
REC Discussion:							
VEC Discussion:							

UNMAPPED/ORPHAN LIST SITES	
	Hillmann has also reviewed a list of unmapped sites (a.k.a. "Orphan List" sites) indicated by the database report. Unmapped sites that were identified as falling within an applicable specific search distance or warranting discussion have either been discussed in the preceding tables or are detailed below:
Notable Listings:	None

4.4 Additional Environmental Record Sources

Requests have been submitted to local, municipal and state agencies for pertinent records pertaining to the Property, particularly with regard to potential environmental concerns such as petroleum storage tanks, storage and usage of hazardous substances and petroleum products, and/or known or suspected environmental contamination. Where applicable, internet research of government environmental regulatory databases was also conducted, as well as a general cursory internet search of the Property address, for information indicative of a REC. The following table summarizes the findings of the research:

Source	Type of Request	Outcome
EPA MyProperty	Online search	Hillmann reviewed available on-line records pertaining to the Property. No information indicative of a REC was identified.
EPA Envirofacts	Online search	Hillmann reviewed available on-line records pertaining to the Property. No information indicative of a REC was identified.
Department of Environmental Health (DEH)	FOI request	No response was received prior to report issuance.
CA DTSC (Envirostor)	FOI request	No response was received prior to report issuance.
CA SWRCB (GeoTracker)	Online search	Hillmann reviewed available on-line records pertaining to the Property. No information indicative of a REC was identified.
San Diego Air Pollution Control District (SDAPD)	FOI request	No response was received prior to report issuance.
www.realquest.com	On-line search	Basic Property information such as parcel number, date of construction, and building square footages were collected. Pertinent information, where obtained, is referenced in the appropriate sections of this report.

5.0 SITE RECONNAISSANCE

5.1 Methodology and Limiting Conditions

The site reconnaissance consisted of visual and/or physical observations of the Property and improvements, adjoining properties as viewed from the Property boundaries and the surrounding area based on visual observations from adjoining public thoroughfares. Building exteriors were observed at ground level, unless otherwise indicated. Where applicable, representative areas of building interiors were accessed and observed to the extent they were made safely accessible with the cooperation of the site escort.

Site Inspection Personnel:	Ms. Gabriela Cyrulik
Property Escort/Company:	Unescorted
Inspection Date:	June 8, 2021
Weather Conditions:	Sunny, 78 degrees F

5.1.1 Significant Inaccessible Areas

No significant areas of the Property inaccessible at the time of the inspection were noted.

5.1.2 Significant Limiting Site Conditions

No significant limiting site conditions were noted at the time of the site reconnaissance.

5.2 General Site Setting

5.2.1 Site and Vicinity Characteristics

Abutting Roadways:	N. Las Posas Road to the north-northeast; West Mission Road to the south
Current Property Use:	Undeveloped
Evidence of Past Property Uses:	None observed
Evidence of Past Adjoining Property Uses:	None observed
Surrounding Area Uses:	Commercial, residential, industrial, undeveloped

5.2.2 Current Adjoining Property Uses

Dir	Street Address	Description
N	N Las Posas Road	Residential
W	-	Undeveloped and residential
E	N Las Posas Road	Residential and commercial
S	1329 W Mission Road	Commercial-CVS Pharmacy

No visual observations indicative of a potential environmental concern were noted on the adjoining properties.

5.2.3 Topographic Characteristics

Terrain:	Flat to gently sloping
Direction of Downward Slope:	Towards the south-southwest
On-site Water Bodies:	None observed
Other Significant Features:	None observed

5.2.4 General Description of Structures

Buildings/# of Floors	N/A
Approx. Building Area:	N/A
Approx. Year Built:	N/A
Ancillary Structures:	None observed
Sources of Heating & Cooling:	NA
Potable Water/Sewage Disposal:	No potable water or sewer services were present at the Property.

5.3 Interior & Exterior Observations

5.3.1 Storage/Usage of Hazardous Substances and Petroleum Products

The following hazardous substances and petroleum products were observed to be stored and used by property occupants:

Occupant	Substance	Qty/Container Type	Storage Conditions
NA	No significant storage or use noted		

5.3.2 Drums

No hazardous substance or petroleum product drums were noted on the Property.

5.3.3 Unidentified Substance Containers

No unidentified substance containers suspected of containing hazardous substance or petroleum product were noted on the Property.

5.3.4 Other Hazardous Substances/Petroleum Products

No other containers of hazardous substances or petroleum products were noted on the Property.

5.3.5 Bulk Petroleum/Hazardous Material Storage Tanks

The following storage tanks for bulk petroleum or hazardous material storage were identified or reported to be present; or are suspected to be present based on visual observations:

AST/ UST	Product	Capacity	Construction	Year Installed	Status	Location/Notes
(none)						

5.3.6 PCBs in Oil Filled Electrical/Hydraulic Equipment

No oil-filled electrical or hydraulic equipment was identified at the Property.

5.3.7 Odors

No strong, pungent or noxious odors were noted at the Property.

5.3.8 Pools of Liquid

No standing water or pools of liquid likely to contain hazardous substances or petroleum products were noted at the Property.

5.3.9 Interior Stains or Corrosion

The following interior stains and/or corrosion due to hazardous substance/petroleum products spills/releases were noted at the Property:

5.3.10 Interior Drains/Sumps

No interior areas were identified at the Property.

5.3.11 Exterior Pits/Ponds/Lagoons

No exterior pits, ponds or lagoons was identified on the Property in connection with waste treatment or disposal.

5.3.12 Stained Soil, Pavement/Stressed Vegetation

No stained soil, pavement or stressed vegetation was observed at the Property.

5.3.13 On-Site Solid Waste Disposal/Fill Material

The following evidence of on-site solid waste dumping/disposal was observed:

Multiple large stockpiles of undocumented soil fill material were observed at the southwest boundary of the Property. Due to a concern of undocumented soil piles on the Property, a limited soil sampling and analysis was conducted at the time of the site inspection. Four (4) soil samples were collected from each of the undocumented soil piles, and analyzed for organochlorine pesticide (OCP) via EPA method 8081A, heavy metals, and VOCs. The analytical results indicated only minor detections of OCPs and heavy metals, all below the RSLs for residential use, and no TPH and/or VOCs were detected in any of the soil samples. Therefore, the undocumented soil piles do not indicate a REC with connection to the Property.

5.3.14 Waste Water

Sanitary sewage generated at the Property is discharged via a connection to the local public sewer system.

Storm water runoff at the Property is discharged off-site to local streams/drainage systems via overland flow.

5.3.15 Septic Systems

No septic systems were identified at the Property.

5.3.16 Wells

No potable, monitoring or other groundwater wells were identified at the Property.

5.3.17 Railroad Spurs

No railroad spurs were identified on the Property.

6.0 INTERVIEWS

6.1 Interviews with Past and Present Owners and Occupants

Subject	Name/Affiliation	Summary
Property Owner / Representative	Ms. Johanna Crooker/ Forward Planning Manager	Ms. Crooker completed an environmental questionnaire and was interviewed during the site inspection. Pertinent information from the interview and questionnaire, where applicable, has been referenced in various sections of this report.
Property Occupants	Not applicable	Property was unoccupied.
Past Owners, Occupants, Operators	Not applicable	Past owners/occupants of the Property were not available for interview at the time of the assessment.
Owners/Occupants of Adjoining or Nearby Properties	Not applicable	The Property was not an abandoned property with evidence of unauthorized uses or uncontrolled access; therefore, interviews with adjoining or nearby property owners or occupants were not conducted.

6.2 Interviews with State and/or Local Government Officials

Written and on-line requests for environmental records of the Property from State and Local governmental agencies are detailed in Section 4.4.

7.0 BUSINESS ENVIRONMENTAL RISKS

In accordance with the contract agreement for this assessment, Hillmann has performed cursory reviews of several potential Business Environmental Risks (also known as "Non-Scope Considerations"). The ASTM E1527-13 standard defines the term business environmental risk (BER) as, *"a risk which can have a material environmental or environmentally-driven impact on the business associated with the current or planned use of a parcel of commercial real estate, not necessarily limited to those environmental issues required to be investigated in this practice."*

7.1 Asbestos-Containing Material (ACM)

The contracted scope of work included a cursory visual screening of the accessed portions of buildings at the Property built prior to 1990 for suspect asbestos containing materials (ACM). The information provided in this section, where applicable, is limited to identification of potential suspect materials in the readily accessible and observed areas of the building, and their general condition. This is not intended to be a comprehensive survey for the presence of ACM, and no testing has been conducted.

No buildings were present at the Property.

7.2 Lead-Based Paint

The contracted scope of work included a cursory visual screening of the condition of painted surfaces in the accessed areas of residential buildings/units built prior to 1980. This is not intended to constitute a comprehensive survey for LBP or potential lead hazards, and no testing has been conducted.

No residential buildings were present at the Property.

7.3 Radon

Data compiled by the USEPA, as summarized by the regulatory database report, indicated that the Property is located in an area classified as Zone 3 or 'low risk' area for radon. Radon testing was not included in the scope of this assessment.

7.4 Mold/Microbial Damage

As per the contracted scope of work, Hillmann conducted a cursory visual screening of the accessed areas of the building for evidence of significant damage to building materials and finishes as result of moisture intrusion and/or mold/microbial growth. Given the absence of building structures at the Property, mold/microbial growth is not considered to be a significant environmental concern.

7.5 NWI Mapped Wetlands

As indicated in the Physical Setting Source table of Section 4.1, no NWI mapped wetlands areas were depicted at the Property by the EDR Geocheck-Physical Setting Source Addendum (attached in Appendic E).

The scope of work for this assessment excludes a visual determination of regulated wetlands at the Property. It is emphasized that, regardless of the wetlands data obtained via the EDR Geocheck-Physical Setting Source Addendum, a delineation of regulated wetlands by a qualified professional would be warranted to determine the presence or absence of regulated wetlands at the Property.

7.6 Lead in Drinking Water

The scope of work for this assessment included a review of the potential for elevated levels of lead in drinking water by determining the source of the drinking water supply and a review of available compliance or testing data.

No potable water service was identified at the Property.

8.0 REFERENCES

ASTM E1527-13-Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process; ASTM International, 2013

ASTM E12600-15-Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transaction, ASTM International, 2015

EDR Radius Map Report with GeoCheck™, Environmental Data Resources, 2020

EDR City Directory Abstract Report, Environmental Data Resources, 2020

EDR Sanborn Map Report, Environmental Data Resources, 2020

Methodology for Identifying the Area of Concern Around a Property Potentially Impacted by Vapor Migration from Nearby Contaminated Sources; A. Buonicore, 2011

Phase I Environmental Site Assessment Report for vacant parcel northwest corner of West Mission Road and Las Posas Road, San Marcos, CA 92069; Krazan and Associates, Inc. October 15, 2003.

9.0 APPENDICES

Appendix A	Site Diagram / Vicinity Map
Appendix B	Site Photographs
Appendix C	Questionnaires / User Provided Information
Appendix D	Historical Records Documentation
Appendix E	Regulatory Records Documentation
Appendix F	Other Documents / Lab Results
Appendix G	Project Personnel Qualifications

APPENDIX A

MAPS / DIAGRAMS



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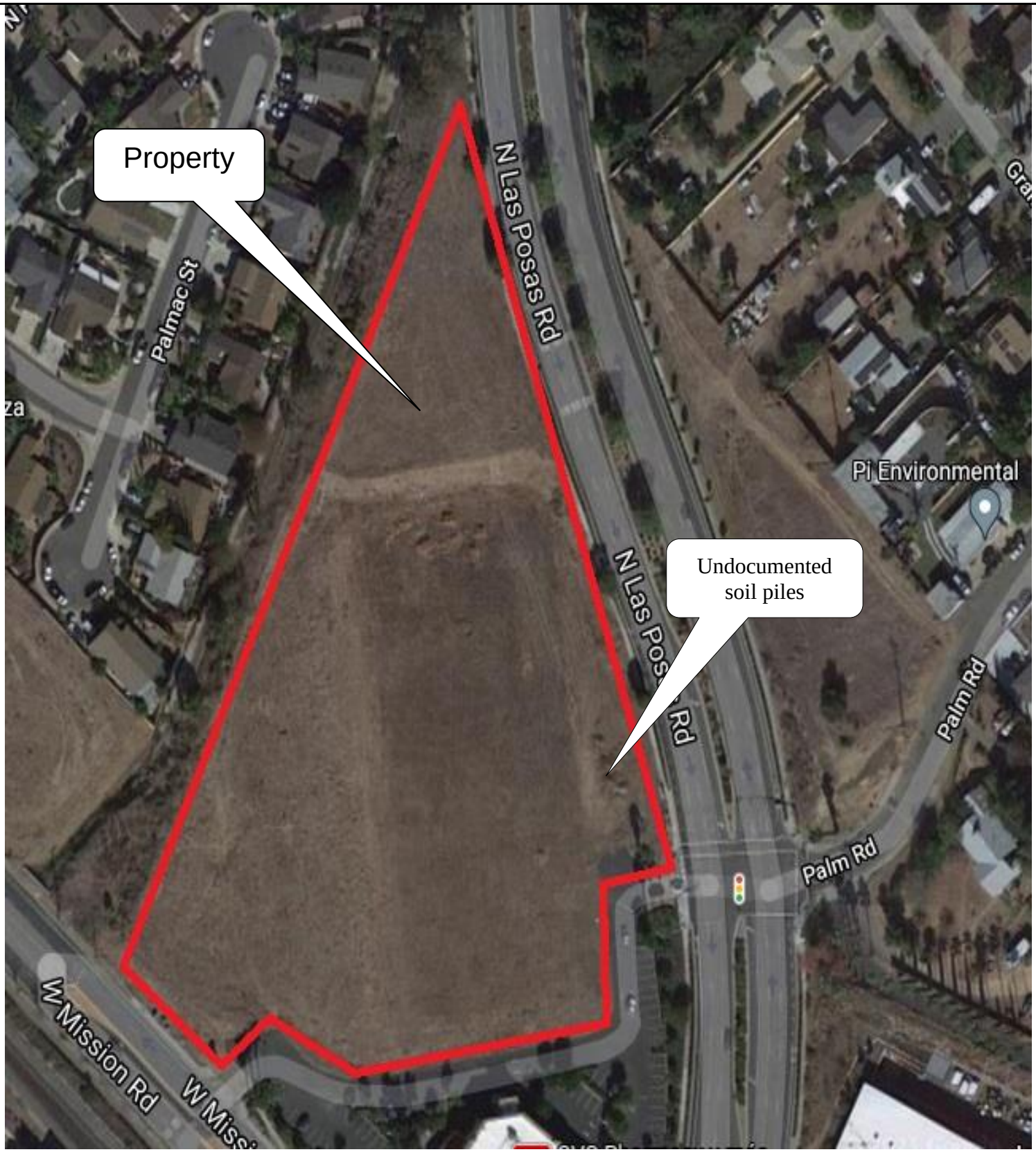
Figure 1: Site Vicinity Map

Las Posas Road and West Mission Road
San Marcos, California

N

SCALE: (NOT TO SCALE)

PROJECT No.: C3-8450



HILLMANN CONSULTING

Figure 2: Site Diagram

Las Posas Road and West Mission Road
San Marcos, California

N

SCALE: (NOT TO SCALE)

PROJECT No.: C3-8450

APPENDIX B

SITE PHOTOGRAPHS

SITE PHOTOGRAPHS



View of the Property facing south-southeast



View of undocumented soil stockpiles located at the southeastern corner of the Property



View of undocumented soil stockpiles located at the southeastern corner of the Property



View of the Property facing north-northwest



View of the Property facing west



View of the Property facing east

PHASE I ESA - SITE PHOTOGRAPHS

Las Posas Road and West Mission Road ,
San Marcos, California

Project No.:	C3-8450

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SITE PHOTOGRAPHS



View of the Property facing south



View of the Property facing northeast



View of the west-northwest adjoining properties



View of the Property facing east



View of dry weeds and grass stockpiles located at the northern boundary of the Property



Closer view of dry weeds and grass stockpiles located at the northern boundary of the Property

PHASE I ESA - SITE PHOTOGRAPHS

Las Posas Road and West Mission Road ,
San Marcos, California

Project No.:	C3-8450

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APPENDIX C

QUESTIONNAIRES/USER PROVIDED DOCUMENTATION

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ASTM E 1527-13/AAI - USER QUESTIONNAIRE

Instructions: This form should be completed by a representative of the USER of the Phase I ESA report and returned to Hillmann via email or in-person. **The report USER is the entity on whose behalf the assessment is being prepared and that will be relying on the report for liability protections.**

In order to qualify for one of the Landowner Liability Protections (LLPs) offered by the Small Business Liability Relief and Brownfields Revitalization Act of 2001 (the "Brownfields Amendments"),188 the USER must conduct the following inquiries required by 40 CFR 312.25, 312.28, 312.29, 312.30, and 312.31. These inquiries must also be conducted by EPA Brownfield Assessment and Characterization grantees. The user should provide the following information to the environmental professional. Failure to conduct these inquiries could result in a determination that "all appropriate inquiries" is not complete. Please complete the following questionnaire and provide any of the referenced information (if available) to Hillmann.

USER Company Name:	MLC Holdings, Inc.	**USER Mailing Address:**	5 Peters Canyon Road Suite 310 Irvine, CA 92606
Respondent Name & Email Address:	Johanna Crooker johanna.crooker@mlcholdings.net	**Date of Completion:**	6/14/2021

Property Address:		**YES**	**NO**	**DETAIL (optional):**
Environmental liens that are filed or recorded against the property: Did a search of recorded land title records identify any environmental liens filed or recorded against the property under federal, tribal, state or local law?		☐	☑	
Activity and use limitations that are in place on the property or that have been filed or recorded against the property: Did a search of recorded land title records (or judicial records where appropriate, identify any AULs, such as engineering controls, land use restrictions or institutional controls that are in place at the property and/or have been filed or recorded against the property under federal, tribal, state or local law?		☐	☑	
Specialized knowledge or experience of the person seeking to qualify for the LLP: Do you have any specialized knowledge or experience related to the property or nearby properties? For example, are you involved in the same line of business as the current or former occupants of the property or an adjoining property so that you would have specialized knowledge of the chemicals and processes used by this type of business?		☐	☑	
Relationship of the purchase price to the fair market value of the property if it were not contaminated: Does the purchase price being paid for this property reasonably reflect the fair market value of the property? If you conclude that there is a difference, have you considered whether the lower purchase price is because contamination is known or believed to be present at the property?		☑	☐	

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Property Address:		**YES**	**NO**	**DETAIL (optional):**
Commonly Known or Reasonably Ascertainable Information: Are you aware of commonly known or reasonably ascertainable information about the property that would help the environmental professional to identify conditions indicative of releases or threatened releases? **ANSWER BELOW**				
- Do you know the past uses of the property?		☑	☐	Undeveloped (No previous uses)
- Do you know of specific chemicals that are present or were once present at the property?		☐	☑	None to our knowledge
- Do you know of spills or other chemical releases that have taken place at the property?		☐	☑	None to our knowledge
- Do you know of any environmental cleanups that have taken place at the property?		☐	☑	None to our knowledge
The degree of obviousness of the presence or likely presence of contamination at the property, and the ability to detect the contamination by appropriate investigation: Based on your knowledge and experience related to the property are there any obvious indicators that point to the presence or likely presence of releases at the property?		☐	☑	No obvious indicators
Litigation/Administrative Proceedings/Government Notices As the User of this ESA, do you have knowledge of (1) any pending, threatened, or past litigation relevant to hazardous substances or petroleum products in, on, or from the property; (2) any pending, threatened, or past administrative proceedings relevant to hazardous substances or petroleum products in, on or from the property; and (3) any notices from any governmental entity regarding any possible violation of environmental laws or possible liability relating to hazardous substances or petroleum products.		☐	☑	None to our knowledge

Additional Details, if applicable:

PHASE I ENVIRONMENTAL SITE ASSESSMENT
VACANT PARCEL
NORTHWEST CORNER OF WEST MISSION AND LAS POSAS ROAD
SAN MARCOS, CALIFORNIA

Project No. 114-03128
October 15, 2003

Prepared for:
Ms. Connie L. Fox
World Premier Investments, Inc.
3 Imperial Promenade, Suite 550
South Coast Metro, CA 92707
(714) 662-6900

Prepared by:
Krazan & Associates, Inc.
4221 Brickell Street
Ontario, CA 91761
(909) 974-4400

Krazan & ASSOCIATES, INC.
SITE DEVELOPMENT ENGINEERS

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October 15, 2003

Project No. 114-03128

PHASE I ENVIRONMENTAL SITE ASSESSMENT
VACANT PARCEL
NORTHWEST CORNER OF WEST MISSION ROAD
AND LAS POSAS ROAD
SAN MARCOS, CALIFORNIA

1.0 EXECUTIVE SUMMARY

Krazan & Associates, Inc. (Krazan) has performed a Phase I Environmental Site Assessment (ESA) of the vacant parcel located at the northwest corner of West Mission Road and Las Posas Road in San Marcos, California. (subject site). Krazan conducted the Phase I ESA of the subject site in conformance with the American Society for Testing and Materials (ASTM) E1527-00 *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*. The Phase I ESA constitutes appropriate inquiry designed to identify Recognized Environmental Conditions (RECs) in connection with the previous ownership and uses of the subject site as defined by ASTM E1527-00.

ASTM E1527-00 Section 1.1.1 *Recognized Environmental Conditions* – The term *recognized environmental conditions* means the presence or likely presence of any *hazardous substances* or *petroleum products* on a *property* under conditions that indicate an existing release, a past release, or a material threat of a release of any *hazardous substances* or *petroleum products* into structures on the *property* or into the ground, groundwater, or surface water on the *property*.

Krazan's findings of this Phase I ESA revealed no evidence of RECs in connection with the subject site.

2.0 PURPOSE AND SCOPE OF ASSESSMENT

2.1 Purpose

This Phase I ESA is designed to identify the presence of RECs in connection with the subject site through the research of previous and current ownership and uses of the subject site. Additionally, the purpose of the Phase I ESA is to permit the user to satisfy one of the requirements to qualify for what is

commonly known as the "innocent landowner" defense to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) liability as described by 42 U.S.C. Section 9601 (35)(B).

2.2 Scope of Work

The Phase I ESA includes the following scope of work: a) a review of local regulatory agency records, b) a review of local, state, and federal regulatory agency lists compiled by Environmental Data Resources, Inc. (EDR), c) a review of historical topographic maps and aerial photographs, d) a review of pertinent building permit records and city directories, e) a site reconnaissance of existing on-site conditions and observations of adjacent property uses, and f) interview(s) with person(s) knowledgeable of the previous and current ownership and uses of the subject site. The scope of work for this Phase I ESA conforms to ASTM E1527-00. Krazan was provided written authorization to conduct the Phase I ESA by Ms. Connie L. Fox of World Premier Investments, Inc. on September 25, 2003, in accordance with the scope of work outlined in Krazan's Proposal/Cost Estimate No. PLA03-193 dated September 23, 2003.

3.0 PHYSICAL SETTING

General property information and property use are summarized in Table I. Refer to the Vicinity Map (included in Appendix A).

TABLE I
Summary of Property Information

Topographic Map:	U.S. Geological Survey, 7.5 minute San Marcos, California topographic quadrangle map, dated 1968, photorevised 1983.
Topographic Map Location:	Section 10, Township 12 South, Range 3 West, San Bernardino Baseline and Meridian.
Topography:	Gradual slope to the south; the elevation is approximately 580 feet above mean sea level.
General Location:	Northwest corner of West Mission Road and Las Posas Road, San Marcos, California.
Assessor's Parcel Number:	219-121-10, 11 and 12
Approximate Depth to Groundwater:	Approximately 65-80 feet below ground surface (bgs), San Diego Regional Water Quality Control Board (SDRWQCB).
Regional Groundwater Flow Direction:	Southerly, SDRWQCB.
Existing Use:	Vacant parcel.

3.1 Geology and Hydrogeology

The subject site is located within the Peninsular Ranges Geomorphic Province in north central San Diego County. The site is located on the eastern edge of a belt of mountainous terrain comprised predominately of uplifted granitic rock materials of the Cretaceous age Southern California Batholith. Typically the granitic rock materials range from near surface weathered silty and clayey sands to very dense, unweathered crystalline granitic rock at depth. More recent surficial deposits include alluvium, colluvium and artificial materials. Alluvial and colluvial sediments are generally present near the base of slopes and within the drainage course areas on-site.

Groundwater beneath the site lies within the Escondido Hydrologic Sub-unit of the Carlsbad Hydrographic Unit as designated by the SDRWQCB. Groundwater within this sub-unit is designated by the SDRWQCB as a beneficial use area. Groundwater is contained within the terrace deposits that overlie the relative impermeable sedimentary bedrock. The groundwater is reported to be first encountered at a depth of approximately 65 to 80 feet below ground surface (bgs) with a general direction of flow towards the south. There are no known regional groundwater impairments in the vicinity of the subject site.

4.0 SITE RECONNAISSANCE

A site reconnaissance, which included a visual observation of the subject site and surrounding properties, was conducted by Krazan's environmental assessor on October 8, 2003. The objective of the site reconnaissance is to obtain information indicating the likelihood of identifying Recognized Environmental Conditions, including hazardous substances and petroleum products, in connection with the property (including soils, surface waters, and groundwater).

4.1 Observations

Table II summarizes conditions encountered during our site reconnaissance. A discussion of physical observations follows Table II. Refer to the Site Map (Figure No. 1) and color photographs following the text for the locations of items discussed in this section of the report.

TABLE II
Summary of Site Reconnaissance

Feature	Observed	Not Observed
Structures (existing)		X
Evidence of past uses		X
Hazardous substances and/or petroleum products (including containers)		X
Aboveground storage tanks (ASTs)		X
Underground storage tanks (USTs) or evidence of USTs		X
Strong, pungent, or noxious odors		X
Pools of liquid likely to be hazardous materials or petroleum products		X
Drums		X
Unidentified substance containers		X
Pad-mounted transformer/Pole-mounted transformer		X
Subsurface hydraulic equipment		X
Heating/ventilation/air conditioning (HVAC)		X
Stains or corrosion on floors, walls, or ceilings		X
Floor drains and sumps		X
Pits, ponds, or lagoons		X
Stained soil and/or pavement		X
Stressed vegetation		X
Waste or wastewater discharges to surface or surface waters on subject site (including stormwater)		X
Wells (irrigation, domestic, dry, injection, abandoned, monitoring wells)		X
Septic Systems		X

- The subject site comprises one irregular-shaped parcel of land totaling approximately 9.38-acres. At the time of Krazan's site reconnaissance, the subject site was vacant land, located on the northwest corner of West Mission Road and Las Posas Road in San Marcos, California. The subject site appeared to be recently tilled and was covered in some areas with native grasses and shrubs. Minor amounts of household trash (i.e., paper cups, plastic bags, glass bottles, etc.) was scattered throughout the subject site.

- During the physical observations of the subject site, no hazardous materials/waste were observed on or adjacent to the subject site. Exposed surface soils did not exhibit obvious signs of discoloration. No obvious evidence (vent pipes, fill pipes, dispensers, etc.) of USTs were noted within the area observed. There was no evidence of any fill material observed on the subject site. No standing water or major depressions were observed on the subject site. No indications of former structures, such as foundations, were observed on the subject site.

- No electrical power lines rated at 69,000 volts or higher were located within 100 feet of the subject site. No pole or pad-mounted transformers were observed on the subject site.

4.2 Adjacent Streets and Property Usage

Table III summarizes the current adjacent roads and site uses observed during the site reconnaissance.

TABLE III
Adjacent Streets and Property Use

Direction	Adjacent Street	Adjacent Property Use
North	None	Residential
East	Las Posas Road	Residential/Gasoline Station
South	West Mission Road	Railroad Tracks
West	None	Residential

Based on the observed uses of the properties located immediately adjacent to the subject site, it is unlikely that significant quantities of hazardous materials are stored at the adjacent properties with the exception of the gasoline service station located on the northeast corner of West Mission Road and Las Posas Road. The adjoining gasoline station was not listed on government databases of known unauthorized releases of hazardous materials to the subsurface and is therefore, deemed to have a low potential to environmentally impact the subject site.

4.3 Asbestos-Containing Building Materials

No structures are located on the subject site. Therefore, asbestos-containing building materials (ACMs) are not an on-site environmental concern at this time.

4.4 Lead-Based Paint

No structures are located on the subject site. Therefore, lead-based paint (LBP) is not an on-site environmental concern at this time.

4.5 Radon

Radon is a radioactive gas that is found in certain geologic environments and is formed by the natural breakdown of radium, which is found in the earth's crust. A radon survey was not included within the scope of this investigation; however, the State of California Department of Health Services (DHS) conducted a statewide radon survey during 1990-1991, which entailed testing of radon in homes in designated geographic areas. Radon detection devices were placed in homes throughout the study region to determine geographic regions with elevated radon concentrations. The U.S. EPA has set the safety standard for radon gas in homes to be 4 pico Curies per liter (pCi/l).

Although the DHS radon survey was conducted in residences and not in commercial properties, the radon concentrations in the geographical region of the subject site average below 4 pCi/l. Therefore, radon is

not anticipated to adversely impact the subject site. However, since radon levels may vary from one area to another, one way to accurately gauge radon levels present on the subject site is to administer a test.

4.6 Potable Water Source

The water purveyor for the subject site is the Vallecitos Water District (VWD). The VWD's water quality monitoring is an on-going program with water samples obtained and a water quality report written on an annual basis. It is the responsibility of the VWD to provide customers with potable water in compliance with the California State Maximum Contaminant Levels (MCLs) for primary drinking water constituents in water supplied to the public.

4.7 Sewage Disposal System

The VWD was contacted regarding historical sewage disposal practices at the site. According to the VWD, no sewer service connection date was available for the subject site. No sewer violations were on file for the subject site, and there were no records of septic systems historically being utilized at the subject site.

5.0 SITE USAGE SURVEY

The property usage survey included assessing property history, and reviewing local, state, and federal regulatory agency records.

5.1 Site History

A review of historical aerial photographs, City of San Marcos Building Department records, Sanborn Fire Insurance Maps (SFIMs), and a Phase I ESA Questionnaire were used to assess the history of the subject site.

Aerial Photograph Interpretation

Historical aerial photographs dated 1946, 1953, 1963, 1976, 1989, 1994 and 2001 were reviewed to assess property history. These photographs were obtained from Environmental Data Resources, Inc. (EDR) in Southport, Connecticut. Aerial photograph coverage for the years prior to 1946 was not reasonably ascertainable or available. The aerial photograph summary is provided in Table IV.

TABLE IV
Summary of Aerial Photograph Review

Year/Scale	Site Use	Site and Adjacent Property Observation
1946 1″ = 655′	Undeveloped	The subject site appears to be undeveloped native land. Undeveloped native land adjoins the subject site to the north. What appears to be a single-lane driveway to a residential structure located northeast of the subject site adjoins to the east, beyond which is vacant land. West Mission Road (two lanes), adjoins the subject site to the south, beyond which is vacant land. Undeveloped native land adjoins the subject site to the west.
1953 1″ = 833′	Undeveloped	The subject site and adjoining properties appear to be developed as observed in the 1946 aerial photograph with the exception of the development of Palomar College approximately one-quarter mile northeast of the subject site.
1963 1″ = 555′	Undeveloped	The subject site and adjoining properties appear to be developed as observed in the 1953 aerial photograph with the exception of single-family residential development approximately one-quarter mile northeast of the subject site and what appears to be a commercial building adjoining the subject site on the south side of West Mission Road.
1976 1″ = 600′	Undeveloped	The subject site and adjoining properties appear to be developed as observed in the 1963 aerial photograph with the exception of an increase in residential development adjoining to the northwest and commercial development south of West Mission Road.
1989 1″ = 666′	Undeveloped	The subject site and adjoining properties appear to be developed as observed in the 1976 aerial photograph.
1994 1″ = 666′	Undeveloped	The subject site and adjoining properties appear to be developed as observed in the 1989 aerial photograph with the exception of the construction of a gasoline station on the northeast corner of West Mission Road and Las Posas Road and increased commercial development south of West Mission Road.
2001 1″ = 690′	Undeveloped	The subject site and adjoining properties appear to be developed as observed in the 1994 aerial photograph.

City of San Marcos Building Department

On October 8, 2003, the City of San Marcos Building Department (SBD) was contacted regarding records for the subject site APN. According to the SBD officials, no records for any structures were on file for the subject site APN and no address has been assigned to the subject site.

City Directories

City Directories were not searched due to the historical and current absence of structures and addresses associated with the subject site.

Sanborn Fire Insurance Maps

Krazan reviews SFIMs to evaluate prior land use at the subject site and adjacent properties. SFIMs typically exist for cities with populations of 2,000 or more, the coverage dependent on the location of the property. On September 25, 2003, Krazan contracted with EDR to provide a Fire Insurance Map Abstract indicating the availability of historic SFIMs for the subject site and adjacent properties as far back as 1867. EDR's search of collections at the Library of Congress, University Publications of America, and various public and local sources revealed no map coverage for the subject site and adjacent properties.

Phase I Environmental Site Assessment Questionnaire

On October 9, 2003, a Phase I ESA Questionnaire was submitted to Ms. Fox, of World Premier Investments, Inc. A completed questionnaire was received from Ms. Fox on October 14, 2003. Ms. Fox has been familiar with the subject site for approximately the past 12 years. According to Ms. Fox, to the best of her knowledge, no on-site treatment and/or discharge of waste; on-site leach fields, dry wells, sumps, or disposal ponds; no use, storage or disposal of hazardous materials; no known existing or former USTs or ASTs; no known on-site hazardous materials spills; buried materials; on-site monitoring, domestic, or irrigation wells; or any other items of environmental concern are associated with the subject site. A copy of the Phase I ESA Questionnaire is included in Appendix B.

5.2 Agricultural Chemicals

Review of the aerial photographs dating to 1946 reveals that the subject site has not been used for agricultural purposes since at least that time. Based upon the length of time since the subject site and adjacent properties may have last been used for agricultural purposes, it is not anticipated that elevated concentrations of environmentally-persistent pesticides would be found in the near-surface soils of the subject site. Krazan's sampling and analysis of surface soils from properties with similar histories has typically yielded non-detectable results for analysis of environmentally-persistent pesticides. Therefore, it is not anticipated that elevated concentrations of environmentally-persistent pesticides would be found in the near-surface soils of the subject site.

5.3 Local Regulatory Agency Interface

A review of the most current local regulatory agency records was conducted to help determine if hazardous materials have been handled, stored, or generated on the subject site and/or the adjacent properties and businesses.

City of San Marcos Fire Department

On October 8, 2003, the City of San Marcos Fire Department (SMFD) was contacted regarding records of historical hazardous/flammable permits, hazardous materials handling, hazardous/flammable incidents, and/or underground storage tanks that are on file for the subject site. According to the SMFD, no records for the subject site were available.

San Diego County Department of Environmental Health

On September 26, 2003, the San Diego County Department of Environmental Health (SDCDEH) was contacted regarding records of historical hazardous/flammable permits, hazardous materials handling, hazardous/flammable incidents, and/or underground storage tanks that are on file for the subject site. According to the SDCDEH, no records for the subject site were available.

5.4 Regulatory Agency Lists Review

Several agencies have published documents that list businesses or properties which have handled hazardous materials or waste or may have experienced site contamination. The lists consulted in the course of our assessment were compiled by EDR and Krazan on September 25, 2003, and represent reasonably ascertainable current listings. Krazan did not verify the locations and distances of every property listed by EDR. Krazan verified locations and distances of the properties Krazan deemed as having the potential to pose an environmental impact to the subject site. The actual location of the listed properties may differ from the EDR listings. Table V summarizes the listed properties located within the ASTM Search Radii. The actual distances of the listed properties (which are summarized in Table V) are based on observations during Krazan's site reconnaissance. No unmapped properties were determined to be located within the search radii specified for each of the following lists. General information for the Regulatory Agency Lists reviewed, the Regional Map, and the EDR report are included in Appendix A.

TABLE V
Listed Properties

EDR Radius Map Summary						
Database	**Type of Records**	**Subject Site**	**<1/8 Mile**	**1/8 to ¼ Mile**	**¼ to ½ Mile**	**½ to 1 Mile**
Federal ASTM Standard:						
NPL	Sites for priority cleanup	0	0	0	0	0
Proposed NPL	Proposed NPL cleanup sites	0	0	0	0	0
CERCLIS	Database of potentially hazardous waste sites for possible inclusion on the NPL	0	0	0	0	---
CERC/NFRAP	Sites designated as No Further Action and removed from the CERCLIS	0	0	0	---	---
CORRACTS	RCRA Corrective Action Activity	0	0	0	1	0

TABLE V (cont'd)
Listed Properties

RCRIS-TSD	RCRA registered sites for transport, store and disposal	0	0	0	1	---
RCRIS Lg. Quan. Gen.	RCRA registered large generators of hazardous waste facilities	0	0	0	0	---
RCRIS Sm. Quan. Gen.	RCRA registered small generators of hazardous waste facilities	0	0	5	---	---
ERNS	Emergency Response Notification System of spills	0	0	---	---	---
State ASTM Standard:						
AWP	Annual Workplan Sites targeted for cleanup	0	0	0	0	0
Cal-Sites	Confirmed hazardous substance release properties	0	0	0	0	0
CHMIRS	Accidental releases or spills sites	0	1	1	6	7
Cortese	Hazardous Waste & Substances Sites List	0	1	0	6	29
Notify 65	Impact to drinking water and potential health risk to the public	0	0	1	0	1
Toxic Pits	Toxic Pits cleanup facilities	0	0	0	0	0
SWF/LF (SWIS)	Active, Closed, and Inactive Landfills	0	0	0	0	---
WMUDS/SWAT	Waste Management Unit Database for tracking and inventory of waste management units	0	0	0	0	---
LUST	Leaking Underground Storage Tanks report	0	1	0	9	---
CA Bond Exp Plan	Bond Expenditure Plan	0	0	0	0	0
UST	Registered underground tanks	0	1	1	---	---
CA FID UST	Facility Inventory Database of active and inactive UST locations	0	0	0	---	---
HIST UST	Hazardous substance storage container database of UST sites	0	1	1	---	---
Federal ASTM Supplemental:						
CONSENT	NPL Superfund list of sites after settlement of litigation matters	0	0	0	0	0
ROD	Records of Decision document sites aid in the cleanup of NPL sites	0	0	0	0	0
Delisted NPL	NPL sites deleted where no further response is appropriate	0	---	---	---	---
FINDS	Facility Index System/Facility Identification Initiative Program Summary Report	0	---	---	---	---
HMIRS	HMIRS contains hazardous material spill incidents reported to DOT	0	---	---	---	---
MLTS	Material Licensing Tracing System lists sites which possess or use radioactive materials	0	---	---	---	---
MINES	Mines Master Index File	0	0	0	---	---
NPL Liens	NPL listing of filed Superfund Liens sites	0	---	---	---	---
PADS	Identifies generators, transporters, commercial storers and/or brokers and disposers of PCBs	0	---	---	---	---
RAATS	Records base on enforcement actions issued to major violators	0	---	---	---	---
TRIS	Toxic Release Inventory System database	0	---	---	---	---
TSCA	Identifies manufacturers and importers of chemical substances	0	---	---	---	---
FTTS	Tracking system of pesticide enforcement actions and compliance activities	0	---	---	---	---
State or Local ASTM Supplemental						
AST	Registered aboveground tanks	0	---	---	---	---
CLEANERS	A list of dry cleaner related facilities	0	0	1	---	---
CA WDS	Sites which have been issued waste discharge requirements	0	---	---	---	---
DEED	List of Deed Restrictions	0	---	---	---	---

TABLE V (cont'd)
Listed Properties

CA SLIC		0	0	0	3	---
HAZNET	Copies of hazardous waste manifests received by the DTSC	0	1	16	---	---
Additional Regulatory Agency Lists Information						
US EPA, Federal Superfund Liens List and California Liens		0	0	0	0	0
Cal EPA, Recorded Dead Restrictions		0	0	0	0	0
The Munger Map Book California-Alaska Oil and Gas Fields Munger Maps		0	0	0	0	0

0 = No sites in radius identified
-- = Not Searched

The subject site was not listed in the EDR-provided government database report. One site with a reported release of hazardous materials to the subsurface was reported within a one-eighth-mile radius of the subject site. The Pioneer Mills facility at 1329 West Mission Road, located approximately 239 feet southwest of the subject site was identified on the leaking UST (LUST) database as having had an unauthorized release of petroleum hydrocarbons in July 1988 that impacted groundwater. The property was remediated to the satisfaction of the lead regulatory agency and a "case closure" designation was issued in February 1993. The adjoining gasoline station (San Marcos Gas) at 1290 West Mission Road, located on the northeast corner of West Mission Road and Las Posas Road was identified on the registered UST database as utilizing four 10,000-gallon gasoline USTs. The San Marcos Gas gasoline station was not listed on government databases of known unauthorized releases of hazardous materials to the subsurface and is therefore, deemed to have a low potential to environmentally impact the subject site at this time.

In general, only potentially hazardous materials released from facilities located approximately up-gradient and within a few hundred feet of the site, or in a cross-gradient direction close to the site, are judged to have a reasonable potential of migrating to the site. This opinion is based on the assumption that materials generally do not migrate large distances laterally within the soil, but rather tend to migrate with groundwater in the general direction of groundwater flow. Therefore, based upon various influencing factors including distance from the subject site, down-gradient location and current regulatory status (case closed), the Pioneer Mills facility LUST site is deemed to have a low potential to environmentally impact the subject site.

The remaining properties within the specified search radius of the subject site, which appear on local, state or federally published lists of sites that use or have had releases of hazardous materials, are of sufficient distance and/or situated cross/downgradient to the subject site, such that impact to the subject site is not likely.

6.0 DISCUSSION OF FINDINGS

The subject site comprises one irregular-shaped parcel of land totaling approximately 9.38-acres. Historically the subject site has been vacant land dating to at least 1946. At the time of Krazan's site reconnaissance the subject site was vacant land located on the northwest corner of West Mission Road and Las Posas Road in San Marcos, California. The subject site is covered by native grasses and shrubs. Minor amounts of household trash were scattered throughout the subject site. However, no hazardous materials or other items of environmental concern were observed on or adjacent to the subject site during the site reconnaissance. Based on the current and historic use of the subject site, the likelihood of an impact to the subsurface of by hazardous materials utilized on the subject site appears to be low.

Visual observations of the subject site revealed that exposed surface soils did not exhibit obvious signs of discoloration. No obvious evidence (vent pipes, fill pipes, dispensers, etc.) of USTs was noted within the area observed. No standing water was observed on the subject site. No structures or any indications of previous or former structures, such as foundations, were observed on the subject site. There was no evidence of any fill material observed on the subject site.

One site with a reported release of hazardous materials to the subsurface was reported within a one-eighth-mile radius of the subject site. However, based upon various influencing factors including distance from the subject site, down-gradient location and current regulatory status (case closed), the Pioneer Mills facility LUST site is deemed to have a low potential to environmentally impact the subject site. Based upon Krazan's field observations of adjacent properties, review of the EDR report and regulatory agency records, the potential for adverse environmental impact to the subject site from adjacent properties including the adjoining gasoline station (San Marcos Gas) appears to be low.

Krazan's research of the subject site facility and area properties of environmental concern for this Phase I ESA did not identify evidence of RECs in connection with the subject site.

7.0 CONCLUSIONS/OPINIONS

We have conducted a Phase I ESA of the subject site in conformance with the scope and limitations of the ASTM E1527-00 *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*. Any deviations from this practice were previously described in this report. This assessment has revealed no evidence of RECs in connection with the subject site.

8.0 LIMITATIONS

This reconnaissance and review of the subject site has been limited in scope. This type of investigation is undertaken with the calculated risk that the presence, full nature, and extent of contamination would not be revealed by visual observation alone. Although a thorough site reconnaissance was conducted in accordance with ASTM Guidelines and employing a professional standard of care, no warranty is given, either expressed or implied, that hazardous material contamination or buried structures, which would not have been disclosed through this investigation, do not exist at the subject site. Therefore, the data obtained are clear and accurate only to the degree implied by the sources and methods used.

The findings presented in this report were based upon field observations during a single property visit, review of available data, and discussions with local regulatory and advisory agencies. Observations describe only the conditions present at the time of this investigation. The data reviewed and observations made are limited to accessible areas and currently available records searched. Krazan cannot guarantee the completeness or accuracy of the regulatory agency records reviewed. Additionally, in evaluating the property, Krazan has relied in good faith upon representations and information provided by individuals noted in the report with respect to present operations and existing property conditions, and the historic uses of the property. It must also be understood that changing circumstances in the property usage, proposed property usage, subject site zoning, and changes in the environmental status of the other nearby properties can alter the validity of conclusions and information contained in this report.

This report is provided for the exclusive use of the client noted on the cover page and shall be subject to the terms and conditions in the applicable contract between the client and Krazan. Any third party use of this report shall also be subject to the terms and conditions governing the work in the contract between the client and Krazan. The unauthorized use of, reliance on, or release of the information contained in

this report without the expressed written consent of Krazan is strictly prohibited and will be without risk or liability to Krazan.

Conclusions and recommendations contained in this report are based on the evaluation of information made available during the course of this assessment. It is not warranted that such data cannot be superseded by future environmental, legal, geotechnical or technical developments.

9.0 QUALIFICATIONS

This Phase I ESA was conducted by Krazan's undersigned environmental professional under the supervision of the undersigned registered engineer. The work was conducted in accordance with ASTM 1527-00 and generally accepted industry standards for environmental due diligence in place at the time of the preparation of this report.

If you have any questions or if we can be of further assistance, please do not hesitate to contact our office at (909) 974-4400.

Respectfully submitted,
KRAZAN & ASSOCIATES, INC.



Richard P. Opp, JD, CHMM, REA
Environmental Division Manager

Clarence Jiang, PE, GE
Project Manager
RCE No. 50233/ RGE No. 2477

RM/RPO/mgr

2c: herewith

REFERENCES

Aerial photographs provided by Environmental Data Resources, Inc. (EDR).

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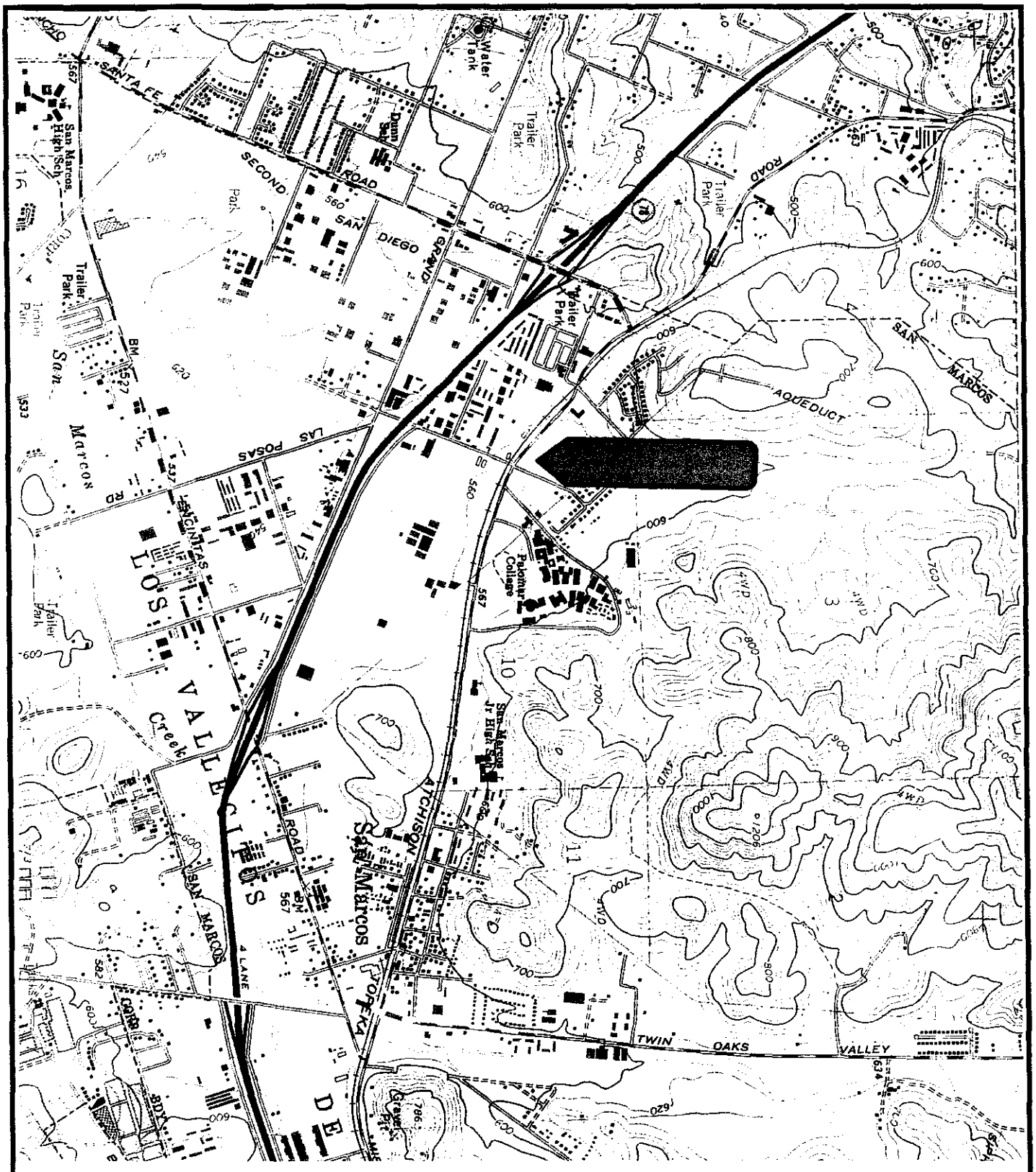
City of San Marcos Fire Department records.

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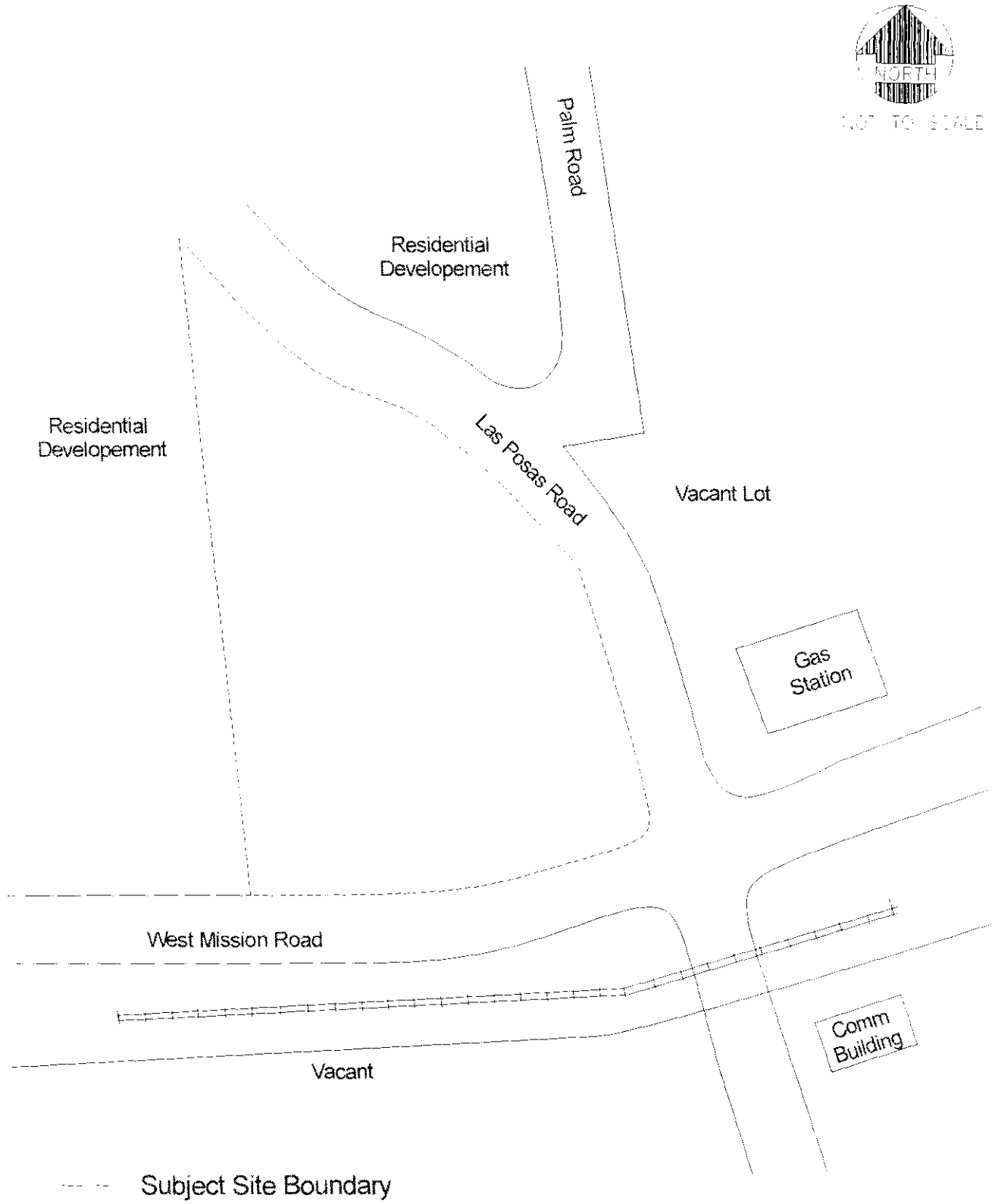
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Vacant Land NWC West Mission & Las Posas Roads San Marcos, CA	Scale: Not To Scale	Date: 10/03	Krazan SITE DEVELOPMENT ENGINEERS Offices Serving the Western United States
	Drawn by: MGR	Approved by: RPO	
VICINITY MAP	Project No. 114-03128	Figure No. 1	



Vacant Land NWC West Mission & Las Posas Roads San Marcos, CA	Scale: Not To Scale Date: 10/03 Drawn by: MGR Approved by: RPO Project No: 114-03128 Figure No: 2	Krazan SITE DEVELOPMENT ENGINEERS Offices Serving the Western United States
SITE MAP		

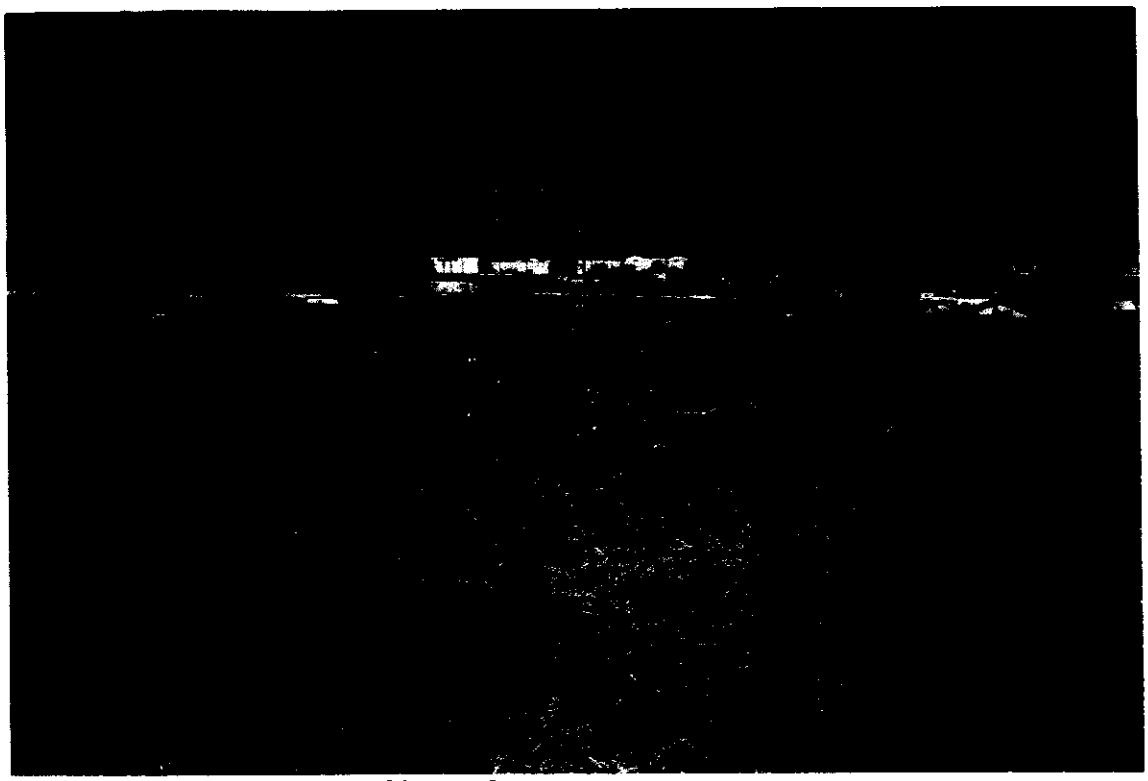


Photo 1: View of subject site looking southwest.



Photo 2: View of subject site's eastern boundary.

Vacant Parcel **NWC West Mission and Las Posas** **San Marcos, CA**	**Project No.** 114-03128 **Date:** October 2003 **Approved by:** Richard Opp	Krazan

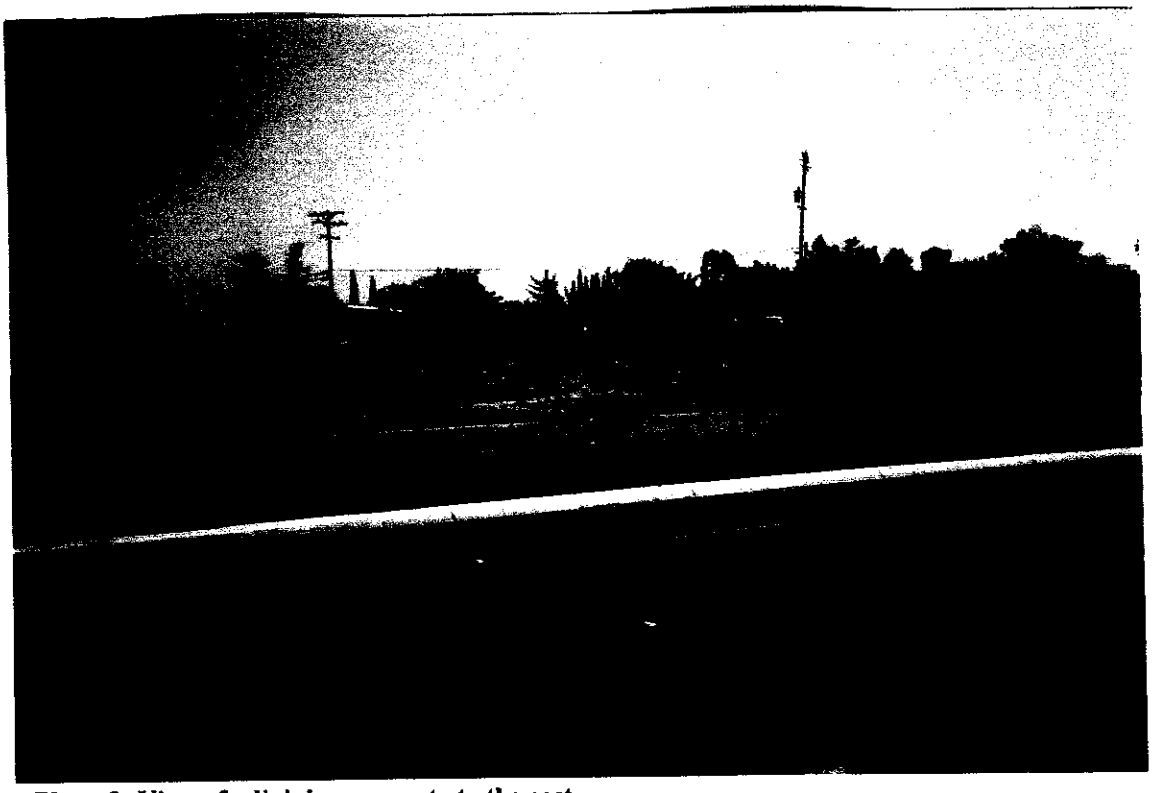


Photo 3: View of adjoining property to the east.

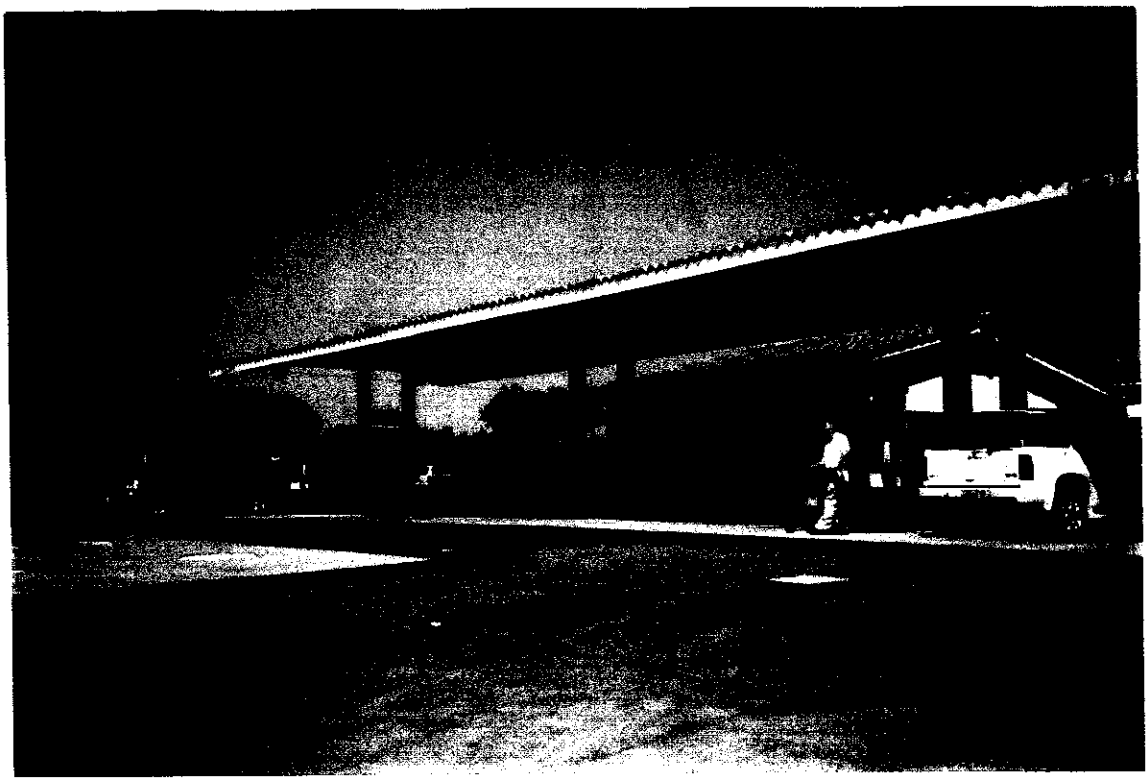


Photo 4: View of adjoining property to the east.

Vacant Parcel **NWC West Mission and Las Posas** **San Marcos, CA**	**Project No.** 114-03128 **Date:** October 2003 **Approved by:** Richard Opp	Krazan



Photo 5: View of adjoining property to the south.



Photo 6: View of adjoining property to the west.

Vacant Parcel **NWC West Mission and Las Posas** **San Marcos, CA**	**Project No.** 114-03128 **Date:** October 2003 **Approved by:** Richard Opp	Krazan

Appendix A

The EDR Radius Map
with GeoCheck®

Vacant Land
Mission Road/Las Posas Road
San Marcos, CA 92069

Inquiry Number: 1054100.3s

September 25, 2003

Environmental Data Resources, Inc.

***The* Source For Environmental Risk Management Data**

3530 Post Road
Southport, Connecticut 06890

Nationwide Customer Service

Telephone: 1-800-352-0050
Fax: 1-800-231-6802
Internet: www.edrnet.com

FORM-NIC

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EPA Waste Codes	EPA-1
Government Records Searched/Data Currency Tracking	GR-1

GEOCHECK ADDENDUM

Physical Setting Source Addendum	A-1
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Physical Setting Source Map	A-7
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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc. (EDR). The report meets the government records search requirements of ASTM Standard Practice for Environmental Site Assessments, E 1527-00. Search distances are per ASTM standard or custom distances requested by the user.

TARGET PROPERTY INFORMATION

ADDRESS

MISSION ROAD/LAS POSAS ROAD
SAN MARCOS, CA 92069

COORDINATES

Latitude (North):	33.149300 - 33° 8' 57.5"
Longitude (West):	117.189200 - 117° 11' 21.1"
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	482355.2
UTM Y (Meters):	3667662.8
Elevation:	583 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property:	2433117-B2 SAN MARCOS, CA
Source:	USGS 7.5 min quad index

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the ASTM E 1527-00 search radius around the target property for the following databases:

FEDERAL ASTM STANDARD

NPL..... National Priority List
Proposed NPL..... Proposed National Priority List Sites
CERCLIS..... Comprehensive Environmental Response, Compensation, and Liability Information System
CERC-NFRAP..... CERCLIS No Further Remedial Action Planned
RCRIS-LQG..... Resource Conservation and Recovery Information System
ERNS..... Emergency Response Notification System

STATE ASTM STANDARD

AWP..... Annual Workplan Sites

EXECUTIVE SUMMARY

Cal-Sites	Calsites Database
Toxic Pits	Toxic Pits Cleanup Act Sites
SWF/LF	Solid Waste Information System
WMUDS/SWAT	Waste Management Unit Database
CA BOND EXP. PLAN	Bond Expenditure Plan
VCP	Voluntary Cleanup Program Properties
INDIAN UST	Underground Storage Tanks on Indian Land
CA FID UST	Facility Inventory Database

FEDERAL ASTM SUPPLEMENTAL

CONSENT	Superfund (CERCLA) Consent Decrees
ROD	Records Of Decision
Delisted NPL	National Priority List Deletions
FINDS	Facility Index System/Facility Identification Initiative Program Summary Report
HMIRS	Hazardous Materials Information Reporting System
MLTS	Material Licensing Tracking System
MINES	Mines Master Index File
NPL Liens	Federal Superfund Liens
PADS	PCB Activity Database System
DOD	Department of Defense Sites
US BROWNFIELDS	A Listing of Brownfields Sites
RAATS	RCRA Administrative Action Tracking System
TRIS	Toxic Chemical Release Inventory System
TSCA	Toxic Substances Control Act
SSTS	Section 7 Tracking Systems
FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

STATE OR LOCAL ASTM SUPPLEMENTAL

AST	Aboveground Petroleum Storage Tank Facilities
CLEANERS	Cleaner Facilities
CA WDS	Waste Discharge System
DEED	List of Deed Restrictions
SCH	School Property Evaluation Program
EMI	Emissions Inventory Data
REF	Unconfirmed Properties Referred to Another Agency
NFA	No Further Action Determination
NFE	Properties Needing Further Evaluation
San Diego Co. HMMD	Hazardous Materials Management Division Database

BROWNFIELDS DATABASES

US BROWNFIELDS	A Listing of Brownfields Sites
VCP	Voluntary Cleanup Program Properties

EDR PROPRIETARY HISTORICAL DATABASES

See the EDR Proprietary Historical Database Section for details

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified.

EXECUTIVE SUMMARY

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

FEDERAL ASTM STANDARD

CORRACTS: CORRACTS is a list of handlers with RCRA Corrective Action Activity. This report shows which nationally-defined corrective action core events have occurred for every handler that has had corrective action activity.

A review of the CORRACTS list, as provided by EDR, and dated 08/13/2003 has revealed that there is 1 CORRACTS site within approximately 1 mile of the target property.

Lower Elevation	Address	Dist / Dir	Map ID	Page
SIGNET ARMORLITE	***130 N BINGHAM DR***	***1/4 - 1/2 SE***	***35***	***69***

RCRIS: Resource Conservation and Recovery Information System. RCRIS includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs): generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month. Small quantity generators (SQGs): generate between 100 kg and 1,000 kg of hazardous waste per month. Large quantity generators (LQGs): generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste from the generator off-site to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

A review of the RCRIS-TSD list, as provided by EDR, and dated 07/11/2003 has revealed that there is 1 RCRIS-TSD site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Dist / Dir	Map ID	Page
SIGNET ARMORLITE	***130 N BINGHAM DR***	***1/4 - 1/2 SE***	***35***	***69***

RCRIS: Resource Conservation and Recovery Information System. RCRIS includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs): generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month. Small quantity generators (SQGs): generate between 100 kg and 1,000 kg of hazardous waste per month. Large quantity generators (LQGs): generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely

hazardous waste from the generator off-site to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

A review of the RCRIS-SQG list, as provided by EDR, and dated 07/11/2003 has revealed that there are 5 RCRIS-SQG sites within approximately 0.25 miles of the target property.

Lower Elevation	Address	Dist / Dir	Map ID	Page
PACIFIC BELL	***225 LOS POSAS***	***1/8 - 1/4 S***	***C6***	***13***
ADVANCED STRUCTURES INC	***1315 ARMORLITE DR***	***1/8 - 1/4 SSW***	***C9***	***18***
GRANDWOOD, INC	***1305 ARMORLITE DR***	***1/8 - 1/4 S***	***C11***	***25***
CONCOURS CLASSICS	***155 BALBOA SUITE D-2***	***1/8 - 1/4 W***	***D16***	***29***
CASEYS AUTO MACHINE	***120 N PACIFIC ST STE G3***	***1/8 - 1/4 WNW***	***21***	***36***

STATE ASTM STANDARD

CHMIRS: The California Hazardous Material Incident Report System contains information on reported hazardous material incidents, i.e., accidental releases or spills. The source is the California Office of Emergency Services.

A review of the CHMIRS list, as provided by EDR, and dated 12/31/2002 has revealed that there are 15 CHMIRS sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
Not reported	125 N. RANCHO SANTE FE	1/2 - 1 WNW	M46	115

Lower Elevation	Address	Dist / Dir	Map ID	Page
Not reported	1329 W MISSION RD	0 - 1/8 SSW	A2	6
Not reported	LAS POSAS / ARMORLITE	1/8 - 1/4 S	C12	25
Not reported	1140 W. MISSION RD	1/4 - 1/2 ESE	H30	45
Not reported	1140 WEST MISSION RD	1/4 - 1/2 ESE	H31	46
Not reported	120 NORTH PACIFIC AVENU	1/4 - 1/2 WSW	32	48
Not reported	185 N PACIFICA ST	1/4 - 1/2 W	34	68
Not reported	1320 GRAND AVE	1/4 - 1/2 SSW	I38	94
Not reported	1365 GRAND AVE	1/4 - 1/2 SSW	J39	95
Not reported	130 BINGHAM DR	1/2 - 1 SSE	48	117
CANALE FOODS, INC	***139 PAWNEE ST***	***1/2 - 1 WSW***	***49***	***118***
Not reported	VALLECITOS DE ORO @ ARM	1/2 - 1 SE	57	130
Not reported	255 PAWNEE STREET	1/2 - 1 WSW	59	132
Not reported	1241 LINDA VISTA DRIVE	1/2 - 1 SSW	68	157
Not reported	1455 LINDA VISTA DRIVE	1/2 - 1 SW	73	167

CORTESE: This database identifies public drinking water wells with detectable levels of contamination, hazardous substance sites selected for remedial action, sites with known toxic material identified through the abandoned site assessment program, sites with USTs having a reportable release and all solid waste disposal facilities from which there is known migration. The source is the California Environmental Protection Agency/Office of Emergency Information.

A review of the Cortese list, as provided by EDR, has revealed that there are 36 Cortese sites within approximately 1 mile of the target property.

EXECUTIVE SUMMARY

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
ARCO STATION #6200	*125 RANCHO SANTA FE RD*	*1/2 - 1 WNW*	*M47*	*116*
SAN DIEGO CO DPW DIV II	*1600 DESCANSO AVE*	*1/2 - 1 W*	*N51*	*120*
TEXACO	*105 RANCHO SANTA FE RD*	*1/2 - 1 W*	*N53*	*123*
TEXACO	105 RANCHO SANTA FE RD	1/2 - 1 W	N54	127
CHEVRON SERVICE STATION#9-3496	*110 RANCHO SANTA FE RD*	*1/2 - 1 W*	*N55*	*127*

Lower Elevation	Address	Dist / Dir	Map ID	Page
PIONEER MILLS	*1329 MISSION RD W*	*0 - 1/8 SSW*	*A1*	*6*
CREST BEVERAGE	*1152 ARMORLITE DR*	*1/4 - 1/2 SSE*	*29*	*43*
PALOMAR COMMUNITY COLLEGE	*1140 E MISSION RD*	*1/4 - 1/2 ESE*	*H33*	*49*
SIGNET ARMORLITE	*130 N BINGHAM DR*	*1/4 - 1/2 SE*	*35*	*69*
DEWEY PEST CONTROL	*1370 GRAND AVENUE*	*1/4 - 1/2 SSW*	*J40*	*96*
AIR PRODUCTS AND CHEMICAL	*1415 GRAND*	*1/4 - 1/2 SW*	*K42*	*103*
MASHBURN SANITATION	*224 LAS POSAS RD*	*1/4 - 1/2 SSW*	*45*	*114*
CLARENCE OCHS, INC.	145 VIA VERA CRUZ	1/2 - 1 S	50	119
FRITO LAY, INC.	*235 PACIFIC ST S*	*1/2 - 1 SW*	*52*	*121*
6-2-6 EQUIPMENT RENTALS	*175 VIA VERA CRUZ*	*1/2 - 1 S*	*56*	*128*
AMERICAN FENCE AND SECURITY CO	*1075 GRAND*	*1/2 - 1 SSE*	*58*	*131*
MORALLY WHOLESALE	*975 LINDA VISTA DR*	*1/2 - 1 SSE*	*60*	*133*
STAR BUILDERS SUPPLY	*961 GRAND AVE*	*1/2 - 1 SSE*	*61*	*135*
D & J TRUCK & AUTO REPAIR	*1539 LA MIRADA*	*1/2 - 1 SW*	*O62*	*137*
FOLLIS MILLWORK INC.	*1555 LA MIRADA DR*	*1/2 - 1 SW*	*O63*	*138*
MARCON PRODUCTS INC	*1615 LA MIRADA DR*	*1/2 - 1 SW*	*P64*	*141*
KIP INC	*1621 LA MIRADA*	*1/2 - 1 SW*	*P65*	*147*
SKS INC.	*875 GRAND AVE*	*1/2 - 1 SSE*	*66*	*148*
JUDD WIRE	*870 LOS VALLECITOS BLVD*	*1/2 - 1 SE*	*67*	*151*
MACDERMID PRINTING SOLUTIONS	*260 S PACIFIC ST*	*1/2 - 1 SW*	*69*	*158*
GOURMET LIQUOR/EZ SERVE 0	2966 SANTA FE	1/2 - 1 NW	70	162
MONIER COMPANY	*1385 LINDA VISTA DR*	*1/2 - 1 SSW*	*Q71*	*162*
ROOFING WHOLESALE CO. INC	*1401 LINDA VISTA DR*	*1/2 - 1 SSW*	*Q72*	*163*
R.D. WALTER TRUCKING	*174 BENT AVE S*	*1/2 - 1 SSE*	*74*	*168*
SCHMID INSULATION	*1520 LINDA VISTA DR*	*1/2 - 1 SW*	*75*	*168*
LUSARDI CONSTRUCTION	*1570 LINDA VISTA DR*	*1/2 - 1 SW*	*76*	*169*
MARDEN SUSCO INC.	*1550 LINDA VISTA DR W*	*1/2 - 1 SW*	*77*	*173*
FIRST NATIONAL BANK	*885 SAN MARCOS BLVD*	*1/2 - 1 SSE*	*78*	*176*
ARMORED TRANSPORT	*1444 ALPINE PL*	*1/2 - 1 SW*	*80*	*177*
SAN MARCOS COUNTY WATER D	*788 SAN MARCOS*	*1/2 - 1 SSE*	*81*	*180*
BORGIA ENERPRISES	*1650 LINDA VISTA DR W*	*1/2 - 1 SW*	*82*	*182*

NOTIFY 65: Notify 65 records contain facility notifications about any release that could impact drinking water and thereby expose the public to a potential health risk. The data come from the State Water Resources Control Board's Proposition 65 database.

A review of the Notify 65 list, as provided by EDR, has revealed that there are 2 Notify 65 sites within approximately 1 mile of the target property.

Lower Elevation	Address	Dist / Dir	Map ID	Page
MASHBURN SANITATION CO.	224 LAS POSAS ROAD	1/8 - 1/4 SSW	17	31
CRIBBAGE LANE & SAN MARCOS BL.		1/2 - 1 SSE	79	177

EXECUTIVE SUMMARY

LUST: The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents. The data come from the State Water Resources Control Board Leaking Underground Storage Tank Information System.

A review of the LUST list, as provided by EDR, and dated 04/02/2003 has revealed that there are 11 LUST sites within approximately 0.5 miles of the target property.

Lower Elevation	Address	Dist / Dir	Map ID	Page
PIONEER MILLS	***1329 MISSION RD W***	***0 - 1/8 SSW***	***A1***	***6***
PIONEER MILLS	***1329 W MISSION RD***	***0 - 1/8 SSW***	***A3***	***7***
CREST BEVERAGE	***1152 ARMORLITE DR***	***1/4 - 1/2 SSE***	***29***	***43***
PALOMAR COMMUNITY COLLEGE	***1140 E MISSION RD***	***1/4 - 1/2 ESE***	***H33***	***49***
SIGNET ARMORLITE	***130 N BINGHAM DR***	***1/4 - 1/2 SE***	***35***	***69***
PATIO GUYS INC	***935 BAILEY CT STE D***	***1/4 - 1/2 SE***	***36***	***91***
DEWEY PEST CONTROL	***1370 GRAND AVENUE***	***1/4 - 1/2 SSW***	***J40***	***96***
AIR PRODUCTS AND CHEMICALS INC	***1415 GRAND AVE***	***1/4 - 1/2 SW***	***K41***	***101***
AIR PRODUCTS AND CHEMICAL	***1415 GRAND***	***1/4 - 1/2 SW***	***K42***	***103***
SPANJIAN BUILDING	1050 LOS VALLECITOS BL	1/4 - 1/2 SSE	L43	110
MASHBURN SANITATION	***224 LAS POSAS RD***	***1/4 - 1/2 SSW***	***45***	***114***

UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the State Water Resources Control Board's Hazardous Substance Storage Container Database.

A review of the UST list, as provided by EDR, and dated 04/02/2003 has revealed that there are 2 UST sites within approximately 0.25 miles of the target property.

Lower Elevation	Address	Dist / Dir	Map ID	Page
MOBIL OIL CORPORATION	***1290 W MISSION RD***	***0 - 1/8 SSE***	***B5***	***11***
PACIFIC BELL SNMCCA11/DB151	***225 N LAS POSAS RD***	***1/8 - 1/4 S***	***C7***	***15***

HIST UST: Historical UST Registered Database.

A review of the HIST UST list, as provided by EDR, and dated 10/15/1990 has revealed that there are 2 HIST UST sites within approximately 0.25 miles of the target property.

Lower Elevation	Address	Dist / Dir	Map ID	Page
PIONEER MILLS	***1329 W MISSION RD***	***0 - 1/8 SSW***	***A3***	***7***
PACIFIC BELL	***225 LOS POSAS***	***1/8 - 1/4 S***	***C6***	***13***

STATE OR LOCAL ASTM SUPPLEMENTAL

CA SLIC: SLIC Region comes from the California Regional Water Quality Control Board.

A review of the CA SLIC list, as provided by EDR, has revealed that there are 3 CA SLIC sites within approximately 0.5 miles of the target property.

Lower Elevation	Address	Dist / Dir	Map ID	Page
SIGNET ARMORLITE	***130 N BINGHAM DR***	***1/4 - 1/2 SE***	***35***	***69***
Not reported	1325 GRAND AVE	1/4 - 1/2 SSW	I37	94
SPANJAIN/ DU FOUR	1050 LOS VALLECITOS	1/4 - 1/2 SSE	L44	111

EXECUTIVE SUMMARY

HAZNET: The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000-1,000,000 annually, representing approximately 350,000-500,000 shipments. Data from non-California manifests & continuation sheets are not included at the present time. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, & disposal method. The source is the Department of Toxic Substance Control is the agency

A review of the HAZNET list, as provided by EDR, has revealed that there are 17 HAZNET sites within approximately 0.25 miles of the target property.

Lower Elevation	Address	Dist / Dir	Map ID	Page
MOBIL OIL CORPORATION 18-HLE	1290 W MISSION ROAD	0 - 1/8 SSE	B4	10
PACIFIC BELL	***225 LOS POSAS***	***1/8 - 1/4 S***	***C6***	***13***
FAUXSTONE	***1370 ARMORLITE DR***	***1/8 - 1/4 SW***	***8***	***17***
GRANDWOOD INC	***1305 ARMORLITE DR***	***1/8 - 1/4 S***	***C10***	***20***
MR. GEISER	441 PALMAC	1/8 - 1/4 NNW	13	26
SOUTHERN CALIFORNIA METAL RECY	207 N LAS POSAS RD	1/8 - 1/4 S	C14	26
CONCOURS CLASSICS	155 BALBOA DR	1/8 - 1/4 W	D15	28
UNITED RENTALS INC #556	***184 N LAS POSAS RD***	***1/8 - 1/4 S***	***E18***	***31***
MISSION AUTO REPAIR	1300 B ARMORLITE DR	1/8 - 1/4 SSW	E19	34
TEAM TWO DESIGNS	1377 ARMORLITE DR STE B	1/8 - 1/4 SW	20	35
SAN DIEGO CAR SALON	1325 DESCANSO AVE	1/8 - 1/4 SSW	F22	37
TOTAL PERFORMANCE	1325 DESCANSO AVE	1/8 - 1/4 SSW	F23	37
WALKER WOOD PRODUCTS	1355 DESCANSO AVE	1/8 - 1/4 SSW	G24	37
ULTRA-FLEX MOULDING INC	***1355 DESCANSO***	***1/8 - 1/4 SSW***	***G25***	***38***
TIAGO	1308 DESCANSO AVE	1/8 - 1/4 SSW	F26	40
BUCKS AUTO BODY	1365 DESCANSO AVE	1/8 - 1/4 SSW	G27	41
ALEX AND SONS AUTO BODY	1365 DESCANSO AVE	1/8 - 1/4 SSW	G28	42

EDR PROPRIETARY HISTORICAL DATABASES

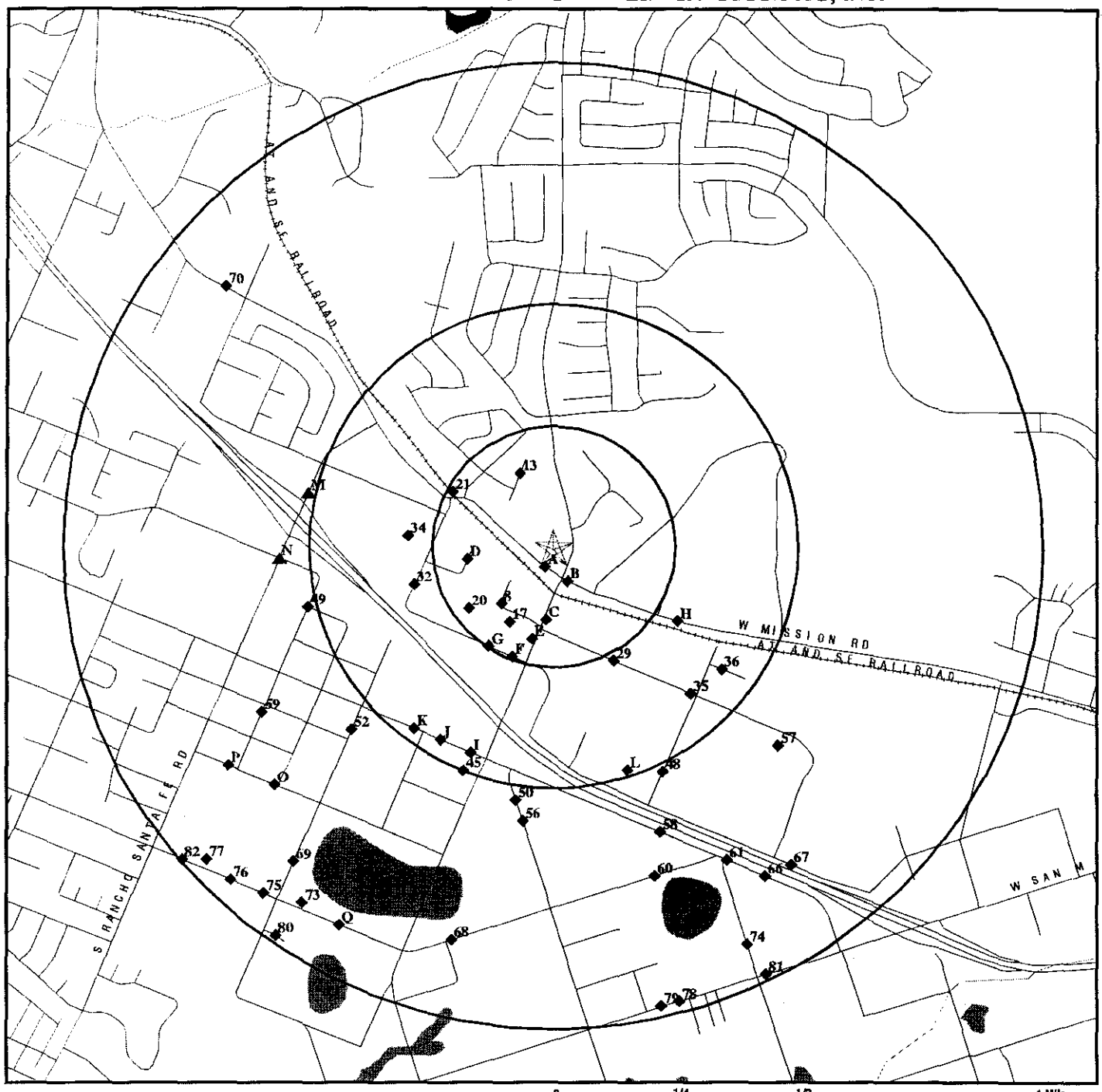
See the EDR Proprietary Historical Database Section for details

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped:

Site Name	Database(s)
PEACOCK CLEANERS	HAZNET, CLEANERS
TORREY CHEMICAL CO	CERC-NFRAP
OLD WEST WOOD FINISHING	CERC-NFRAP
OLD SAN MARCOS LF	SWF/LF
CREST BEVERAGE COMPANY	LUST
SKS, SAN MARCOS	LUST
COCA COLA	LUST
SOILD WASTE SERVICES INC.	LUST
MASHBURN SANITATION	LUST
MASHBURN WASTE	LUST
MASHBURN SANITAION CO	LUST
CALIFORNIA IMPLEMENT COMPANY	LUST
LUKA'S GASOLINE	LUST
LUKA'S FOREIGN CAR SERVICE	LUST
FOREIGN CAR SERVICE	LUST
TELEDYNE AERO-CAL METAL FAB.	LUST
COUNTY OF SD-DPW SAN MARCOS	LUST
COUNTY OF SD-SAN MARCOS RS	LUST
FRITO LAY, INC	LUST
CIRCLE K STORES DC 36 #2969	LUST
CHEVRON #9-3496	LUST
ARCO	LUST
SHELL SERVICE STATION	LUST
ARCO 6200	LUST
ARCO PRODUCTS COMPANY	LUST
CRM AUTOMOTIVE SERVICES	LUST
EZ SERVE FACILITY #100944	LUST
SIX TO SIX EQUIPMENT RENTALS	LUST
TOVY'S AUTOBODY & PAINT	HAZNET
ALL AUTO SERVICES	HAZNET
MOTO RAD CYCLE PAINT	HAZNET
LM MACHINING CENTER	HAZNET
EST INC	HAZNET
GOULD BUILDING CONTRACTORS INC	HAZNET
7-ELEVEN STORE 18977	HAZNET
MOBIL OIL CORPORATION S/S #HLE	HAZNET
K B MOTOR SPORTS	HAZNET
NEWLIFE AUTO BODY	HAZNET
ALOHA AUTOMOTIVE	HAZNET
TRANSMISSION DEPOT	HAZNET
DAMBACH PRECISION	HAZNET
TORREY CHEMICAL CO.	REF

OVERVIEW MAP - 1054100.3s - Krazan & Associates, Inc.

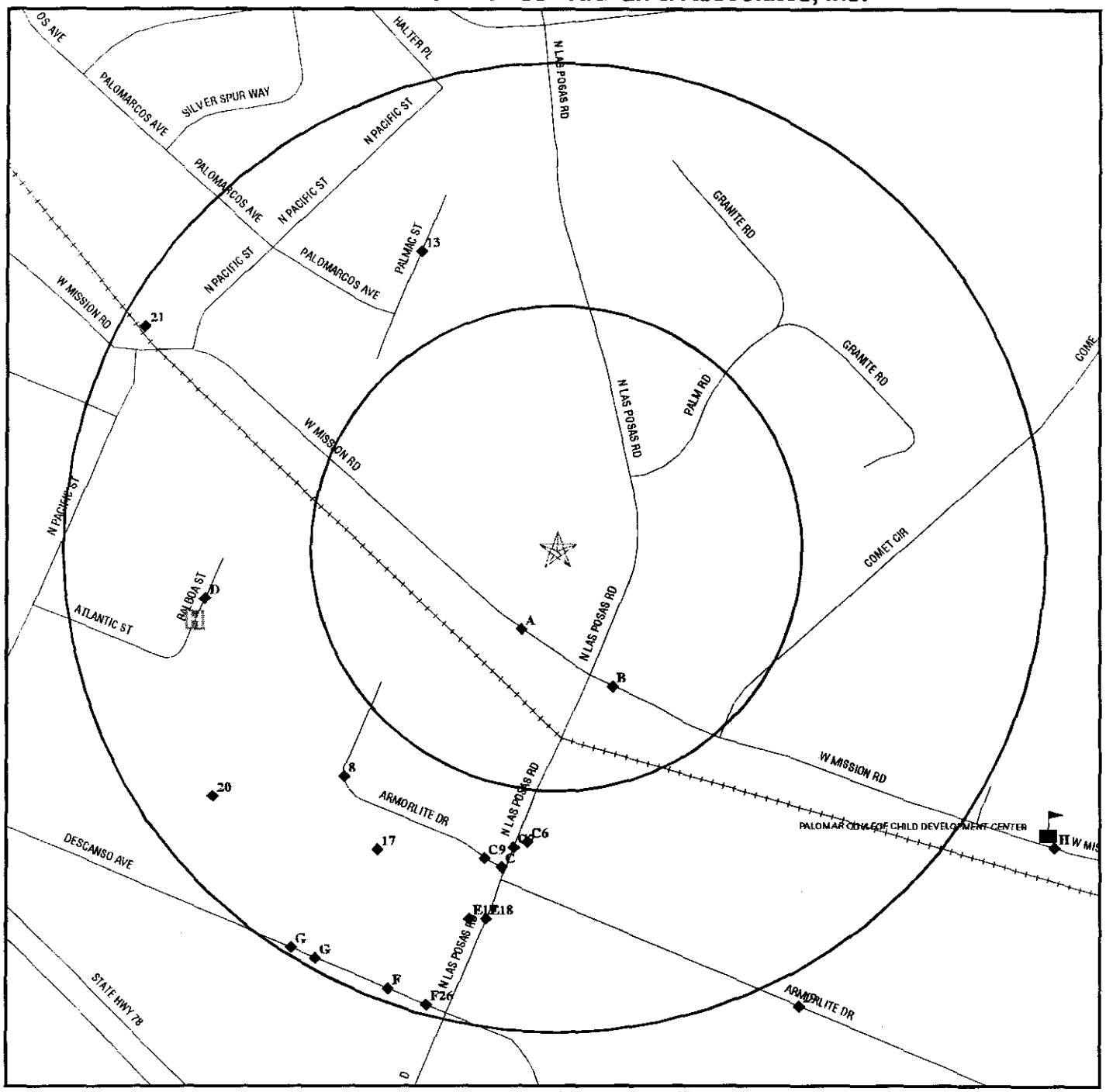


- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Coal Gasification Sites
- National Priority List Sites
- Landfill Sites
- Dept. Defense Sites
- Oil & Gas pipelines
- Federal Wetlands
- Areas of Concern

TARGET PROPERTY:	Vacant Land	CUSTOMER:	Krazan & Associates, Inc.
ADDRESS:	Mission Road/Las Posas Road	CONTACT:	Richard Opp
CITY/STATE/ZIP:	San Marcos CA 92069	INQUIRY #:	1054100.3s
LAT/LONG:	33.1493 / 117.1892	DATE:	September 25, 2003 6:41 pm

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DETAIL MAP - 1054100.3s - Krazan & Associates, Inc.



★ Target Property

▲ Sites at elevations higher than or equal to the target property

◆ Sites at elevations lower than the target property

♟ Coal Gasification Sites

Historical Gas Stations / Historical Dry Cleaners
See the EDR Proprietary Historical Map Findings

Sensitive Receptors

National Priority List Sites

Landfill Sites

Dept. Defense Sites

Oil & Gas pipelines

Areas of Concern

TARGET PROPERTY:	Vacant Land	CUSTOMER:	Krazan & Associates, Inc.
ADDRESS:	Mission Road/Las Posas Road	CONTACT:	Richard Opp
CITY/STATE/ZIP:	San Marcos CA 92069	INQUIRY #:	1054100.3s
LAT/LONG:	33.1493 / 117.1892	DATE:	September 25, 2003 6:43 pm

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MAP FINDINGS SUMMARY

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
FEDERAL ASTM STANDARD								
NPL		1.000	0	0	0	0	NR	0
Proposed NPL		1.000	0	0	0	0	NR	0
CERCLIS		0.500	0	0	0	NR	NR	0
CERC-NFRAP		0.250	0	0	NR	NR	NR	0
CORRACTS		1.000	0	0	1	0	NR	1
RCRIS-TSD		0.500	0	0	1	NR	NR	1
RCRIS Lg. Quan. Gen.		0.250	0	0	NR	NR	NR	0
RCRIS Sm. Quan. Gen.		0.250	0	5	NR	NR	NR	5
ERNS		TP	NR	NR	NR	NR	NR	0
STATE ASTM STANDARD								
AWP		1.000	0	0	0	0	NR	0
Cal-Sites		1.000	0	0	0	0	NR	0
CHMIRS		1.000	1	1	6	7	NR	15
Cortese		1.000	1	0	6	29	NR	36
Notify 65		1.000	0	1	0	1	NR	2
Toxic Pits		1.000	0	0	0	0	NR	0
State Landfill		0.500	0	0	0	NR	NR	0
WMUDS/SWAT		0.500	0	0	0	NR	NR	0
LUST		0.500	2	0	9	NR	NR	11
CA Bond Exp. Plan		1.000	0	0	0	0	NR	0
UST		0.250	1	1	NR	NR	NR	2
VCP		0.500	0	0	0	NR	NR	0
INDIAN UST		0.250	0	0	NR	NR	NR	0
CA FID UST		0.250	0	0	NR	NR	NR	0
HIST UST		0.250	1	1	NR	NR	NR	2
FEDERAL ASTM SUPPLEMENTAL								
CONSENT		1.000	0	0	0	0	NR	0
ROD		1.000	0	0	0	0	NR	0
Delisted NPL		1.000	0	0	0	0	NR	0
FINDS		TP	NR	NR	NR	NR	NR	0
HMIRS		TP	NR	NR	NR	NR	NR	0
MLTS		TP	NR	NR	NR	NR	NR	0
MINES		0.250	0	0	NR	NR	NR	0
NPL Liens		TP	NR	NR	NR	NR	NR	0
PADS		TP	NR	NR	NR	NR	NR	0
DOD		1.000	0	0	0	0	NR	0
US BROWNFIELDS		0.500	0	0	0	NR	NR	0
RAATS		TP	NR	NR	NR	NR	NR	0
TRIS		TP	NR	NR	NR	NR	NR	0
TSCA		TP	NR	NR	NR	NR	NR	0
SSTS		TP	NR	NR	NR	NR	NR	0
FTTS		TP	NR	NR	NR	NR	NR	0
STATE OR LOCAL ASTM SUPPLEMENTAL								
AST		TP	NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
CLEANERS		0.250	0	0	NR	NR	NR	0
CA WDS		TP	NR	NR	NR	NR	NR	0
DEED		TP	NR	NR	NR	NR	NR	0
SCH		0.250	0	0	NR	NR	NR	0
EMI		TP	NR	NR	NR	NR	NR	0
REF		0.250	0	0	NR	NR	NR	0
NFA		0.250	0	0	NR	NR	NR	0
NFE		0.250	0	0	NR	NR	NR	0
CA SLIC		0.500	0	0	3	NR	NR	3
HAZNET		0.250	1	16	NR	NR	NR	17
San Diego Co. HMMD		TP	NR	NR	NR	NR	NR	0
EDR PROPRIETARY HISTORICAL DATABASES								
Gas Stations/Dry Cleaners		0.250	0	1	NR	NR	NR	1
Coal Gas		1.000	0	0	0	0	NR	0
BROWNFIELDS DATABASES								
US BROWNFIELDS		0.500	0	0	0	NR	NR	0
VCP		0.500	0	0	0	NR	NR	0

NOTES:

See the EDR Proprietary Historical Database Section for details

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

A1 **PIONEER MILLS** **LUST** **S105033851**
SSW **1329 MISSION RD W** **Cortese** **N/A**
< 1/8 **SAN MARCOS, CA 92069**
239 ft.

Site 1 of 3 in cluster A

Relative:
Lower

CORTESE:
Reg Id: 9UT1010
Region: CORTESE
Reg By: Leaking Underground Storage Tanks

Actual:
574 ft.

A2 **CHMIRS** **S100278876**
SSW **1329 W MISSION RD** **N/A**
< 1/8 **SAN MARCOS, CA 92069**
239 ft.

Site 2 of 3 in cluster A

Relative:
Lower

CHMIRS:

OES Control Number:	8801964
Chemical Name:	Not reported
Extent of Release:	Not reported
Property Use:	Industrial, Utility
Incident Date:	28-JUN-88
Date Completed:	28-JUN-88
Time Completed :	1700
Agency Id Number :	37145
Agency Incident Number :	0
OES Incident Number :	8801964
Time Notified :	1600
Surrounding Area :	962
Estimated Temperature :	80
Property Management :	P
More Than Two Substances Involved? :	N
Special Studies 1 :	Not reported
Special Studies 2 :	Not reported
Special Studies 3 :	Not reported
Special Studies 4 :	Not reported
Special Studies 5 :	Not reported
Special Studies 6 :	Not reported
Responding Agency Personel # Of Injuries :	Not reported
Responding Agency Personel # Of Fatalities :	Not reported
Resp Agncy Personel # Of Decontaminated :	Not reported
Others Number Of Decontaminated :	Not reported
Others Number Of Injuries :	Not reported
Others Number Of Fatalities :	Not reported
Vehicle Make/year :	Not reported
Vehicle License Number :	Not reported
Vehicle State :	Not reported
Vehicle Id Number :	Not reported
CA/DOT/PUC/ICC Number :	Not reported
Company Name :	Not reported
Reporting Officer Name/ID :	JAY R BUTLER/ FIRE INSPECTOR
Report Date :	29-JUN-88
Comments :	Yes
Facility Telephone Number :	619 744-7200
Waterway Involved :	Not reported
Waterway :	Not reported
Spill Site :	Not reported
Cleanup By :	Not reported
Containment :	Not reported
What Happened :	Not reported

Actual:
574 ft.

(Continued) **S100278876**

Type :	Not reported
Other :	Not reported
Chemical 1 :	Not Reported
Chemical 2 :	Not Reported
Chemical 3 :	Not Reported
Date/Time :	Not reported
Evacuations :	Not reported

A3 **PIONEER MILLS** **HIST UST** **U001572219**
SSW **1329 W MISSION RD** **San Diego Co. HMMD** **N/A**
< 1/8 **SAN MARCOS, CA 92069** **LUST**
239 ft.

Site 3 of 3 in cluster A

Relative: Lower

Actual: 574 ft.

State LUST:

Cross Street:	Not reported		
Qty Leaked:	Not reported		
Case Number	9UT1010		
Reg Board:	9		
Chemical:	0		
Lead Agency:	Local Agency		
Local Agency :	0		
Case Type:	Aquifer affected		
Status:	Case Closed		
Review Date:	Not reported	Confirm Leak:	Not reported
Workplan:	6/28/88	Prelim Assess:	6/28/88
Pollution Char:	Not reported	Remed Plan:	Not reported
Remed Action:	6/8/88		
Monitoring:	Not reported		
Close Date:	02/12/1993		
Release Date:	Not reported		
Cleanup Fund Id :	Not reported		
Discover Date :	06/28/1988		
Enforcement Dt :	Not reported		
Enf Type:	Warning/notice of violation to uncooperative responsible parties (includes CDO and CAO)		
Enter Date :	/ /		
Funding:	Not reported		
Staff Initials:	VPA		
How Discovered:	Not reported		
How Stopped:	Not reported		
Interim :	Not reported		
Leak Cause:	Not reported		
Leak Source:	Not reported		
MTBE Date :	/ /		
Max MTBE GW :	0 Parts per Billion		
MTBE Tested:	Not Required to be Tested.		
Priority:	1C		
Local Case # :	H02919-001		
Beneficial:	Not reported		
Staff :	UNK		
GW Qualifier :	Not reported		
Max MTBE Soil :	Not reported		
Soil Qualifier :	Not reported		
Hydr Basin #:	Not reported		
Operator :	Not reported		
Oversight Prgm:	Local Oversight Program UST		
Oversight Prgm :	LOP		
Review Date :	Not reported		
Stop Date :	/ /		

PIONEER MILLS (Continued) **U001572219**

Work Suspended :Not reported
Responsible PartyNot reported
RP Address: Not reported
Global Id: T0607300032
Org Name: Not reported
Contact Person: Not reported
MTBE Conc: 0
Mtbe Fuel: 0
Water System Name: Not reported
Well Name: Not reported
Distance To Lust: 0
Waste Discharge Global ID: Not reported
Waste Disch Assigned Name: Not reported

LUST Region 9:
Case Number: 9UT1010
Local Agency: 37000
Substance: 8006619
Date Found: 06/28/1988
Date Stopped: 06/28/1988
Source: Tank
Lead Agency: Local Agency
Status: Case Closed
Case Type: Aquifer affected
Abate Method: Excavate and Treat - remove contaminated soil and treat (includes spreading or land farming), Pump and Treat Ground Water - generally employed to remove dissolved contaminants
Confirm Date: Not reported
Prelim Assess: Not reported
Remed Plan: Not reported
Began Monitor: 2/12/93
Enforce Type: Not reported
Enforce Date: Not reported
Pilot Program: LOP
Basin Number: 904.52
File Dispn: File discarded, case closed
Interim Remedial Actions: Yes
Beneficial Use: MUN
Cleanup and Abatement order Number: Not reported
Waste Discharge Requirement Number: Not reported
NPDES Number: Not reported
Release Date: 07/15/1988
Qty Leaked: 0
How Found: Tank Closure
How Stopped: Close Tank
Cause: Corrosion
Submit Workplan: Not reported
Desc Pollution: Not reported
Remed Action: Not reported
Closed Date: 2/12/93
Local Case: H02919-001
Gwater Depth: 4'

HMMD:
Facility ID: H02919
Inactive Indicator: Active
SIC: Not reported
Owner: PIONEER MILLS
Mailing Address: SAN MARCOS
CA
92069
Corporate Code: 18
Census Tract #: 20009
Inspection Date: Not reported
Inspector Name: Not reported
Facility Contact: Not reported
Property Owner: EAN KRUM
PO Address: SAN MARCOS
CA
Business Code: Not reported
Permit Expiration: 00/00
2nd Name: Not reported
Fire Dept District: SAN MARCOS FPD
EPA ID: Not reported
Reinspection Date: 10/88
Gas Station: Not reported
Delinquent Flag: Not Delinquent

PIONEER MILLS (Continued) **U001572219**

92069
Tank Owner: PIONEER MILLS
TO Address: SAN MARCOS
CA
92069
Last Update: 04/24/1998 0:00:00
Last Delinquent Letter: Not reported
Last Letter Type: Not reported
Violation Notice Issued: Not reported
Map Code/Business Plan on File: Not reported
Business Plan Acceptance Date: Not reported
Reinspection Date Y2K Compatible: Oct 1988

HMMD DISCLOSURE INVENTORY:
Chemical Name: Not reported
Item Number: Not reported
Stored at 1 Time: Not reported
Measurement Units: Not reported
Storage Method: Not reported
Carcinogen: No
Annual Qty String: Not reported
Quantity Stored At One Time: Not reported
Annual Quantity String: Not reported
Material Safety Data Sheet: Not reported
1st Hazard Category: Not reported
2nd Hazard Category: Not reported

HMMD UNDERGROUND TANKS:
Tank Number: T001
Tank ID Number: #1
Capacity (Gal): 2000.00
Tank Exempt: No
Waste or Product: Product
Tank Contents: DIESEL

Tank Number: T002
Tank ID Number: 2
Capacity (Gal): 2000.00
Tank Exempt: No
Waste or Product: Product
Tank Contents: DIESEL

HMMD WASTE STREAMS:
Inspection Date: Not reported
Waste Item #: Not reported
Waste Code: Not reported
Waste Name: Not reported
Qnty at Inspection: Not reported
Annual Quantity: Not reported
Measurement Unit: Not reported
Treatment Method: Not reported
Storage Method: Not reported
Waste Description: Not reported
Haz Waste Hauler: Not reported
Carcinogen: No
Annual Qty String: Not reported
Quantity String: Not reported

HMMD VIOLATIONS:
Inspection Date: Not reported
Occurrences: Not reported
Waste Code: Not reported
Type of Violation: Not reported
Violation Description:

HMMD ENVIRONMENTAL ASSESSMENT INFORMATION:
Case Status Date: 02/12/1993 0:00:00
Case Type: TANK, RELEASE (W)
Case Status: CLOSED
Release Occurrence Number: 001
Historical Name: PIONEER MILLS
Date Release Began: 06/28/1988 0:00:00
Lead Agency: DEH

PIONEER MILLS (Continued) **U001572219**

The CA HMMD database may contain additional details for this site.
Please click here or contact your EDR Account Executive for more information.

UST HIST:

Facility ID:	18776	Tank Used for:	PRODUCT
Tank Num:	1	Container Num:	#1
Tank Capacity:	2000	Year Installed:	1973
Type of Fuel:	DIESEL	Tank Construction:	3/16 inches
Leak Detection:	Visual		
Contact Name:	DEAN KRUM	Telephone:	(619) 744-5833
Total Tanks:	1	Region:	STATE
Facility Type:	Other	Other Type:	FEED MANUFACTURE

B4 **MOBIL OIL CORPORATION 18-HLE** **HAZNET** **S104577751**
SSE **1290 W MISSION ROAD** **N/A**
< 1/8 **SAN MARCOS, CA 92069**
404 ft.

Site 1 of 2 in cluster B

Relative:
Lower

Actual:
579 ft.

HAZNET:

Gepaid:	CAL000098361
TSD EPA ID:	CAT080022148
Gen County:	San Diego
Tsd County:	San Bernardino
Tons:	.0500
Waste Category:	Other organic solids
Disposal Method:	Transfer Station
Contact:	MOBIL
Telephone:	(703) 846-5734
Mailing Address:	PO BOX 142667
	AUSTIN, TX 78714 - 2667
County	San Diego

Gepaid:	CAL000098361
TSD EPA ID:	CAT080013352
Gen County:	San Diego
Tsd County:	Los Angeles
Tons:	.7464
Waste Category:	Tank bottom waste
Disposal Method:	Recycler
Contact:	MOBIL
Telephone:	(703) 846-5734
Mailing Address:	PO BOX 142667
	AUSTIN, TX 78714 - 2667
County	San Diego

Gepaid:	CAL000098361
TSD EPA ID:	CAD028409019
Gen County:	San Diego
Tsd County:	Los Angeles
Tons:	.8380
Waste Category:	Aqueous solution with less than 10% total organic residues
Disposal Method:	Treatment, Tank
Contact:	MOBIL
Telephone:	(703) 846-5734
Mailing Address:	PO BOX 142667
	AUSTIN, TX 78714 - 2667
County	San Diego

MOBIL OIL CORPORATION 18-HLE (Continued) **S104577751**

Gepaid: CAL000098361
TSD EPA ID: CAD028409019
Gen County: San Diego
Tsd County: Los Angeles
Tons: .9674
Waste Category: Unspecified oil-containing waste
Disposal Method: Treatment, Tank
Contact: MOBIL
Telephone: (703) 846-5734
Mailing Address: PO BOX 142667
AUSTIN, TX 78714 - 2667
County San Diego

Gepaid: CAL000098361
TSD EPA ID: CAD028409019
Gen County: San Diego
Tsd County: Los Angeles
Tons: .9465
Waste Category: Aqueous solution with less than 10% total organic residues
Disposal Method: Treatment, Tank
Contact: MOBIL
Telephone: (703) 846-5734
Mailing Address: PO BOX 142667
AUSTIN, TX 78714 - 2667
County San Diego

The CA HAZNET database contains 19 additional records for this site.
Please click here or contact your EDR Account Executive for more information.

B5
SSE
< 1/8
404 ft.

Relative:
Lower

Actual:
579 ft.

MOBIL OIL CORPORATION **UST U003789816**
1290 W MISSION RD **San Diego Co. HMMD N/A**
SAN MARCOS, CA 92069

Site 2 of 2 in cluster B

HMMD:
Facility ID: H25233
Inactive Indicator: Active
SIC: Not reported
Owner: EXXON MOBIL OIL CORP
Mailing Address: AUSTIN
TX
78759
Corporate Code: 18
Census Tract #: 20006
Inspection Date: 06/20/2001 0:00:00
Inspector Name: MONNIER
Facility Contact: DON HARMS
Property Owner: ALBERT AND SAMY COLUCCI
PO Address: VISTA
CA
92084
Tank Owner: EXXON MOBIL OIL CORP
TO Address: TORRANCE
CA
90504
Last Update: 03/03/2002 0:00:00
Last Delinquent Letter: Not reported
Last Letter Type: Not reported

Business Code: FUEL-DISPENSE NO REPAIR
Permit Expiration: 10/31
2nd Name: TNKNLGY ATTN EMILY J DAIGNEAU

Fire Dept District: SAN MARCOS FPD
EPA ID: CAL000055711
Reinspection Date: 06/02
Gas Station: Not reported
Delinquent Flag: Not Delinquent

MOBIL OIL CORPORATION (Continued) **U003789816**

Violation Notice Issued: Not reported
Map Code/Business Plan on File: Not reported
Business Plan Acceptance Date: 06/25/01
Reinspection Date Y2K Compatible: Jun 2002

HMMD DISCLOSURE INVENTORY:
Chemical Name: ETHYLENE GLYCOL BUTYL ETHER 3% WAX & SOAP
Item Number: D001
Stored at 1 Time: 55.00
Measurement Units 0000000165
Storage Method: Not reported
Carcinogen: Yes
Annual Qty String: 0000000055
Quantity Stored At One Time: 111-76-2
Annual Quantity String: 165.00
Material Safety Data Sheet: M
1st Hazard Category: Not reported
2nd Hazard Category: IMMED HEALTH HAZRD

Chemical Name: PROPANE
Item Number: D002
Stored at 1 Time: 500.00
Measurement Units 0000003000
Storage Method: Not reported
Carcinogen: Yes
Annual Qty String: 0000000500
Quantity Stored At One Time: 74-98-6
Annual Quantity String: 3000.00
Material Safety Data Sheet: C
1st Hazard Category: Not reported
2nd Hazard Category: FIRE HAZARD

HMMD UNDERGROUND TANKS:
Tank Number: T001
Tank ID Number: RT1404
Capacity (Gal): 10000.00
Tank Exempt: No
Waste or Product: Product
Tank Contents: DIESEL

Tank Number: T002
Tank ID Number: RT1043
Capacity (Gal): 10000.00
Tank Exempt: No
Waste or Product: Product
Tank Contents: SUPER UNLEADED

Tank Number: T003
Tank ID Number: RT1043
Capacity (Gal): 10000.00
Tank Exempt: No
Waste or Product: Product
Tank Contents: PLUS UNLEADED

Tank Number: T004
Tank ID Number: RT1043
Capacity (Gal): 10000.00
Tank Exempt: No
Waste or Product: Product
Tank Contents: REGULAR UNLEADED

HMMD WASTE STREAMS:
Inspection Date: 06/20/2001 0:00:00
Waste Item #: W001
Waste Code: 134.00
Waste Name: AQUEOUS SOL'N W/LESS 10% ORG
Qnty at Inspection: 45.00
Annual Quantity: 90.00
Measurement Unit: GAL
Treatment Method: RECYCLE
Storage Method: PROCESSING EQUIPMENT
Waste Description: GASOLINE & WATER
Haz Waste Hauler: CA HAZARDOUS SVS. INC.
Carcinogen: No
Annual Qty String: 0000000090
Quantity String: 0000000045

Inspection Date: 06/20/2001 0:00:00
Waste Item #: W002
Waste Code: 888.00
Waste Name: USED OIL FILTERS
Qnty at Inspection: 20.00
Annual Quantity: 40.00
Measurement Unit: LBS

MOBIL OIL CORPORATION (Continued) **U003789816**

Treatment Method: FILTERS/METAL RECLAI
Waste Description: WASTE FUEL FILTERS
Carcinogen: No
Quantity String: 0000000020
Storage Method: METAL DRUMS,55 GALLONS
Haz Waste Hauler: ASBURY ENVIR. SERVICES
Annual Qty String: 0000000040

HMMD VIOLATIONS:
Inspection Date: 06/20/2001 0:00:00
Waste Code: Not reported
Type of Violation: GENERAL VIOLATION
Violation Description: SPILL CONTAINER/OVERFILL PREVENTION SYSTEM IS NOT PROPERLY INSTALLED OR MAINTAINED AS REQUIRED. CCR 2635(C)
Occurrences: 01

Inspection Date: 09/29/1998 0:00:00
Waste Code: Not reported
Type of Violation: GENERAL VIOLATION
Violation Description: DOCUMENTATION SHOWING EVIDENCE OF FINANCIAL RESPONSIBILITY IS NOT AVAILABLE. HSC 25292.2
Occurrences: 01

HMMD ENVIRONMENTAL ASSESSMENT INFORMATION:
Case Status Date: Not reported
Case Type: Not reported
Case Status: Not reported
Release Occurrence Number: Not reported
Historical Name: Not reported
Date Release Began: Not reported
Lead Agency: Not reported

The CA HMMD database may contain additional details for this site.
Please click here or contact your EDR Account Executive for more information.

State UST:
Facility ID: H25233
Region: STATE
Local Agency: 37000

C6 **PACIFIC BELL** **RCRIS-SQG 1000250512**
South **225 LOS POSAS** **FINDS CAT080030620**
1/8-1/4 **SAN MARCOS, CA 92069** **HIST UST**
802 ft. **HAZNET**

Site 1 of 7 in cluster C

Relative: Lower

Actual: 562 ft.

RCRIS:
Owner: NOT REQUIRED
(415) 555-1212
EPA ID: CAT080030620
Contact: Not reported
Classification: Small Quantity Generator
TSDF Activities: Not reported

PACIFIC BELL (Continued) **1000250512**

Violation Status: No violations found

FINDS:
Other Pertinent Environmental Activity Identified at Site:
Facility Registry System (FRS)
Resource Conservation and Recovery Act Information system (RCRAINFO)

HAZNET:

Gepaid:	CAT080030620
TSD EPA ID:	CAT080013352
Gen County:	San Diego
Tsd County:	Los Angeles
Tons:	9.1740
Waste Category:	Waste oil and mixed oil
Disposal Method:	Recycler
Contact:	PACIFIC BELL
Telephone:	(925) 823-6161
Mailing Address:	PO BOX 5095 RM 3E000
	SAN RAMON, CA 94583 - 0995
County	San Diego

Gepaid:	CAT080030620
TSD EPA ID:	CAT080013352
Gen County:	San Diego
Tsd County:	Los Angeles
Tons:	.0834
Waste Category:	Waste oil and mixed oil
Disposal Method:	Recycler
Contact:	PACIFIC BELL
Telephone:	(925) 823-6161
Mailing Address:	PO BOX 5095 RM 3E000
	SAN RAMON, CA 94583 - 0995
County	San Diego

Gepaid:	CAT080030620
TSD EPA ID:	CAT080013352
Gen County:	San Diego
Tsd County:	Los Angeles
Tons:	.0834
Waste Category:	Aqueous solution with less than 10% total organic residues
Disposal Method:	Recycler
Contact:	PACIFIC BELL
Telephone:	(925) 823-6161
Mailing Address:	PO BOX 5095 RM 3E000
	SAN RAMON, CA 94583 - 0995
County	San Diego

Gepaid:	CAT080030620
TSD EPA ID:	CAT080013352
Gen County:	San Diego
Tsd County:	Los Angeles
Tons:	.2293
Waste Category:	Unspecified aqueous solution
Disposal Method:	Recycler
Contact:	PACIFIC BELL
Telephone:	(925) 823-6161
Mailing Address:	PO BOX 5095 RM 3E000
	SAN RAMON, CA 94583 - 0995
County	San Diego

PACIFIC BELL (Continued) **1000250512**

Gepaid: CAT080030620
TSD EPA ID: CAD028409019
Gen County: San Diego
Tsd County: Los Angeles
Tons: 6.2550
Waste Category: Unspecified oil-containing waste
Disposal Method: Treatment, Tank
Contact: PACIFIC BELL
Telephone: (925) 823-6161
Mailing Address: PO BOX 5095 RM 3E000
SAN RAMON, CA 94583 - 0995
County San Diego

The CA HAZNET database contains 3 additional records for this site.
Please click here or contact your EDR Account Executive for more information.

UST HIST:

Facility ID:	57717	Tank Used for:	PRODUCT
Tank Num:	1	Container Num:	1
Tank Capacity:	550	Year Installed:	1972
Type of Fuel:	DIESEL	Tank Construction:	Not reported
Leak Detection:	None		
Contact Name:	E.J.KOEHLER	Telephone:	(415) 542-6758
Total Tanks:	1	Region:	STATE
Facility Type:	Other	Other Type:	SIC 4800

C7 **PACIFIC BELL SNMCCA11/DB151** **UST U003789294**
South **225 N LAS POSAS RD** **San Diego Co. HMMD N/A**
1/8-1/4 **SAN MARCOS, CA 92069**
824 ft.

Site 2 of 7 in cluster C

Relative:
Lower

Actual:
561 ft.

HMMD:

Facility ID:	H06360		
Inactive Indicator:	Active	Business Code:	PUBLIC UTILITIES
SIC:	4811	Permit Expiration:	06/30
Owner:	PACIFIC BELL	2nd Name:	C/O ENV. MGMT. RM 3E000T
Mailing Address:	SAN RAMON CA 94583, 0995		
Corporate Code:	18	Fire Dept District:	SAN MARCOS FPD
Census Tract #:	20009	EPA ID:	Not reported
Inspection Date:	04/09/2001 0:00:00	Reinspection Date:	04/02
Inspector Name:	GRIFFITH	Gas Station:	Not reported
Facility Contact:	AMADO QUINTANILLA	Delinquent Flag:	Not Delinquent
Property Owner:	PACIFIC BELL		
PO Address:	ORANGE CA 92668		
Tank Owner:	PACIFIC BELL		
TO Address:	SAN RAMON CA 94583		
Last Update:	03/08/2002 0:00:00		
Last Delinquent Letter:	Not reported		
Last Letter Type:	Not reported		
Violation Notice Issued:	Not reported		
Map Code/Business Plan on File:	Not reported		
Business Plan Acceptance Date:	09/14/01		

PACIFIC BELL SNMCCA11/DB151 (Continued) **U003789294**

Reinspection Date Y2K Compatible: Apr 2002

HMMD DISCLOSURE INVENTORY:
Chemical Name: BATTERY ELECTROLYTE- 47 PER CENT SULFURIC ACID
Item Number: D001
Stored at 1 Time: 1896.00
Measurement Units 0000000001
Storage Method: Not reported
Carcinogen: Yes
Annual Qty String: 0000001896
Quantity Stored At One Time: 7664-93-9
Annual Quantity String: 1.00
Material Safety Data Sheet: P
1st Hazard Category: Not reported
2nd Hazard Category: XTREMLY HAZRDS-CFR

HMMD UNDERGROUND TANKS:
Tank Number: T001
Tank ID Number: D-80-1K
Capacity (Gal): 1000.00
Tank Exempt: No
Waste or Product: Product
Tank Contents: DIESEL

Tank Number: T002
Tank ID Number: RT0968
Capacity (Gal): 5000.00
Tank Exempt: No
Waste or Product: Product
Tank Contents: DIESEL

HMMD WASTE STREAMS:
Inspection Date: 04/09/2001 0:00:00
Waste Item #: W001
Waste Code: 221.00
Waste Name: WASTE OIL & MIXED OIL
Qnty at Inspection: 20.00
Annual Quantity: 20.00
Measurement Unit: GAL
Treatment Method: RECYCLE
Storage Method: PLASTIC DRUMS 0-5 GALLONS
Waste Description: USED OIL
Haz Waste Hauler: SELF:SMALL QTY EXEMPTION
Carcinogen: No
Annual Qty String: 0000000020
Quantity String: 0000000020

Inspection Date: 04/09/2001 0:00:00
Waste Item #: W002
Waste Code: 888.00
Waste Name: USED OIL FILTERS
Qnty at Inspection: 5.00
Annual Quantity: 5.00
Measurement Unit: LBS
Treatment Method: FILTERS/METAL RECLAI
Storage Method: PLASTIC DRUMS 0-5 GALLONS
Waste Description: WASTE OIL FILTERS
Haz Waste Hauler: SELF:SMALL QTY EXEMPTION
Carcinogen: No
Annual Qty String: 0000000005
Quantity String: 0000000005

HMMD VIOLATIONS:
Inspection Date: 08/03/2000 0:00:00
Occurrences: 01
Waste Code: Not reported
Type of Violation: GENERAL VIOLATION
Violation Description: DOCUMENTATION SHOWING EVIDENCE OF FINANCIAL RESPONSIBILITY IS NOT AVAILABLE.
HSC 25292.2

HMMD ENVIRONMENTAL ASSESSMENT INFORMATION:
Case Status Date: Not reported
Case Type: Not reported
Case Status: Not reported
Release Occurrence Number: Not reported
Historical Name: Not reported
Date Release Began: Not reported
Lead Agency: Not reported

PACIFIC BELL SNMCCA11/DB151 (Continued) **U003789294**

The CA HMMD database may contain additional details for this site.
Please click here or contact your EDR Account Executive for more information.

State UST:
Facility ID: H06360
Region: STATE
Local Agency: 37000

8
SW
1/8-1/4
842 ft.

Relative:
Lower

Actual:
560 ft.

FAUXSTONE **HAZNET** **S100935136**
1370 ARMORLITE DR **San Diego Co. HMMD** **N/A**
SAN MARCOS, CA 92069

HAZNET:
Gepaid: CAL000048329
TSD EPA ID: TND991279480
Gen County: San Diego
Tsd County: 99
Tons: .2085
Waste Category: Oxygenated solvents (acetone, butanol, ethyl acetate, etc.)
Disposal Method: Not reported
Contact: RAMS GLEN INC.
Telephone: (000) 000-0000
Mailing Address: 1370 ARMORLITE DR
SAN MARCOS, CA 92069
County San Diego

Gepaid: CAL000048329
TSD EPA ID: CAT080022148
Gen County: San Diego
Tsd County: San Bernardino
Tons: .0000
Waste Category: Oxygenated solvents (acetone, butanol, ethyl acetate, etc.)
Disposal Method: Transfer Station
Contact: RAMS GLEN INC.
Telephone: (000) 000-0000
Mailing Address: 1370 ARMORLITE DR
SAN MARCOS, CA 92069
County San Diego

HMMD:
Facility ID: H28584
Inactive Indicator: Inactive
SIC: 3511
Owner: RAMS GLEN INC
Mailing Address: SAN MARCOS
CA
92069, 1342
Corporate Code: Not reported
Census Tract #: Not reported
Inspection Date: 01/11/1995 0:00:00
Inspector Name: MANN
Facility Contact: DENNIS MADDEN
Property Owner: Not reported
PO Address: Not reported
Tank Owner: Not reported
TO Address: Not reported
Last Update: 07/24/1998 0:00:00
Last Delinquent Letter: Not reported
Last Letter Type: Not reported

Business Code: MISC GENERAL BUILDING
Permit Expiration: 09/30
2nd Name: Not reported
Fire Dept District: SAN MARCOS FPD
EPA ID: CAL000048329
Reinspection Date: 01/96
Gas Station: Not reported
Delinquent Flag: Not Delinquent

FAUXSTONE (Continued) **S100935136**

Violation Notice Issued: Not reported
Map Code/Business Plan on File: Not reported
Business Plan Acceptance Date: 04/07/95
Reinspection Date Y2K Compatible: Jan 1996

HMMD DISCLOSURE INVENTORY:
Chemical Name: Not reported
Item Number: Not reported
Stored at 1 Time: Not reported
Measurement Units: Not reported
Storage Method: Not reported
Carcinogen: No
Annual Qty String: Not reported
Quantity Stored At One Time: Not reported
Annual Quantity String: Not reported
Material Safety Data Sheet: Not reported
1st Hazard Category: Not reported
2nd Hazard Category: Not reported

HMMD UNDERGROUND TANKS:
Tank Number: Not reported
Tank ID Number: Not reported
Capacity (Gal): Not reported
Tank Exempt: Not reported
Waste or Product: Not reported
Tank Contents: Not reported

HMMD WASTE STREAMS:
Inspection Date: 01/11/1995 0:00:00
Waste Item #: W001
Waste Code: 212.00
Waste Name: OXYGENATED SOLVENTS
Qnty at Inspection: 55.00
Annual Quantity: 50.00
Measurement Unit: GAL
Treatment Method: RECYCLE
Storage Method: METAL DRUMS,55 GALLONS
Waste Description: PAINT THINNER
Haz Waste Hauler: ALTERNATIVE DISPOSAL, INC
Carcinogen: No
Annual Qty String: 0000000050
Quantity String: 0000000055

HMMD VIOLATIONS:
Inspection Date: Not reported
Occurrences: Not reported
Waste Code: Not reported
Type of Violation: Not reported
Violation Description:

HMMD ENVIRONMENTAL ASSESSMENT INFORMATION:
Case Status Date: Not reported
Case Type: Not reported
Case Status: Not reported
Release Occurrence Number: Not reported
Historical Name: Not reported
Date Release Began: Not reported
Lead Agency: Not reported

The CA HMMD database may contain additional details for this site.
Please click here or contact your EDR Account Executive for more information.

C9
SSW
1/8-1/4
866 ft.

Site 3 of 7 in cluster C

Relative:
Lower

Actual:
560 ft.

ADVANCED STRUCTURES INC
1315 ARMORLITE DR
SAN MARCOS, CA 92069

RCRIS-SQG **1000151400**
FINDS **CAD080920739**
San Diego Co. HMMD

ADVANCED STRUCTURES INC (Continued) **1000151400**

RCRIS:
Owner: ADVANCED STRUCTURES INC PETE DARBY
(415) 555-1212
EPA ID: CAD080920739
Contact: ENVIRONMENTAL MANAGER
(619) 744-9220
Classification: Small Quantity Generator
TSDF Activities: Not reported
Violation Status: No violations found

FINDS:
Other Pertinent Environmental Activity Identified at Site:
Facility Registry System (FRS)
National Toxics Inventory (NTI)
Resource Conservation and Recovery Act Information system (RCRAINFO)

HMMD:

Facility ID:	H14980		
Inactive Indicator:	Inactive	Business Code:	Not reported
SIC:	3443	Permit Expiration:	05/31
Owner:	CHARLES P DARBY	2nd Name:	Not reported
Mailing Address:	SAN MARCOS		
	CA		
	92069, 1341		
Corporate Code:	18	Fire Dept District:	SAN MARCOS FPD
Census Tract #:	20009	EPA ID:	CAD080920739
Inspection Date:	06/26/1990 0:00:00	Reinspection Date:	06/91
Inspector Name:	AVASTU	Gas Station:	Not reported
Facility Contact:	STEVE BROWN	Delinquent Flag:	Not Delinquent
Property Owner:	Not reported		
PO Address:	Not reported		
Tank Owner:	Not reported		
TO Address:	Not reported		
Last Update:	07/10/1998 0:00:00		

Last Delinquent Letter: Not reported
Last Letter Type: Not reported
Violation Notice Issued: Not reported
Map Code/Business Plan on File: Yes
Business Plan Acceptance Date: 02/27/91
Reinspection Date Y2K Compatible: Jun 1991

HMMD DISCLOSURE INVENTORY:

Chemical Name:	Not reported		
Item Number:	Not reported		
Stored at 1 Time:	Not reported		
Measurement Units:	Not reported	Storage Method:	Not reported
Carcinogen:	No	Annual Qty String:	Not reported

Quantity Stored At One Time: Not reported
Annual Quantity String: Not reported
Material Safety Data Sheet: Not reported
1st Hazard Category: Not reported
2nd Hazard Category: Not reported

HMMD UNDERGROUND TANKS:

Tank Number:	Not reported	Tank ID Number:	Not reported
Capacity (Gal):	Not reported	Tank Exempt:	Not reported

ADVANCED STRUCTURES INC (Continued) **1000151400**

Waste or Product: Not reported
Tank Contents: Not reported

HMMD WASTE STREAMS:

Inspection Date: 06/26/1990 0:00:00
Waste Code: 211.00
Qnty at Inspection: 495.00
Measurement Unit: GAL
Treatment Method: RECYCLE
Waste Description: TRICHLOROETHANE
Carcinogen: No
Quantity String: 0000000495

Waste Item #: W001
Waste Name: HALOGENATED SOLVENTS
Annual Quantity: 1780.00
Storage Method: METAL DRUMS,55 GALLONS
Haz Waste Hauler: BARON-BLAKESLEE
Annual Qty String: 0000001780

Inspection Date: 06/26/1990 0:00:00
Waste Code: 212.00
Qnty at Inspection: 660.00
Measurement Unit: GAL
Treatment Method: RECYCLE
Waste Description: MEK/PAINT SLUDGE
Carcinogen: No
Quantity String: 0000000660

Waste Item #: W002
Waste Name: OXYGENATED SOLVENTS
Annual Quantity: 1465.00
Storage Method: METAL DRUMS,55 GALLONS
Haz Waste Hauler: OMEGA CHEMICAL CORP.
Annual Qty String: 0000001465

Inspection Date: 06/26/1990 0:00:00
Waste Code: 221.00
Qnty at Inspection: 205.00
Measurement Unit: GAL
Treatment Method: RECYCLE
Waste Description: WASTE OIL
Carcinogen: No
Quantity String: 0000000205

Waste Item #: W003
Waste Name: WASTE OIL & MIXED OIL
Annual Quantity: 205.00
Storage Method: METAL DRUMS,55 GALLONS
Haz Waste Hauler: OMEGA CHEMICAL CORP.
Annual Qty String: 0000000205

HMMD VIOLATIONS:

Inspection Date: Not reported
Waste Code: Not reported
Type of Violation: Not reported
Violation Description:

Occurrences: Not reported

HMMD ENVIRONMENTAL ASSESSMENT INFORMATION:

Case Status Date: Not reported
Case Type: Not reported
Case Status: Not reported
Release Occurrence Number: Not reported
Historical Name: Not reported
Date Release Began: Not reported
Lead Agency: Not reported

The CA HMMD database may contain additional details for this site.
Please click here or contact your EDR Account Executive for more information.

C10
South
1/8-1/4
882 ft.

Relative:
Lower

Actual:
560 ft.

GRANDWOOD INC
1305 ARMORLITE DR
SAN MARCOS, CA 92061

Site 4 of 7 in cluster C

HAZNET **S100611141**
San Diego Co. HMMD **N/A**
EMI

GRANDWOOD INC (Continued) **S100611141**

HAZNET:

Gepaid:	CAD981453814
TSD EPA ID:	CAD000088252
Gen County:	Los Angeles
Tsd County:	Los Angeles
Tons:	.2293
Waste Category:	Oxygenated solvents (acetone, butanol, ethyl acetate, etc.)
Disposal Method:	Transfer Station
Contact:	K DALLMEYER
Telephone:	(000) 000-0000
Mailing Address:	1305 ARMORLITE DR
	SAN MARCOS, CA 92069
County	Los Angeles

Gepaid:	CAD981453814
TSD EPA ID:	CAD000088252
Gen County:	Los Angeles
Tsd County:	Los Angeles
Tons:	.2293
Waste Category:	Oxygenated solvents (acetone, butanol, ethyl acetate, etc.)
Disposal Method:	Transfer Station
Contact:	K DALLMEYER
Telephone:	(000) 000-0000
Mailing Address:	1305 ARMORLITE DR
	SAN MARCOS, CA 92069
County	Los Angeles

Gepaid:	CAD981453814
TSD EPA ID:	CAD000088252
Gen County:	Los Angeles
Tsd County:	Los Angeles
Tons:	.4170
Waste Category:	Oxygenated solvents (acetone, butanol, ethyl acetate, etc.)
Disposal Method:	Transfer Station
Contact:	K DALLMEYER
Telephone:	(000) 000-0000
Mailing Address:	1305 ARMORLITE DR
	SAN MARCOS, CA 92069
County	Los Angeles

Gepaid:	CAD981453814
TSD EPA ID:	CAD008252405
Gen County:	Los Angeles
Tsd County:	Los Angeles
Tons:	.9173
Waste Category:	Oxygenated solvents (acetone, butanol, ethyl acetate, etc.)
Disposal Method:	Recycler
Contact:	K DALLMEYER
Telephone:	(000) 000-0000
Mailing Address:	1305 ARMORLITE DR
	SAN MARCOS, CA 92069
County	Los Angeles

GRANDWOOD INC (Continued) **S100611141**

Gepaid: CAD981453814
TSD EPA ID: CAD000088252
Gen County: Los Angeles
Tsd County: Los Angeles
Tons: .2293
Waste Category: Oxygenated solvents (acetone, butanol, ethyl acetate, etc.)
Disposal Method: Transfer Station
Contact: K DALLMEYER
Telephone: (000) 000-0000
Mailing Address: 1305 ARMORLITE DR
SAN MARCOS, CA 92069
County Los Angeles

The CA HAZNET database contains 6 additional records for this site.
Please click here or contact your EDR Account Executive for more information.

HMMD:
Facility ID: H07507
Inactive Indicator: Active
SIC: 2511
Owner: MAGGIE BROWN
Mailing Address: SAN MARCOS
CA
92069, 1341
Corporate Code: 18
Census Tract #: 20009
Inspection Date: 11/29/2001 0:00:00
Inspector Name: MONNIER
Facility Contact: MAGGIE BROWN
Property Owner: Not reported
PO Address: Not reported
Tank Owner: Not reported
TO Address: Not reported
Last Update: 12/30/2001 0:00:00
Business Code: FURNITURE MANUFACTURERS
Permit Expiration: 12/31
2nd Name: Not reported
Fire Dept District: SAN MARCOS FPD
EPA ID: CAD981453814
Reinspection Date: 01/03
Gas Station: Not reported
Delinquent Flag: Not Delinquent
Last Delinquent Letter: Not reported
Last Letter Type: Not reported
Violation Notice Issued: Not reported
Map Code/Business Plan on File: Not reported
Business Plan Acceptance Date: 07/29/99
Reinspection Date Y2K Compatible: Jan 2003

HMMD DISCLOSURE INVENTORY:
Chemical Name: LACQUER THINNER, STAINS UMP NAPHTHA
Item Number: D001
Stored at 1 Time: 770.00
Measurement Units0000001200
Carcinogen: Yes
Quantity Stored At One Time: 64742-89-8
Annual Quantity String: 1200.00
Material Safety Data Sheet: M
1st Hazard Category: Not reported
2nd Hazard Category: FIRE HAZARD
Storage Method: Not reported
Annual Qty String: 0000000770

Chemical Name: VINYL ACETATE WOOD GLUE SUN CO
Item Number: D003
Stored at 1 Time: 110.00
Measurement Units0000000055
Carcinogen: Yes
Storage Method: Not reported
Annual Qty String: 0000000110

GRANDWOOD INC (Continued) **S100611141**

Quantity Stored At One Time: 108-05-4
Annual Quantity String: 55.00
Material Safety Data Sheet: M
1st Hazard Category: Not reported
2nd Hazard Category: FIRE HAZARD

HMMD UNDERGROUND TANKS:
Tank Number: Not reported
Capacity (Gal): Not reported
Waste or Product: Not reported
Tank ID Number: Not reported
Tank Exempt: Not reported
Tank Contents: Not reported

HMMD WASTE STREAMS:
Inspection Date: 11/29/2001 0:00:00
Waste Code: 212.00
Qnty at Inspection: 55.00
Measurement Unit: GAL
Treatment Method: ON SITE RECYCLING
Waste Description: LACQUER, THINNER WASTE
Carcinogen: No
Quantity String: 0000000055
Waste Item #: W001
Waste Name: OXYGENATED SOLVENTS
Annual Quantity: 110.00
Storage Method: METAL DRUMS,55 GALLONS
Haz Waste Hauler: ASBURY ENVIR. SERVICES
Annual Qty String: 0000000110

Inspection Date: 11/29/2001 0:00:00
Waste Code: 352.00
Qnty at Inspection: 100.00
Measurement Unit: LBS
Treatment Method: INCINERATION
Waste Description: SOLVENTS/STRAIN RAGS
Carcinogen: No
Quantity String: 0000000100
Waste Item #: W002
Waste Name: ORGANIC SOLIDS (OTHER)
Annual Quantity: 100.00
Storage Method: METAL DRUMS,55 GALLONS
Haz Waste Hauler: ASBURY ENVIR. SERVICES
Annual Qty String: 0000000100

HMMD VIOLATIONS:
Inspection Date: 11/29/2001 0:00:00
Waste Code: Not reported
Type of Violation: GENERAL VIOLATION
Violation Description: DISPOSAL OR CAUSING THE DISPOSAL OF HAZARDOUS WASTE TO AN UNAUTHORIZED POINT(GROUND, STORM DRAIN, SEWER SYSTEM, TRASH OR AIR) HSC 25189.5
Occurrences: 01

Inspection Date: 07/29/1999 0:00:00
Waste Code: Not reported
Type of Violation: GENERAL VIOLATION
Violation Description: CONTAINERS HOLDING IGNITABLE OR REACTIVE WASTES ARE NOT GROUNDED OR ADEQUATELY PROTECTED FROM ACCIDENTAL IGNITION CCR 66265.31
Occurrences: 02

Inspection Date: 11/29/2001 0:00:00
Waste Code: Not reported
Type of Violation: GENERAL VIOLATION
Violation Description: PERSONNEL TRAINING RECORDS ARE INADEQUATE TO DOCUMENT COMPLIANCE WITH REQUIREMENTS FOR CURRENT AND FORMER EMPLOYEES CCR 66265.16
Occurrences: 01

Inspection Date: 07/29/1999 0:00:00
Waste Code: Not reported
Type of Violation: GENERAL VIOLATION
Violation Description: HAZARDOUS WASTE CONTAINERS ARE MISSING LABELS, ACCUMULATION DATE AND/OR ARE IMPROPERLY LABELED CCR 66262.34
Occurrences: 02

GRANDWOOD INC (Continued) **S100611141**

Inspection Date: 07/29/1999 0:00:00 Occurrences: 01
Waste Code: Not reported
Type of Violation: GENERAL VIOLATION
Violation Description: HAZARDOUS WASTE CONTAINERS ARE NOT KEPT CLOSED WHILE IN STORAGE
CCR 66265.173

Inspection Date: 11/29/2001 0:00:00 Occurrences: 01
Waste Code: Not reported
Type of Violation: GENERAL VIOLATION
Violation Description: GENERATOR OF A WASTE HAS NOT DETERMINED IF THAT WASTE IS A HAZARDOUS WASTE AS DEFINED BY LAW
CCR 66262.11

HMMD ENVIRONMENTAL ASSESSMENT INFORMATION:
Case Status Date: Not reported
Case Type: Not reported
Case Status: Not reported
Release Occurrence Number: Not reported
Historical Name: Not reported
Date Release Began: Not reported
Lead Agency: Not reported

The CA HMMD database may contain additional details for this site.
Please click here or contact your EDR Account Executive for more information.

EMISSIONS :

Facility ID :	5981
Air District Code :	SD
SIC Code :	2511
Total Priority Score :	Not reported
Health Risk Assessment :	Not reported
Non-cancer Chronic Haz Index :	Not reported
Non-cancer Acute Haz Index :	Not reported
Air Basin :	SD
Air District Name :	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System :	Not reported
Consolidated Emission Reporting Rule :	Not reported
Total Organic Hydrocarbon Gases :	4
Reactive Organic Gases :	4
Carbon Monoxide Emissions :	0
NOX Gas Emissions (Nitrogen - Oxygen) :	0
SOX Gas Emissions (Sulphur - Oxygen) :	0

Facility ID :	5981
Air District Code :	SD
SIC Code :	2511
Total Priority Score :	Not reported
Health Risk Assessment :	Not reported
Non-cancer Chronic Haz Index :	Not reported
Non-cancer Acute Haz Index :	Not reported
Air Basin :	SD
Air District Name :	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System :	Not reported
Consolidated Emission Reporting Rule :	Not reported
Total Organic Hydrocarbon Gases :	Not reported
Reactive Organic Gases :	Not reported
Carbon Monoxide Emissions :	Not reported

GRANDWOOD INC (Continued) **S100611141**

NOX Gas Emissions (Nitrogen - Oxygen) : Not reported
SOX Gas Emissions (Sulphur - Oxygen) : Not reported

C11 **GRANDWOOD, INC** **RCRIS-SQG** **1000311114**
South **1305 ARMORLITE DR** **FINDS** **CAD981453814**
1/8-1/4 **SAN MARCOS, CA 92069**
882 ft.

Site 5 of 7 in cluster C

Relative:
Lower

Actual:
560 ft.

RCRIS:
Owner: NOT REQUIRED
(415) 555-1212
EPA ID: CAD981453814
Contact: Not reported
Classification: Small Quantity Generator
TSDF Activities: Not reported
Violation Status: No violations found

FINDS:
Other Pertinent Environmental Activity Identified at Site:
Facility Registry System (FRS)
NEI
National Emissions Trends (NET)
National Toxics Inventory (NTI)
Resource Conservation and Recovery Act Information system (RCRAINFO)

C12 **CHMIRS** **S100222287**
South **LAS POSAS / ARMORLITE** **N/A**
1/8-1/4 **SAN MARCOS, CA**
884 ft.

Site 6 of 7 in cluster C

Relative:
Lower

Actual:
560 ft.

CHMIRS:

OES Control Number:	9990930
Chemical Name:	Not reported
Extent of Release:	Not reported
Property Use:	Vacant Lot
Incident Date:	15-APR-88
Date Completed:	15-APR-88
Time Completed :	Not reported
Agency Id Number :	37717
Agency Incident Number :	000
OES Incident Number :	9990930
Time Notified :	1917
Surrounding Area :	600
Estimated Temperature :	60
Property Management :	U
More Than Two Substances Involved? :	N
Special Studies 1 :	Not reported
Special Studies 2 :	Not reported
Special Studies 3 :	Not reported
Special Studies 4 :	Not reported
Special Studies 5 :	Not reported
Special Studies 6 :	Not reported
Responding Agency Personel # Of Injuries :	Not reported
Responding Agency Personel # Of Fatalities :	Not reported

(Continued) **S100222287**

Resp Agncy Personel # Of Decontaminated :	Not reported
Others Number Of Decontaminated :	Not reported
Others Number Of Injuries :	Not reported
Others Number Of Fatalities :	Not reported
Vehicle Make/year :	Not reported
Vehicle License Number :	Not reported
Vehicle State :	Not reported
Vehicle Id Number :	Not reported
CA/DOT/PUC/ICC Number :	Not reported
Company Name :	Not reported
Reporting Officer Name/ID :	V. CHUCH
Report Date :	16-APR-88
Comments :	No
Facility Telephone Number :	619 236-2222
Waterway Involved :	Not reported
Waterway :	Not reported
Spill Site :	Not reported
Cleanup By :	Not reported
Containment :	Not reported
What Happened :	Not reported
Type :	Not reported
Other :	Not reported
Chemical 1 :	Not Reported
Chemical 2 :	Not Reported
Chemical 3 :	Not Reported
Date/Time :	Not reported
Evacuations :	Not reported

13
NNW
1/8-1/4
887 ft.

MR. GEISER **HAZNET** **S102800853**
441 PALMAC **N/A**
SAN MARCOS, CA 92069

Relative:
Lower

Actual:
579 ft.

HAZNET:

Gepaid:	CAC000981392
TSD EPA ID:	IRC957100891
Gen County:	San Diego
Tsd County:	99
Tons:	.4214
Waste Category:	Asbestos-containing waste
Disposal Method:	Disposal, Land Fill
Contact:	MR. GEISER
Telephone:	(000) 000-0000
Mailing Address:	441 PALMAC SAN MARCOS, CA 92069
County	San Diego

C14
South
1/8-1/4
899 ft.

SOUTHERN CALIFORNIA METAL RECYCLING INC **HAZNET** **S103988715**
207 N LAS POSAS RD **N/A**
SAN MARCOS, CA 92069

Site 7 of 7 in cluster C

Relative:
Lower

Actual:
560 ft.

SOUTHERN CALIFORNIA METAL RECYCLING INC (Continued) **S103988715**

HAZNET:

Gepaid:	CAL000140334
TSD EPA ID:	CAT080013352
Gen County:	San Diego
Tsd County:	Los Angeles
Tons:	13.3440
Waste Category:	Oil/water separation sludge
Disposal Method:	Recycler
Contact:	ROBERT CHAVEZ
Telephone:	(714) 556-8915
Mailing Address:	2117 S LYON ST
	SANTA ANA, CA 92705
County	San Diego

Gepaid:	CAL000140334
TSD EPA ID:	CAT080013352
Gen County:	San Diego
Tsd County:	Los Angeles
Tons:	12.5100
Waste Category:	Unspecified aqueous solution
Disposal Method:	Recycler
Contact:	ROBERT CHAVEZ
Telephone:	(714) 556-8915
Mailing Address:	2117 S LYON ST
	SANTA ANA, CA 92705
County	San Diego

Gepaid:	CAL000140334
TSD EPA ID:	CAT080013352
Gen County:	San Diego
Tsd County:	Los Angeles
Tons:	11.4675
Waste Category:	Oil/water separation sludge
Disposal Method:	Recycler
Contact:	ROBERT CHAVEZ
Telephone:	(714) 556-8915
Mailing Address:	2117 S LYON ST
	SANTA ANA, CA 92705
County	San Diego

Gepaid:	CAL000140334
TSD EPA ID:	CAT080013352
Gen County:	San Diego
Tsd County:	Los Angeles
Tons:	24.9366
Waste Category:	Oil/water separation sludge
Disposal Method:	Recycler
Contact:	ROBERT CHAVEZ
Telephone:	(714) 556-8915
Mailing Address:	2117 S LYON ST
	SANTA ANA, CA 92705
County	San Diego

SOUTHERN CALIFORNIA METAL RECYCLING INC (Continued) **S103988715**

Gepaid: CAL000140334
TSD EPA ID: CAT080013352
Gen County: San Diego
Tsd County: Los Angeles
Tons: 8.34
Waste Category: Aqueous solution with less than 10% total organic residues
Disposal Method: Recycler
Contact: GABRIEL LOPEZ/ACCT MANAGER
Telephone: (714) 556-8915
Mailing Address: 2117 S LYON ST
SANTA ANA, CA 92705
County San Diego

The CA HAZNET database contains 2 additional records for this site.
Please click here or contact your EDR Account Executive for more information.

D15 **CONCOURS CLASSICS** **HAZNET** **S105722608**
West **155 BALBOA DR** **N/A**
1/8-1/4 **SAN MARCOS, CA 92069**
948 ft.

Site 1 of 2 in cluster D

Relative: Lower

Actual: 560 ft.

HAZNET:
Gepaid: CAL000055200
TSD EPA ID: AZD980892731
Gen County: San Diego
Tsd County: 99
Tons: 0.28
Waste Category: Unspecified solvent mixture Waste
Disposal Method: Not reported
Contact: INACTIVE DUP NUM IN BLK LOGBK
Telephone: 0
Mailing Address: 155 BALBOA DR
SAN MARCOS, CA 92069
County San Diego

Gepaid: CAL000055200
TSD EPA ID: AZD980892731
Gen County: San Diego
Tsd County: 99
Tons: 0.22
Waste Category: Waste oil and mixed oil
Disposal Method: Not reported
Contact: INACTIVE DUP NUM IN BLK LOGBK
Telephone: 0
Mailing Address: 155 BALBOA DR
SAN MARCOS, CA 92069
County San Diego

D16
West
1/8-1/4
948 ft.

CONCOURS CLASSICS — **RCRIS-SQG** **1000180622**
155 BALBOA SUITE D-2 — **FINDS** **CAD980891386**
SAN MARCOS, CA 92069 — **San Diego Co. HMMD**

Site 2 of 2 in cluster D

Relative:
Lower

Actual:
560 ft.

RCRIS:
Owner: NOT REQUIRED
(415) 555-1212
EPA ID: CAD980891386
Contact: Not reported
Classification: Small Quantity Generator
TSDF Activities: Not reported
Violation Status: No violations found

FINDS:
Other Pertinent Environmental Activity Identified at Site:
Facility Registry System (FRS)
Resource Conservation and Recovery Act Information system (RCRAINFO)

HMMD:

Facility ID:	H17157		
Inactive Indicator:	Active	Business Code:	GENL AUTO/CYCLE/TRUCK REP
SIC:	Not reported	Permit Expiration:	04/30
Owner:	JOHN LEFEVRE	2nd Name:	Not reported
Mailing Address:	SAN MARCOS CA 92069, 1346		
Corporate Code:	18	Fire Dept District:	SAN MARCOS FPD
Census Tract #:	20009	EPA ID:	CAL000055200
Inspection Date:	01/10/2001 0:00:00	Reinspection Date:	03/02
Inspector Name:	MONNIER	Gas Station:	Not reported
Facility Contact:	JOHN LEFEVRE	Delinquent Flag:	Not Delinquent
Property Owner:	Not reported		
PO Address:	Not reported		
Tank Owner:	Not reported		
TO Address:	Not reported		
Last Update:	02/20/2002 0:00:00		
Last Delinquent Letter:	06/04/1996 0:00:00		
Last Letter Type:	30		
Violation Notice Issued:	Not reported		
Map Code/Business Plan on File:	Not reported		
Business Plan Acceptance Date:	03/25/96		
Reinspection Date Y2K Compatible:	Mar 2002		

HMMD DISCLOSURE INVENTORY:

Chemical Name:	ARGON 38-9)		
Item Number:	D001		
Stored at 1 Time:	336.00		
Measurement Units:	0000000336	Storage Method:	Not reported
Carcinogen:	Yes	Annual Qty String:	0000000336
Quantity Stored At One Time:	7440-37-1		
Annual Quantity String:	336.00		
Material Safety Data Sheet:	C		
1st Hazard Category:	Not reported		
2nd Hazard Category:	SUDDN RLSE OF PRES		

HMMD UNDERGROUND TANKS:

Tank Number:	Not reported	Tank ID Number:	Not reported

CONCOURS CLASSICS (Continued) **1000180622**

Capacity (Gal): Not reported
Waste or Product: Not reported
Tank Exempt: Not reported
Tank Contents: Not reported

HMMD WASTE STREAMS:

Inspection Date: 01/10/2001 0:00:00
Waste Code: 214.00
Qnty at Inspection: 32.00
Measurement Unit: GAL
Treatment Method: RECYCLE
Waste Description: THINNER/PAINT WASTES
Carcinogen: No
Quantity String: 0000000032
Waste Item #: W001
Waste Name: UNSPEC SOLVENT MIXTURE
Annual Quantity: 32.00
Storage Method: METAL DRUMS,30 GALLONS
Haz Waste Hauler: SAFETY-KLEEN
Annual Qty String: 0000000032

Inspection Date: 01/10/2001 0:00:00
Waste Code: 221.00
Qnty at Inspection: 55.00
Measurement Unit: GAL
Treatment Method: RECYCLE
Waste Description: WASTE OIL
Carcinogen: No
Quantity String: 0000000055
Waste Item #: W002
Waste Name: WASTE OIL & MIXED OIL
Annual Quantity: 55.00
Storage Method: METAL DRUMS,55 GALLONS
Haz Waste Hauler: ASBURY ENVIR. SERVICES
Annual Qty String: 0000000055

Inspection Date: 01/10/2001 0:00:00
Waste Code: 213.00
Qnty at Inspection: 10.00
Measurement Unit: GAL
Treatment Method: RECYCLE
Waste Description: PARTS CLEANER
Carcinogen: No
Quantity String: 0000000010
Waste Item #: W003
Waste Name: HYDROCARBON SOLVENTS
Annual Quantity: 40.00
Storage Method: PROCESSING EQUIPMENT
Haz Waste Hauler: SAFETY-KLEEN
Annual Qty String: 0000000040

HMMD VIOLATIONS:

Inspection Date: 10/26/1999 0:00:00
Waste Code: Not reported
Type of Violation: GENERAL VIOLATION
Violation Description: HAZARDOUS WASTE IS STORED IN EXCESS OF ALLOWABLE TIME PERIOD WITHOUT A STATE PERMIT OR WRITTEN VARIANCE CCR 66262.34
Occurrences: 01

Inspection Date: 01/10/2001 0:00:00
Waste Code: Not reported
Type of Violation: GENERAL VIOLATION
Violation Description: HAZARDOUS WASTE MANIFESTS/RECEIPTS ARE NOT MAINTAINED ON SITE TO DOCUMENT PROPER DISPOSAL OF HAZARDOUS WASTE CCR 66262.40, 66272.1
Occurrences: 01

Inspection Date: 01/10/2001 0:00:00
Waste Code: Not reported
Type of Violation: GENERAL VIOLATION
Violation Description: HAZARDOUS WASTE IS STORED IN EXCESS OF ALLOWABLE TIME PERIOD WITHOUT A STATE PERMIT OR WRITTEN VARIANCE CCR 66262.34
Occurrences: 02

HMMD ENVIRONMENTAL ASSESSMENT INFORMATION:

Case Status Date: Not reported
Case Type: Not reported
Case Status: Not reported
Release Occurrence Number: Not reported
Historical Name: Not reported

CONCOURS CLASSICS (Continued) **1000180622**

Date Release Began: Not reported
Lead Agency: Not reported

The CA HMMD database may contain additional details for this site.
Please click here or contact your EDR Account Executive for more information.

17
SSW
1/8-1/4
951 ft.

Relative:
Lower

Actual:
560 ft.

MASHBURN SANITATION CO. **Notify 65** **S100233159**
224 LAS POSAS ROAD **N/A**
SAN MARCOS, CA

NOTIFY 65:
Date Reported: Not reported Staff Initials: Not reported
Board File Number: Not reported
Facility Type: Not reported
Discharge Date: Not reported
Incident Description: Not Reported

E18
South
1/8-1/4
1027 ft.

Relative:
Lower

Actual:
560 ft.

UNITED RENTALS INC #556 **HAZNET** **S104400457**
184 N LAS POSAS RD **San Diego Co. HMMD** **N/A**
SAN MARCOS, CA 92069

Site 1 of 2 in cluster E

HAZNET:
Gepaid: CAL000209748
TSD EPA ID: CAD050806850
Gen County: San Diego
Tsd County: Los Angeles
Tons: 8.9000
Waste Category: Other organic solids
Disposal Method: Transfer Station
Contact: UNITED RENTALS NORTHWEST INC
Telephone: (303) 674-1320
Mailing Address: 1153 BERGEN PARKWAY STE M237
EVERGREEN, CO 80439
County San Diego

Gepaid: CAL000209748
TSD EPA ID: CAD028409019
Gen County: San Diego
Tsd County: Los Angeles
Tons: .2293
Waste Category: Hydrocarbon solvents (benzene, hexane, Stoddard, etc.)
Disposal Method: Transfer Station
Contact: UNITED RENTALS NORTHWEST INC
Telephone: (303) 674-1320
Mailing Address: 1153 BERGEN PARKWAY STE M237
EVERGREEN, CO 80439
County San Diego

UNITED RENTALS INC #556 (Continued) **S104400457**

Gepaid: CAL000209748
TSD EPA ID: CAT080013352
Gen County: San Diego
Tsd County: Los Angeles
Tons: 2.0850
Waste Category: Oil/water separation sludge
Disposal Method: Transfer Station
Contact: UNITED RENTALS NORTHWEST INC
Telephone: (303) 674-1320
Mailing Address: 1153 BERGEN PARKWAY STE M237
EVERGREEN, CO 80439
County San Diego

Gepaid: CAL000209748
TSD EPA ID: CAT080013352
Gen County: San Diego
Tsd County: Los Angeles
Tons: 1.5345
Waste Category: Oil/water separation sludge
Disposal Method: Recycler
Contact: UNITED RENTALS NORTHWEST INC
Telephone: (303) 674-1320
Mailing Address: 1153 BERGEN PARKWAY STE M237
EVERGREEN, CO 80439
County San Diego

Gepaid: CAL000209748
TSD EPA ID: CAT080013352
Gen County: San Diego
Tsd County: Los Angeles
Tons: .6880
Waste Category: Hydrocarbon solvents (benzene, hexane, Stoddard, etc.)
Disposal Method: Recycler
Contact: UNITED RENTALS NORTHWEST INC
Telephone: (303) 674-1320
Mailing Address: 1153 BERGEN PARKWAY STE M237
EVERGREEN, CO 80439
County San Diego

The CA HAZNET database contains 3 additional records for this site.
Please click here or contact your EDR Account Executive for more information.

HMMD:

Facility ID:	H39210		
Inactive Indicator:	Inactive	Business Code:	GENL AUTO/CYCLE/TRUCK REP
SIC:	Not reported	Permit Expiration:	07/31
Owner:	UNITED RENTALS NW, INC	2nd Name:	Not reported
Mailing Address:	SAN MARCOS		
	CA		
	92069		
Corporate Code:	18	Fire Dept District:	SAN MARCOS FPD
Census Tract #:	20009	EPA ID:	CAL000209748
Inspection Date:	05/23/2000 0:00:00	Reinspection Date:	07/01
Inspector Name:	MONNIER	Gas Station:	Not reported
Facility Contact:	JUSTIN RELAFORD	Delinquent Flag:	Not Delinquent
Property Owner:	Not reported		
PO Address:	Not reported		
Tank Owner:	Not reported		

UNITED RENTALS INC #556 (Continued) **S104400457**

TO Address: Not reported
Last Update: 09/16/2001 0:00:00
Last Delinquent Letter: Not reported
Last Letter Type: Not reported
Violation Notice Issued: Not reported
Map Code/Business Plan on File: Not reported
Business Plan Acceptance Date: 06/14/00
Reinspection Date Y2K Compatible: Jul 2001

HMMD DISCLOSURE INVENTORY:
Chemical Name: Not reported
Item Number: Not reported
Stored at 1 Time: Not reported
Measurement Units: Not reported
Storage Method: Not reported
Carcinogen: No
Annual Qty String: Not reported
Quantity Stored At One Time: Not reported
Annual Quantity String: Not reported
Material Safety Data Sheet: Not reported
1st Hazard Category: Not reported
2nd Hazard Category: Not reported

HMMD UNDERGROUND TANKS:
Tank Number: Not reported
Tank ID Number: Not reported
Capacity (Gal): Not reported
Tank Exempt: Not reported
Waste or Product: Not reported
Tank Contents: Not reported

HMMD WASTE STREAMS:
Inspection Date: 05/23/2000 0:00:00
Waste Item #: W001
Waste Code: 213.00
Waste Name: HYDROCARBON SOLVENTS
Qnty at Inspection: 26.00
Annual Quantity: 100.00
Measurement Unit: GAL
Treatment Method: RECYCLE
Storage Method: PROCESSING EQUIPMENT
Waste Description: PARTS CLEANER
Haz Waste Hauler: SAFETY KLEEN
Carcinogen: No
Annual Qty String: 0000000100
Quantity String: 0000000026

Inspection Date: 05/23/2000 0:00:00
Waste Item #: W002
Waste Code: 222.00
Waste Name: OIL/WATER SEPARATION SLUDGE
Qnty at Inspection: 700.00
Annual Quantity: 10000.00
Measurement Unit: LBS
Treatment Method: LANDFILL
Storage Method: METAL DRUMS,55 GALLONS
Waste Description: SUMP SLUDGE-CLARIFIED
Haz Waste Hauler: SAFETY KLEEN
Carcinogen: No
Annual Qty String: 0000010000
Quantity String: 0000000700

Inspection Date: 05/23/2000 0:00:00
Waste Item #: W003
Waste Code: 342.00
Waste Name: ORGANIC LIQUIDS W/METALS
Qnty at Inspection: 110.00
Annual Quantity: 110.00
Measurement Unit: GAL
Treatment Method: RECYCLE
Storage Method: PLASTIC DRUMS,55 GALLONS
Waste Description: Not reported
Haz Waste Hauler: GOLDEN STATE ENVIR. SERV.
Carcinogen: No
Annual Qty String: 0000000110
Quantity String: 0000000110

Inspection Date: 05/23/2000 0:00:00
Waste Item #: W004
Waste Code: 214.00
Waste Name: UNSPEC SOLVENT MIXTURE
Qnty at Inspection: 55.00
Annual Quantity: 55.00
Measurement Unit: GAL
Treatment Method: RECYCLE
Storage Method: METAL DRUMS,55 GALLONS

UNITED RENTALS INC #556 (Continued) **S104400457**

Waste Description: W/FUEL-CONTAMINATED
Carcinogen: No
Quantity String: 0000000055
Haz Waste Hauler: GOLDEN STATE ENVIR. SERV.
Annual Qty String: 0000000055

Inspection Date: 05/23/2000 0:00:00
Waste Code: 221.00
Qnty at Inspection: 165.00
Measurement Unit: GAL
Treatment Method: RECYCLE
Waste Description: USED OIL
Carcinogen: No
Quantity String: 0000000165
Waste Item #: W005
Waste Name: WASTE OIL & MIXED OIL
Annual Quantity: 1500.00
Storage Method: METAL DRUMS,55 GALLONS
Haz Waste Hauler: GOLDEN STATE ENVIR. SERV.
Annual Qty String: 0000001500

Inspection Date: 05/23/2000 0:00:00
Waste Code: 888.00
Qnty at Inspection: 300.00
Measurement Unit: LBS
Treatment Method: FILTERS/METAL RECLAI
Waste Description: USED OIL FILTERS
Carcinogen: No
Quantity String: 0000000300
Waste Item #: W006
Waste Name: USED OIL FILTERS
Annual Quantity: 1200.00
Storage Method: METAL DRUMS,55 GALLONS
Haz Waste Hauler: GOLDEN STATE ENVIR. SERV.
Annual Qty String: 0000001200

Inspection Date: 05/23/2000 0:00:00
Waste Code: 444.00
Qnty at Inspection: 300.00
Measurement Unit: LBS
Treatment Method: RECYCLE
Waste Description: USED BATTERIES
Carcinogen: No
Quantity String: 0000000300
Waste Item #: W007
Waste Name: USED BATTERIES
Annual Quantity: 300.00
Storage Method: WASTE PILE
Haz Waste Hauler: UNKNOWN HAZ WST HAULER
Annual Qty String: 0000000300

HMMD VIOLATIONS:
Inspection Date: Not reported
Waste Code: Not reported
Type of Violation: Not reported
Violation Description:
Occurrences: Not reported

HMMD ENVIRONMENTAL ASSESSMENT INFORMATION:
Case Status Date: Not reported
Case Type: Not reported
Case Status: Not reported
Release Occurrence Number: Not reported
Historical Name: Not reported
Date Release Began: Not reported
Lead Agency: Not reported

The CA HMMD database may contain additional details for this site.
Please click here or contact your EDR Account Executive for more information.

E19
SSW
1/8-1/4
1036 ft.

MISSION AUTO REPAIR
1300 B ARMORLITE DR
SAN MARCOS, CA 92069

Site 2 of 2 in cluster E

HAZNET **S103977856**
N/A

Relative:
Lower

Actual:
560 ft.

MISSION AUTO REPAIR (Continued) **S103977856**

HAZNET:
Gepaid: CAL000055456
TSD EPA ID: CAT080013352
Gen County: San Diego
Tsd County: Los Angeles
Tons: .2293
Waste Category: Aqueous solution with less than 10% total organic residues
Disposal Method: Recycler
Contact: HARGROVE JOHN R JR
Telephone: (000) 000-0000
Mailing Address: 1300 B ARMORLITE DR
SAN MARCOS, CA 92069
County San Diego

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20 **TEAM TWO DESIGNS** **HAZNET** **S100946215**
SW **1377 ARMORLITE DR STE B** **N/A**
1/8-1/4 **SAN MARCOS, CA 92069**
1138 ft.

Relative:
Lower

Actual:
560 ft.

HAZNET:
Gepaid: CAL000072377
TSD EPA ID: CAD089446710
Gen County: San Diego
Tsd County: Los Angeles
Tons: .2293
Waste Category: Oxygenated solvents (acetone, butanol, ethyl acetate, etc.)
Disposal Method: Recycler
Contact: RABORN NORMAN
Telephone: (000) 000-0000
Mailing Address: 1377 ARMORLITE DR STE B
SAN MARCOS, CA 92069
County San Diego

Gepaid: CAL000148579
TSD EPA ID: CAT080013352
Gen County: San Diego
Tsd County: Los Angeles
Tons: 6.6720
Waste Category: Oil/water separation sludge
Disposal Method: Recycler
Contact: PACIFIC TECHNOLOGY INC
Telephone: (000) 000-0000
Mailing Address: 1377 ARMORLITE DR STE B
SAN MARCOS, CA 92069 - 1341
County San Diego

Gepaid: CAL000148579
TSD EPA ID: CAT080013352
Gen County: San Diego
Tsd County: Los Angeles
Tons: 2.2935
Waste Category: Oil/water separation sludge
Disposal Method: Recycler
Contact: PACIFIC TECHNOLOGY INC
Telephone: (000) 000-0000
Mailing Address: 1377 ARMORLITE DR STE B
SAN MARCOS, CA 92069 - 1341
County San Diego

TEAM TWO DESIGNS (Continued) **S100946215**

Gepaid: CAL000148579
TSD EPA ID: CAT080013352
Gen County: San Diego
Tsd County: Los Angeles
Tons: .8340
Waste Category: Oil/water separation sludge
Disposal Method: Recycler
Contact: PACIFIC TECHNOLOGY INC
Telephone: (000) 000-0000
Mailing Address: 1377 ARMORLITE DR STE B
SAN MARCOS, CA 92069 - 1341
County San Diego

Gepaid: CAL000148579
TSD EPA ID: CAT080013352
Gen County: San Diego
Tsd County: Los Angeles
Tons: 3.1274
Waste Category: Oil/water separation sludge
Disposal Method: Recycler
Contact: PACIFIC TECHNOLOGY INC
Telephone: (000) 000-0000
Mailing Address: 1377 ARMORLITE DR STE B
SAN MARCOS, CA 92069 - 1341
County San Diego

The CA HAZNET database contains 2 additional records for this site.
Please click here or contact your EDR Account Executive for more information.

21
WNW
1/8-1/4
1254 ft.

Relative:
Lower

Actual:
574 ft.

CASEYS AUTO MACHINE **RCRIS-SQG 1001967317**
120 N PACIFIC ST STE G3 **FINDS CAR000067124**
SAN MARCOS, CA 92069

RCRIS:
Owner: CASEY RUMMERFIELD
(760) 741-4925
EPA ID: CAR000067124
Contact: CASEY RUMMERFIELD
(760) 591-3450
Classification: Small Quantity Generator
TSDF Activities: Not reported
Violation Status: No violations found

FINDS:
Other Pertinent Environmental Activity Identified at Site:
Facility Registry System (FRS)
Resource Conservation and Recovery Act Information system (RCRAINFO)

F22 **SAN DIEGO CAR SALON** **HAZNET** **S105723695**
SSW **1325 DESCANSO AVE** **N/A**
1/8-1/4 **SAN MARCOS, CA 92069**
1281 ft.

Site 1 of 3 in cluster F

Relative:
Lower

Actual:
560 ft.

HAZNET:
Gepaid: CAL000183244
TSD EPA ID: CAD008252405
Gen County: San Diego
Tsd County: Los Angeles
Tons: 0.43
Waste Category: Unspecified solvent mixture Waste
Disposal Method: Recycler
Contact: HARRIS TO - MGR/OWNER
Telephone: (760) 744-0834
Mailing Address: 1358 LA MIRADA DRIVE
SAN MARCOS, CA 92069
County San Diego

F23 **TOTAL PERFORMANCE** **HAZNET** **S105723696**
SSW **1325 DESCANSO AVE** **N/A**
1/8-1/4 **SAN MARCOS, CA 92069**
1281 ft.

Site 2 of 3 in cluster F

Relative:
Lower

Actual:
560 ft.

HAZNET:
Gepaid: CAL000183245
TSD EPA ID: CAD008252405
Gen County: San Diego
Tsd County: Los Angeles
Tons: 0.45
Waste Category: Aqueous solution with 10% or more total organic residues
Disposal Method: Recycler
Contact: JOHN TANJA - OWNER
Telephone: (760) 744-0834
Mailing Address: 1325 DESCANSO AVE
SAN MARCOS, CA 92069
County San Diego

G24 **WALKER WOOD PRODUCTS** **HAZNET** **S102805225**
SSW **1355 DESCANSO AVE** **N/A**
1/8-1/4 **SAN MARCOS, CA 92069**
1288 ft.

Site 1 of 4 in cluster G

Relative:
Lower

Actual:
560 ft.

HAZNET:
Gepaid: CAC001129184
TSD EPA ID: CAD000088252
Gen County: San Diego
Tsd County: Los Angeles
Tons: .4170
Waste Category: Oxygenated solvents (acetone, butanol, ethyl acetate, etc.)
Disposal Method: Transfer Station
Contact: ED ELDER
Telephone: (000) 000-0000
Mailing Address: 1355 DESCANSO AVE
SAN MARCOS, CA 92069
County San Diego

WALKER WOOD PRODUCTS (Continued) **S102805225**

G25
SSW
1/8-1/4
1288 ft.

Relative:
Lower

Actual:
560 ft.

ULTRA-FLEX MOULDING INC **HAZNET S104750461**
1355 DESCANSO **San Diego Co. HMMD N/A**
SAN MARCOS, CA 92069

Site 2 of 4 in cluster G

HAZNET:

Gepaid:	CAL000171120
TSD EPA ID:	CAD028409019
Gen County:	San Diego
Tsd County:	Los Angeles
Tons:	.0625
Waste Category:	Off-specification, aged, or surplus organics
Disposal Method:	Transfer Station
Contact:	BOYD ADAMS
Telephone:	(760) 744-6579
Mailing Address:	PO BOX 462830
	ESCONDIDO, CA 92046
County	San Diego

Gepaid:	CAL000171120
TSD EPA ID:	CAD089446710
Gen County:	San Diego
Tsd County:	Los Angeles
Tons:	33.8720
Waste Category:	Other organic solids
Disposal Method:	Disposal, Land Fill
Contact:	BOYD ADAMS
Telephone:	(760) 744-6579
Mailing Address:	PO BOX 462830
	ESCONDIDO, CA 92046
County	San Diego

Gepaid:	CAL000171120
TSD EPA ID:	CAD089446710
Gen County:	San Diego
Tsd County:	Los Angeles
Tons:	.4795
Waste Category:	Unspecified solvent mixture Waste
Disposal Method:	Recycler
Contact:	BOYD ADAMS
Telephone:	(760) 744-6579
Mailing Address:	PO BOX 462830
	ESCONDIDO, CA 92046
County	San Diego

Gepaid:	CAL000171120
TSD EPA ID:	CAD089446710
Gen County:	San Diego
Tsd County:	Los Angeles
Tons:	1.2175
Waste Category:	Unspecified aqueous solution
Disposal Method:	Recycler
Contact:	BOYD ADAMS
Telephone:	(760) 744-6579
Mailing Address:	PO BOX 462830
	ESCONDIDO, CA 92046
County	San Diego

ULTRA-FLEX MOULDING INC (Continued) **S104750461**

Gepaid: CAL000171120
TSD EPA ID: CAD088504881
Gen County: San Diego
Tsd County: Orange
Tons: 7.5000
Waste Category: Other organic solids
Disposal Method: Not reported
Contact: BOYD ADAMS
Telephone: (760) 744-6579
Mailing Address: PO BOX 462830
ESCONDIDO, CA 92046
County San Diego

The CA HAZNET database contains 11 additional records for this site.
Please click here or contact your EDR Account Executive for more information.

HMMD:
Facility ID: H23584
Inactive Indicator: Inactive
SIC: 2434
Owner: BOYD ADAMS
Mailing Address: SAN MARCOS
CA
92079, 1089
Corporate Code: 18
Census Tract #: 20009
Inspection Date: 07/27/2000 0:00:00
Inspector Name: MONNIER
Facility Contact: KEITH BEASLEY
Property Owner: Not reported
PO Address: Not reported
Tank Owner: Not reported
TO Address: Not reported
Last Update: 11/25/2001 0:00:00
Business Code: RESIN MANUFACTURER/USER
Permit Expiration: 06/30
2nd Name: Not reported
Fire Dept District: SAN DIEGO FD
EPA ID: CAL000171120
Reinspection Date: 09/01
Gas Station: Not reported
Delinquent Flag: Not Delinquent
Last Delinquent Letter: Not reported
Last Letter Type: Not reported
Violation Notice Issued: Not reported
Map Code/Business Plan on File: Not reported
Business Plan Acceptance Date: 03/25/91
Reinspection Date Y2K Compatible: Sep 2001

HMMD DISCLOSURE INVENTORY:
Chemical Name: Not reported
Item Number: Not reported
Stored at 1 Time: Not reported
Measurement Units: Not reported
Carcinogen: No
Storage Method: Not reported
Annual Qty String: Not reported
Quantity Stored At One Time: Not reported
Annual Quantity String: Not reported
Material Safety Data Sheet: Not reported
1st Hazard Category: Not reported
2nd Hazard Category: Not reported

HMMD UNDERGROUND TANKS:
Tank Number: Not reported
Capacity (Gal): Not reported
Waste or Product: Not reported
Tank ID Number: Not reported
Tank Exempt: Not reported
Tank Contents: Not reported

ULTRA-FLEX MOULDING INC (Continued) **S104750461**

HMMD WASTE STREAMS:

Inspection Date:	07/27/2000 0:00:00	Waste Item #:	W001
Waste Code:	461.00	Waste Name:	PAINT SLUDGE
Qnty at Inspection:	55.00	Annual Quantity:	220.00
Measurement Unit:	GAL		
Treatment Method:	RECYCLE	Storage Method:	METAL DRUMS,55 GALLONS
Waste Description:	PAINT SPRAY SLUDGE	Haz Waste Hauler:	UNKNOWN HAZ WST HAULER
Carcinogen:	No	Annual Qty String:	0000000220
Quantity String:	0000000055		

Inspection Date:	07/27/2000 0:00:00	Waste Item #:	W002
Waste Code:	352.00	Waste Name:	ORGANIC SOLIDS (OTHER)
Qnty at Inspection:	540.00	Annual Quantity:	6480.00
Measurement Unit:	CFT		
Treatment Method:	LANDFILL	Storage Method:	ROLL OFF OR DROP BOXES
Waste Description:	20 YD CONTAINER ONSITE	Haz Waste Hauler:	KEM
Carcinogen:	No	Annual Qty String:	0000006480
Quantity String:	0000000540		

HMMD VIOLATIONS:

Inspection Date:	Not reported	Occurrences:	Not reported
Waste Code:	Not reported		
Type of Violation:	Not reported		
Violation Description:			

HMMD ENVIRONMENTAL ASSESSMENT INFORMATION:

Case Status Date:	Not reported
Case Type:	Not reported
Case Status:	Not reported
Release Occurrence Number:	Not reported
Historical Name:	Not reported
Date Release Began:	Not reported
Lead Agency:	Not reported

The CA HMMD database may contain additional details for this site.
Please click here or contact your EDR Account Executive for more information.

F26 **TIAGO** **HAZNET** **S102861387**
SSW **1308 DESCANSO AVE** **N/A**
1/8-1/4 **SAN MARCOS, CA 92069**
1291 ft.

Site 3 of 3 in cluster F

Relative: Lower

Actual: 560 ft.

HAZNET:

Gepaid:	CAL000214886
TSD EPA ID:	CAD982444481
Gen County:	San Diego
Tsd County:	San Bernardino
Tons:	0.4
Waste Category:	Contaminated soil from site clean-ups
Disposal Method:	Recycler
Contact:	JD DYE
Telephone:	(760) 471-9531
Mailing Address:	1308 DESCANSO AVE
	SAN MARCOS, CA 92069
County	San Diego

TIAGO (Continued) **S102861387**

G27
SSW
1/8-1/4
1297 ft.

Relative:
Lower

Actual:
560 ft.

BUCKS AUTO BODY **HAZNET** **S103953505**
1365 DESCANSO AVE **N/A**
SAN MARCOS, CA 92069

Site 3 of 4 in cluster G

HAZNET:

Gepaid:	CAL000162058
TSD EPA ID:	CAD008302903
Gen County:	San Diego
Tsd County:	Los Angeles
Tons:	.0667
Waste Category:	Paint sludge
Disposal Method:	Recycler
Contact:	DONALD SOWERS
Telephone:	(000) 000-0000
Mailing Address:	1365 DESCANSO AVE
	SAN MARCOS, CA 92069
County	San Diego

Gepaid:	CAL000162058
TSD EPA ID:	CAD008252405
Gen County:	San Diego
Tsd County:	Los Angeles
Tons:	.2502
Waste Category:	Oxygenated solvents (acetone, butanol, ethyl acetate, etc.)
Disposal Method:	Recycler
Contact:	DONALD SOWERS
Telephone:	(000) 000-0000
Mailing Address:	1365 DESCANSO AVE
	SAN MARCOS, CA 92069
County	San Diego

Gepaid:	CAL000162058
TSD EPA ID:	CAD028409019
Gen County:	San Diego
Tsd County:	Los Angeles
Tons:	.2502
Waste Category:	Off-specification, aged, or surplus organics
Disposal Method:	Transfer Station
Contact:	DONALD SOWERS
Telephone:	(000) 000-0000
Mailing Address:	1365 DESCANSO AVE
	SAN MARCOS, CA 92069
County	San Diego

Gepaid:	CAL000162058
TSD EPA ID:	CAD028409019
Gen County:	San Diego
Tsd County:	Los Angeles
Tons:	.1042
Waste Category:	Oxygenated solvents (acetone, butanol, ethyl acetate, etc.)
Disposal Method:	Transfer Station
Contact:	DONALD SOWERS
Telephone:	(000) 000-0000
Mailing Address:	1365 DESCANSO AVE
	SAN MARCOS, CA 92069
County	San Diego

BUCKS AUTO BODY (Continued) **S103953505**

Gepaid: CAL000162058
TSD EPA ID: CAD008252405
Gen County: San Diego
Tsd County: Los Angeles
Tons: .4170
Waste Category: Oxygenated solvents (acetone, butanol, ethyl acetate, etc.)
Disposal Method: Recycler
Contact: DONALD SOWERS
Telephone: (000) 000-0000
Mailing Address: 1365 DESCANSO AVE
SAN MARCOS, CA 92069
County San Diego

The CA HAZNET database contains 4 additional records for this site.
Please click here or contact your EDR Account Executive for more information.

G28 **ALEX AND SONS AUTO BODY** **HAZNET** **S100727368**
SSW **1365 DESCANSO AVE** **N/A**
1/8-1/4 **SAN MARCOS, CA 92067**
1297 ft.

Site 4 of 4 in cluster G

Relative: Lower

Actual: 560 ft.

HAZNET:
Gepaid: CAL000117948
TSD EPA ID: CAD008252405
Gen County: San Diego
Tsd County: Los Angeles
Tons: .1834
Waste Category: Unspecified solvent mixture Waste
Disposal Method: Recycler
Contact: ALEX BARBOA
Telephone: (000) 000-0000
Mailing Address: 1365 DESCANSO AVE
SAN MARCOS, CA 92069 - 1305
County San Diego

Gepaid: CAL000117948
TSD EPA ID: CAD008252405
Gen County: San Diego
Tsd County: Los Angeles
Tons: .1251
Waste Category:
Disposal Method: Recycler
Contact: ALEX BARBOA
Telephone: (000) 000-0000
Mailing Address: 1365 DESCANSO AVE
SAN MARCOS, CA 92069 - 1305
County San Diego

Gepaid: CAL000117948
TSD EPA ID: CAD008252405
Gen County: San Diego
Tsd County: Los Angeles
Tons: .0000
Waste Category:
Disposal Method: Recycler
Contact: ALEX BARBOA
Telephone: (000) 000-0000
Mailing Address: 1365 DESCANSO AVE

ALEX AND SONS AUTO BODY (Continued) **S100727368**

SAN MARCOS, CA 92069 - 1305
County San Diego

Gepaid: CAL000117948
TSD EPA ID: CAD008252405
Gen County: San Diego
Tsd County: Los Angeles
Tons: .2668
Waste Category: Unspecified solvent mixture Waste
Disposal Method: Recycler
Contact: ALEX BARBOA
Telephone: (000) 000-0000
Mailing Address: 1365 DESCANSO AVE
SAN MARCOS, CA 92069 - 1305
County San Diego

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29 **CREST BEVERAGE** **LUST** **S102428480**
SSE **1152 ARMORLITE DR** **Cortese** **N/A**
1/4-1/2 **SAN MARCOS, CA 92069** **San Diego Co. HMMD**
1408 ft.

Relative:
Lower

Actual:
560 ft.

LUST Region 9:

Case Number:	9UT1422	Release Date:	06/08/1989
Local Agency:	37000		
Substance:	8006619	Qty Leaked:	Not reported
Date Found:	03/27/1989	How Found:	Tank Closure
Date Stopped:	03/27/1989	How Stopped:	Close Tank
Source:	Not reported	Cause:	Not reported
Lead Agency:	Local Agency		
Status:	Case Closed		
Case Type:	Aquifer affected		
Abate Method:	No Action Required - incident is minor, requiring no remedial action		
Confirm Date:	Not reported	Submit Workplan:	Not reported
Prelim Assess:	Not reported	Desc Pollution:	Not reported
Remed Plan:	Not reported	Remed Action:	Not reported
Began Monitor:	5/31/90	Closed Date:	5/31/90
Enforce Type:	Not reported		
Enforce Date:	Not reported		
Pilot Program:	LOP	Local Case:	H20781-001
Basin Number:	904.52	Gwater Depth:	10'
File Dispn:	File discarded, case closed		

Interim Remedial Actions: Yes
Beneficial Use: MUN
Cleanup and Abatement order Number: Not reported
Waste Discharge Requirement Number: Not reported
NPDES Number: Not reported

CORTESE:
Reg Id: 9UT1422
Region: CORTESE
Reg By: Leaking Underground Storage Tanks

HMMD:

Facility ID:	H20781		
Inactive Indicator:	Active	Business Code:	Not reported
SIC:	5181	Permit Expiration:	10/31
Owner:	SAN DIEGO UNION TRIBUNE	2nd Name:	Not reported
Mailing Address:	SAN DIEGO		
	CA		
	92108, 3003		

CREST BEVERAGE (Continued) **S102428480**

Corporate Code: 18
Census Tract #: 20009
Inspection Date: 09/08/1999 0:00:00
Inspector Name: MONNIER
Facility Contact: TONY DOUBEK
Property Owner: ARMORLITE ASSOCIATES
PO Address: LAGUNA NIGUEL
CA
92677
Tank Owner: ARMORLITE ASSOCIATES
TO Address: LAGUNA NIGUEL
CA
92677
Last Update: 08/05/2001 0:00:00
Last Delinquent Letter: Not reported
Last Letter Type: Not reported
Violation Notice Issued: Not reported
Map Code/Business Plan on File: Not reported
Business Plan Acceptance Date: 09/08/99
Reinspection Date Y2K Compatible: Jan 2000

Fire Dept District: SAN MARCOS FPD
EPA ID: CAL912495571
Reinspection Date: 00/00
Gas Station: Not reported
Delinquent Flag: Not Delinquent

HMMD DISCLOSURE INVENTORY:
Chemical Name: Not reported
Item Number: Not reported
Stored at 1 Time: Not reported
Measurement Units: Not reported
Carcinogen: No
Quantity Stored At One Time: Not reported
Annual Quantity String: Not reported
Material Safety Data Sheet: Not reported
1st Hazard Category: Not reported
2nd Hazard Category: Not reported

Storage Method: Not reported
Annual Qty String: Not reported

HMMD UNDERGROUND TANKS:
Tank Number: T001
Capacity (Gal): 10000.00
Waste or Product: Product

Tank ID Number: 1
Tank Exempt: No
Tank Contents: REGULAR UNLEADED

Tank Number: T002
Capacity (Gal): 5000.00
Waste or Product: Product

Tank ID Number: 2
Tank Exempt: No
Tank Contents: DIESEL

HMMD WASTE STREAMS:
Inspection Date: 09/08/1999 0:00:00
Waste Code: 541.00
Qnty at Inspection: 16.00
Measurement Unit: GAL
Treatment Method: RECYCLE
Waste Description: FIXER/SILVER
Carcinogen: No
Quantity String: 0000000016

Waste Item #: W001
Waste Name: PHOTOCHEM/PHOTOPROC WASTE
Annual Quantity: 77.00

Storage Method: PLASTIC DRUMS 0-5 GALLONS
Haz Waste Hauler: SAFETY-KLEEN
Annual Qty String: 0000000077

HMMD VIOLATIONS:
Inspection Date: 12/19/1995 0:00:00
Waste Code: Not reported
Type of Violation: GENERAL VIOLATION
Violation Description: HAZARDOUS WASTE CONTAINERS ARE MISSING LABELS, ACCUMULATION DATE AND/OR ARE IMPROPERLY LABELED CCR 66262.34

Occurrences: 01

CREST BEVERAGE (Continued) **S102428480**

Inspection Date: 12/19/1995 0:00:00 Occurrences: 02
Waste Code: Not reported
Type of Violation: GENERAL VIOLATION
Violation Description: PERSONNEL TRAINING IS NOT ADEQUATE TO ENSURE COMPLIANCE WITH HAZARDOUS WASTES/MATERIALS REGULATIONS
CCR 66265.16

Inspection Date: 07/03/1997 0:00:00 Occurrences: 01
Waste Code: Not reported
Type of Violation: GENERAL VIOLATION
Violation Description: GENERATOR OF HAZARDOUS WASTE HAS NOT SENT THE APPROPRIATE COPY OF THE MANIFEST TO THE CAL-EPA.
CCR 66262.23(A)(4)

Inspection Date: 07/03/1997 0:00:00 Occurrences: 02
Waste Code: Not reported
Type of Violation: GENERAL VIOLATION
Violation Description: GENERATOR HAS NOT MAINTAINED THE REQUIRED SIGNED COPY OF THE HAZARDOUS WASTE MANIFEST FROM THE TSD FACILITY ON SITE FOR REVIEW CCR 66262.40

Inspection Date: 07/03/1997 0:00:00 Occurrences: 02
Waste Code: Not reported
Type of Violation: GENERAL VIOLATION
Violation Description: PERSONNEL TRAINING IS NOT ADEQUATE TO ENSURE COMPLIANCE WITH HAZARDOUS WASTES/MATERIALS REGULATIONS
CCR 66265.16

Inspection Date: 12/19/1995 0:00:00 Occurrences: 01
Waste Code: Not reported
Type of Violation: GENERAL VIOLATION
Violation Description: GENERATOR HAS NOT MAINTAINED THE REQUIRED SIGNED COPY OF THE HAZARDOUS WASTE MANIFEST FROM THE TSD FACILITY ON SITE FOR REVIEW CCR 66262.40

HMMD ENVIRONMENTAL ASSESSMENT INFORMATION:
Case Status Date: 05/31/1990 0:00:00
Case Type: TANK, RELEASE (W)
Case Status: CLOSED
Release Occurrence Number: 001
Historical Name: CREST BEVERAGE COMPANY
Date Release Began: 11/15/1988 0:00:00
Lead Agency: DEH

The CA HMMD database may contain additional details for this site.
Please click here or contact your EDR Account Executive for more information.

H30 **1140 W. MISSION RD** **CHMIRS S105630789**
ESE **SAN MARCOS, CA** **N/A**
1/4-1/2
1572 ft.

Site 1 of 3 in cluster H

Relative:
Lower

Actual:
573 ft.

CHMIRS:
OES Control Number: 28029
Chemical Name: PAINT(WATER BASE)
Extent of Release: Not reported
Property Use: Not reported

(Continued) **S105630789**

Incident Date:	Not reported
Date Completed:	Not reported
Time Completed :	Not reported
Agency Id Number :	Not reported
Agency Incident Number :	Not reported
OES Incident Number :	28029
Time Notified :	Not reported
Surrounding Area :	Not reported
Estimated Temperature :	Not reported
Property Management :	Not reported
More Than Two Substances Involved? :	Not reported
Special Studies 1 :	Not reported
Special Studies 2 :	Not reported
Special Studies 3 :	Not reported
Special Studies 4 :	Not reported
Special Studies 5 :	Not reported
Special Studies 6 :	Not reported
Responding Agency Personel # Of Injuries :	Not reported
Responding Agency Personel # Of Fatalities :	Not reported
Resp Agncy Personel # Of Decontaminated :	Not reported
Others Number Of Decontaminated :	Not reported
Others Number Of Injuries :	Not reported
Others Number Of Fatalities :	Not reported
Vehicle Make/year :	Not reported
Vehicle License Number :	Not reported
Vehicle State :	Not reported
Vehicle Id Number :	Not reported
CA/DOT/PUC/ICC Number :	Not reported
Company Name :	Not reported
Reporting Officer Name/ID :	Not reported
Report Date :	Not reported
Comments :	Not reported
Facility Telephone Number :	Not reported
Waterway Involved :	YES
Waterway :	Not reported
Spill Site :	Not reported
Cleanup By :	UNDETERMINED
Containment :	Not reported
What Happened :	FIRE IN PAINT STORAGE CONTAINER
Type :	CHEMICAL
Other :	Not reported
Chemical 1 :	Not Reported
Chemical 2 :	Not Reported
Chemical 3 :	Not Reported
Date/Time :	2130
Evacuations :	Not reported

H31
ESE
1/4-1/2
1572 ft.

1140 WEST MISSION RD **CHMIRS** **S105630788**
SAN DIEGO (County), CA **N/A**

Site 2 of 3 in cluster H

Relative:
Lower

Actual:
573 ft.

CHMIRS:

OES Control Number:	28030
Chemical Name:	WATER BASED PAINT
Extent of Release:	Not reported
Property Use:	Not reported
Incident Date:	Not reported

(Continued) **S105630788**

Date Completed:	Not reported
Time Completed :	Not reported
Agency Id Number :	Not reported
Agency Incident Number :	Not reported
OES Incident Number :	28030
Time Notified :	Not reported
Surrounding Area :	Not reported
Estimated Temperature :	Not reported
Property Management :	Not reported
More Than Two Substances Involved? :	Not reported
Special Studies 1 :	Not reported
Special Studies 2 :	Not reported
Special Studies 3 :	Not reported
Special Studies 4 :	Not reported
Special Studies 5 :	Not reported
Special Studies 6 :	Not reported
Responding Agency Personel # Of Injuries :	Not reported
Responding Agency Personel # Of Fatalities :	Not reported
Resp Agncy Personel # Of Decontaminated :	Not reported
Others Number Of Decontaminated :	Not reported
Others Number Of Injuries :	Not reported
Others Number Of Fatalities :	Not reported
Vehicle Make/year :	Not reported
Vehicle License Number :	Not reported
Vehicle State :	Not reported
Vehicle Id Number :	Not reported
CA/DOT/PUC/ICC Number :	Not reported
Company Name :	Not reported
Reporting Officer Name/ID :	Not reported
Report Date :	Not reported
Comments :	Not reported
Facility Telephone Number :	Not reported
Waterway Involved :	Not reported
Waterway :	Not reported
Spill Site :	Not reported
Cleanup By :	UNKNOWN
Containment :	Not reported
What Happened :	PALAMAR COLLEGE SEALAND CONTAINER USED FOR SHED-CAUGHT ON FIRE. STORAGE SHED CAUGHT ON FIRE. 400 GALLONS OF PAINT STORED THERE SOME PAINT SPILLED INTO GROUND & POSSIBLY STORM DRAIN.
Type :	CHEMICAL
Other :	Not reported
Chemical 1 :	Not Reported
Chemical 2 :	Not Reported
Chemical 3 :	Not Reported
Date/Time :	05-16-93/2030
Evacuations :	Not reported

32 **CHMIRS** **S100276494**
WSW **120 NORTH PACIFIC AVENUE** **N/A**
1/4-1/2 **SAN MARCOS, CA 92083**
1572 ft.

Relative:
Lower

Actual:
564 ft.

CHMIRS:

OES Control Number:	9099689
Chemical Name:	Not reported
Extent of Release:	Not reported
Property Use:	Industrial, Utility
Incident Date:	17-NOV-90
Date Completed:	17-NOV-90
Time Completed :	1491
Agency Id Number :	37140
Agency Incident Number :	25081
OES Incident Number :	9099689
Time Notified :	1411
Surrounding Area :	600
Estimated Temperature :	76
Property Management :	P
More Than Two Substances Involved? :	N
Special Studies 1 :	Not reported
Special Studies 2 :	Not reported
Special Studies 3 :	Not reported
Special Studies 4 :	Not reported
Special Studies 5 :	Not reported
Special Studies 6 :	Not reported
Responding Agency Personel # Of Injuries :	0
Responding Agency Personel # Of Fatalities :	0
Resp Agncy Personel # Of Decontaminated :	0
Others Number Of Decontaminated :	0
Others Number Of Injuries :	0
Others Number Of Fatalities :	0
Vehicle Make/year :	Not reported
Vehicle License Number :	Not reported
Vehicle State :	Not reported
Vehicle Id Number :	Not reported
CA/DOT/PUC/ICC Number :	Not reported
Company Name :	Not reported
Reporting Officer Name/ID :	ENG. TRACY JARMAN
Report Date :	17-NOV-90
Comments :	No
Facility Telephone Number :	619 533-4300
Waterway Involved :	Not reported
Waterway :	Not reported
Spill Site :	Not reported
Cleanup By :	Not reported
Containment :	Not reported
What Happened :	Not reported
Type :	Not reported
Other :	Not reported
Chemical 1 :	Not Reported
Chemical 2 :	Not Reported
Chemical 3 :	Not Reported
Date/Time :	Not reported
Evacuations :	Not reported

(Continued) S100276494

H33 ESE 1/4-1/2 1577 ft. Relative: Lower Actual: 573 ft.

PALOMAR COMMUNITY COLLEGE
1140 E MISSION RD
SAN MARCOS, CA 92069
Site 3 of 3 in cluster H

Database(s): RCRIS-LQG, FINDS, UST, LUST, HIST UST, HAZNET, Cortese, San Diego Co. HMMD

EDR ID Number: 1000334331
EPA ID Number: CAD981583057

RCRIS:
Owner: NOT REQUIRED
(415) 555-1212
EPA ID: CAD981583057
Contact: Not reported
Classification: Large Quantity Generator
TSDF Activities: Not reported

Violation Status: Violations exist

Regulation Violated:	262.10-12.A
Area of Violation:	GENERATOR-ALL REQUIREMENTS (OVERSIGHT)
Date Violation Determined:	05/23/1994
Actual Date Achieved Compliance:	05/23/1999
Regulation Violated:	262.10-12.A
Area of Violation:	GENERATOR-ALL REQUIREMENTS (OVERSIGHT)
Date Violation Determined:	05/24/1993
Actual Date Achieved Compliance:	05/23/1994
Regulation Violated:	262.10-12.A
Area of Violation:	GENERATOR-ALL REQUIREMENTS (OVERSIGHT)
Date Violation Determined:	03/30/1992
Actual Date Achieved Compliance:	05/24/1993

There are 3 violation record(s) reported at this site:

Evaluation	Area of Violation	Date of Compliance
Compliance Evaluation Inspection	GENERATOR-ALL REQUIREMENTS (OVERSIGHT)	19990523
Compliance Evaluation Inspection	GENERATOR-ALL REQUIREMENTS (OVERSIGHT)	19940523
Compliance Evaluation Inspection	GENERATOR-ALL REQUIREMENTS (OVERSIGHT)	19930524

FINDS:
Other Pertinent Environmental Activity Identified at Site:
Facility Registry System (FRS)
Resource Conservation and Recovery Act Information system (RCRAINFO)

State LUST:

Cross Street:	Not reported		
Qty Leaked:	Not reported		
Case Number	9UT1436		
Reg Board:	9		
Chemical:	Regular Gasoline		
Lead Agency:	Local Agency		
Local Agency :	0		
Case Type:	Soil only		
Status:	Case Closed		
Review Date:	Not reported	Confirm Leak:	Not reported
Workplan:	6/29/89	Prelim Assess:	6/29/89
Pollution Char:	Not reported	Remed Plan:	Not reported

PALOMAR COMMUNITY COLLEGE (Continued) **1000334331**

Remed Action: 1/3/65
Monitoring: Not reported
Close Date: 04/02/1991
Release Date: Not reported
Cleanup Fund Id : Not reported
Discover Date : 06/07/1989
Enforcement Dt : Not reported
Enf Type: Not reported
Enter Date : / /
Funding: Not reported
Staff Initials: WKA
How Discovered: Not reported
How Stopped: Not reported
Interim : Not reported
Leak Cause: Not reported
Leak Source: Not reported
MTBE Date : / /
Max MTBE GW : 0 Parts per Billion
MTBE Tested: Site NOT Tested for MTBE.Includes Unknown and Not Analyzed.
Priority: Low priority. Priority ranking can change over time.
Local Case # : H03452-001
Beneficial: Not reported
Staff : UNK
GW Qualifier : Not reported
Max MTBE Soil : Not reported
Soil Qualifier : Not reported
Hydr Basin #: Not reported
Operator : Not reported
Oversight Prgm: Local Oversight Program UST
Oversight Prgm : LOP
Review Date : Not reported
Stop Date : / /
Work Suspended : Not reported
Responsible Party Not reported
RP Address: Not reported
Global Id: T0607300263
Org Name: Not reported
Contact Person: Not reported
MTBE Conc: 0
Mtbe Fuel: 1
Water System Name: Not reported
Well Name: Not reported
Distance To Lust: 0
Waste Discharge Global ID: Not reported
Waste Disch Assigned Name: Not reported

Cross Street: Not reported
Qty Leaked: Not reported
Case Number 9UT2643
Reg Board: 9
Chemical: Regular Gasoline
Lead Agency: Local Agency
Local Agency : 0
Case Type: Soil only
Status: Case Closed
Review Date: Not reported
Workplan: 12/28/93
Confirm Leak: Not reported
Prelim Assess: 12/28/93

PALOMAR COMMUNITY COLLEGE (Continued) **1000334331**

Pollution Char: Not reported Remed Plan: Not reported
Remed Action: 1/3/65
Monitoring: Not reported
Close Date: 03/22/1996
Release Date: Not reported
Cleanup Fund Id : Not reported
Discover Date : 12/23/1993
Enforcement Dt : Not reported
Enf Type: Warning/notice of violation to uncooperative responsible parties (includes CDO and CAO)
Enter Date : / /
Funding: Not reported
Staff Initials: BJO
How Discovered: Not reported
How Stopped: Not reported
Interim : Not reported
Leak Cause: Not reported
Leak Source: Not reported
MTBE Date : / /
Max MTBE GW : 0 Parts per Billion
MTBE Tested: Site NOT Tested for MTBE.Includes Unknown and Not Analyzed.
Priority: 2B
Local Case # : H03452-002
Beneficial: Not reported
Staff : UNK
GW Qualifier : Not reported
Max MTBE Soil : Not reported
Soil Qualifier : Not reported
Hydr Basin #: Not reported
Operator : Not reported
Oversight Prgm: Local Oversight Program UST
Oversight Prgm : LOP
Review Date : Not reported
Stop Date : / /
Work Suspended : Not reported
Responsible Party Not reported
RP Address: Not reported
Global Id: T0607301391
Org Name: Not reported
Contact Person: Not reported
MTBE Conc: 0
Mtbe Fuel: 1
Water System Name: Not reported
Well Name: Not reported
Distance To Lust: 0
Waste Discharge Global ID: Not reported
Waste Disch Assigned Name: Not reported

PALOMAR COMMUNITY COLLEGE (Continued) **1000334331**

LUST Region 9:

Case Number:	9UT1436	Release Date:	06/12/1989
Local Agency:	37000		
Substance:	8006619	Qty Leaked:	Not reported
Date Found:	05/26/1989	How Found:	Tank Closure
Date Stopped:	05/26/1989	How Stopped:	Close Tank
Source:	Not reported	Cause:	Not reported
Lead Agency:	Local Agency		
Status:	Case Closed		
Case Type:	Aquifer affected		
Confirm Date:	Not reported	Submit Workplan:	Not reported
Prelim Assess:	Not reported	Desc Pollution:	Not reported
Remed Plan:	Not reported	Remed Action:	Not reported
Began Monitor:	4/2/91	Closed Date:	4/2/91
Enforce Type:	Not reported		
Enforce Date:	Not reported		
Pilot Program:	LOP	Local Case:	H03452-001
Basin Number:	904.52	Gwater Depth:	>21'
File Dispn:	File discarded, case closed		
Interim Remedial Actions:	Yes		
Beneficial Use:	MUN		
Cleanup and Abatement order Number:	Not reported		
Waste Discharge Requirement Number:	Not reported		
NPDES Number:	Not reported		

Case Number:	9UT2643	Release Date:	12/29/1993
Local Agency:	37000		
Substance:	8006619	Qty Leaked:	Not reported
Date Found:	12/23/1993	How Found:	Tank Closure
Date Stopped:	12/23/1993	How Stopped:	Close Tank
Source:	Tank	Cause:	Structure Failure
Lead Agency:	Local Agency		
Status:	Case Closed		
Case Type:	Soil only		
Confirm Date:	Not reported	Submit Workplan:	Not reported
Prelim Assess:	Not reported	Desc Pollution:	Not reported
Remed Plan:	Not reported	Remed Action:	Not reported
Began Monitor:	3/22/96	Closed Date:	3/22/96
Enforce Type:	Not reported		
Enforce Date:	Not reported		
Pilot Program:	LOP	Local Case:	H03452-002
Basin Number:	904.52	Gwater Depth:	10'
File Dispn:	File discarded, case closed		
Interim Remedial Actions:	Yes		
Beneficial Use:	MUN		
Cleanup and Abatement order Number:	Not reported		
Waste Discharge Requirement Number:	Not reported		
NPDES Number:	Not reported		

PALOMAR COMMUNITY COLLEGE (Continued) **1000334331**

HAZNET:

Gepaid:	CAD981583057
TSD EPA ID:	CAD009007626
Gen County:	San Diego
Tsd County:	Los Angeles
Tons:	.8428
Waste Category:	Asbestos-containing waste
Disposal Method:	Disposal, Land Fill
Contact:	PALOMAR COMMUNITY COLLEGE
Telephone:	(619) 744-1150
Mailing Address:	1140 W MISSION RD
	SAN MARCOS, CA 92069 - 1415
County	San Diego

Gepaid:	CAD981583057
TSD EPA ID:	CAD008364432
Gen County:	San Diego
Tsd County:	Los Angeles
Tons:	.0140
Waste Category:	Other organic solids
Disposal Method:	Disposal, Land Fill
Contact:	PALOMAR COMMUNITY COLLEGE
Telephone:	(619) 744-1150
Mailing Address:	1140 W MISSION RD
	SAN MARCOS, CA 92069 - 1415
County	San Diego

Gepaid:	CAD981583057
TSD EPA ID:	CAD008364432
Gen County:	San Diego
Tsd County:	Los Angeles
Tons:	.0605
Waste Category:	Other inorganic solid waste
Disposal Method:	Disposal, Land Application
Contact:	PALOMAR COMMUNITY COLLEGE
Telephone:	(619) 744-1150
Mailing Address:	1140 W MISSION RD
	SAN MARCOS, CA 92069 - 1415
County	San Diego

Gepaid:	CAD981583057
TSD EPA ID:	CAD008364432
Gen County:	San Diego
Tsd County:	Los Angeles
Tons:	.2185
Waste Category:	Other inorganic solid waste
Disposal Method:	Recycler
Contact:	PALOMAR COMMUNITY COLLEGE
Telephone:	(619) 744-1150
Mailing Address:	1140 W MISSION RD
	SAN MARCOS, CA 92069 - 1415
County	San Diego

PALOMAR COMMUNITY COLLEGE (Continued) **1000334331**

Gepaid: CAD981583057
TSD EPA ID: NVT330010000
Gen County: San Diego
Tsd County: 99
Tons: .0460
Waste Category: Other organic solids
Disposal Method: Not reported
Contact: PALOMAR COMMUNITY COLLEGE
Telephone: (619) 744-1150
Mailing Address: 1140 W MISSION RD
SAN MARCOS, CA 92069 - 1415
County San Diego

The CA HAZNET database contains 190 additional records for this site.
Please click here or contact your EDR Account Executive for more information.

CORTESE:
Reg Id: 9UT1436
Region: CORTESE
Reg By: Leaking Underground Storage Tanks

Reg Id: 9UT3872
Region: CORTESE
Reg By: Leaking Underground Storage Tanks

Reg Id: 9UT2643
Region: CORTESE
Reg By: Leaking Underground Storage Tanks

Reg Id: 9UT34
Region: CORTESE
Reg By: Leaking Underground Storage Tanks

HMMD:
Facility ID: H03452
Inactive Indicator: Active
SIC: 8351
Owner: PALOMAR COMMUNITY COLLEGE
Mailing Address: SAN MARCOS
CA
92069, 1415
Corporate Code: 18
Census Tract #: 20006
Inspection Date: 02/21/2002 0:00:00
Inspector Name: CHAIRS
Facility Contact: KELLEY MACISAAC
Property Owner: Not reported
PO Address: Not reported
Tank Owner: Not reported
TO Address: Not reported
Last Update: 03/03/2002 0:00:00
Last Delinquent Letter: Not reported
Last Letter Type: Not reported
Violation Notice Issued: Not reported
Map Code/Business Plan on File: Yes
Business Plan Acceptance Date: 12/04/95
Reinspection Date Y2K Compatible: Feb 2003

Business Code: SCHOOLS, UNIV, COLLEGES
Permit Expiration: 06/30
2nd Name: KELLEY MACISAAC
Fire Dept District: SAN MARCOS FPD
EPA ID: CAD981583057
Reinspection Date: 02/03
Gas Station: Not reported
Delinquent Flag: Not Delinquent

PALOMAR COMMUNITY COLLEGE (Continued) **1000334331**

HMMD DISCLOSURE INVENTORY:

Chemical Name: ETHANOL
Item Number: D062
Stored at 1 Time: 55.00
Measurement Units: 0000000055 Storage Method: Not reported
Carcinogen: Yes Annual Qty String: 0000000055
Quantity Stored At One Time: 67-17-5
Annual Quantity String: 55.00
Material Safety Data Sheet: M
1st Hazard Category: Not reported
2nd Hazard Category: DELAYD HLTH HAZARD

Chemical Name: VARN V- 133 BLANKET WASH
Item Number: D020
Stored at 1 Time: 55.00
Measurement Units: 0000000055 Storage Method: Not reported
Carcinogen: Yes Annual Qty String: 0000000055
Quantity Stored At One Time: 8032-32-4
Annual Quantity String: 55.00
Material Safety Data Sheet: M
1st Hazard Category: Not reported
2nd Hazard Category: FIRE HAZARD

Chemical Name: DIESEL FUEL
Item Number: D013
Stored at 1 Time: 275.00
Measurement Units: 0000000500 Storage Method: Not reported
Carcinogen: Yes Annual Qty String: 0000000275
Quantity Stored At One Time: 68476-34-6
Annual Quantity String: 500.00
Material Safety Data Sheet: M
1st Hazard Category: Not reported
2nd Hazard Category: FIRE HAZARD

Chemical Name: FORMADELHYDE
Item Number: D029
Stored at 1 Time: 100.00
Measurement Units: 0000000010 Storage Method: Not reported
Carcinogen: Yes Annual Qty String: 0000000100
Quantity Stored At One Time: 50-00-0
Annual Quantity String: 10.00
Material Safety Data Sheet: P
1st Hazard Category: Not reported
2nd Hazard Category: FIRE HAZARD

Chemical Name: KEROSENE
Item Number: D041
Stored at 1 Time: 55.00
Measurement Units: 0000000055 Storage Method: Not reported
Carcinogen: Yes Annual Qty String: 0000000055
Quantity Stored At One Time: 8008-20-6
Annual Quantity String: 55.00
Material Safety Data Sheet: M
1st Hazard Category: Not reported
2nd Hazard Category: FIRE HAZARD

Chemical Name: SODIUM CARBONATE, SODA ASH:ARTDEPT.

PALOMAR COMMUNITY COLLEGE (Continued) **1000334331**

Item Number: D046
Stored at 1 Time: 2000.00
Measurement Units: 0000003000 Storage Method: Not reported
Carcinogen: Yes Annual Qty String: 0000002000
Quantity Stored At One Time: 497-19-8
Annual Quantity String: 3000.00
Material Safety Data Sheet: B
1st Hazard Category: Not reported
2nd Hazard Category: IMMED HEALTH HAZRD

Chemical Name: ISOPROPYL ALCOHOL: CHEM DEPT DEPT
Item Number: D048
Stored at 1 Time: 55.00
Measurement Units: 0000000055 Storage Method: Not reported
Carcinogen: Yes Annual Qty String: 0000000055
Quantity Stored At One Time: 67-63-0
Annual Quantity String: 55.00
Material Safety Data Sheet: M
1st Hazard Category: Not reported
2nd Hazard Category: FIRE HAZARD

Chemical Name: TURF SUPREME
Item Number: D059
Stored at 1 Time: 500.00
Measurement Units: 0000000750 Storage Method: Not reported
Carcinogen: Yes Annual Qty String: 0000000500
Quantity Stored At One Time: MIXTURE
Annual Quantity String: 750.00
Material Safety Data Sheet: B
1st Hazard Category: Not reported
2nd Hazard Category: FIRE HAZARD

Chemical Name: SULFURIC ACID
Item Number: D061
Stored at 1 Time: 55.00
Measurement Units: 0000000070 Storage Method: Not reported
Carcinogen: Yes Annual Qty String: 0000000055
Quantity Stored At One Time: 7664-93-9
Annual Quantity String: 70.00
Material Safety Data Sheet: G
1st Hazard Category: Not reported
2nd Hazard Category: IMMED HEALTH HAZRD

Chemical Name: FIXER DEVELOPER CHEMICALS
Item Number: D063
Stored at 1 Time: 710.00
Measurement Units: 0000001450 Storage Method: Not reported
Carcinogen: Yes Annual Qty String: 0000000710
Quantity Stored At One Time: MIXTURE
Annual Quantity String: 1450.00
Material Safety Data Sheet: P
1st Hazard Category: Not reported
2nd Hazard Category: DELAYD HLTH HAZARD

Chemical Name: HYPOCHLORITE-CHLORINE
Item Number: D064
Stored at 1 Time: 330.00

PALOMAR COMMUNITY COLLEGE (Continued) **1000334331**

Measurement Units: 0000003000 Storage Method: Not reported
Carcinogen: Yes Annual Qty String: 0000000330
Quantity Stored At One Time: 7782-50-5
Annual Quantity String: 3000.00
Material Safety Data Sheet: A
1st Hazard Category: Not reported
2nd Hazard Category: IMMED HEALTH HAZRD

Chemical Name: POTASSIUM NITRATE: AMMUNITION SHELLS, FIREARMS
Item Number: D065
Stored at 1 Time: 2200.00
Measurement Units: 0000005000 Storage Method: Not reported
Carcinogen: Yes Annual Qty String: 0000002200
Quantity Stored At One Time: 7757-79-1
Annual Quantity String: 5000.00
Material Safety Data Sheet: False
1st Hazard Category: Not reported
2nd Hazard Category: FIRE HAZARD

Chemical Name: SOLVENT BASED PAINT AND VARNISHES
Item Number: D019
Stored at 1 Time: 500.00
Measurement Units: 0000001000 Storage Method: Not reported
Carcinogen: Yes Annual Qty String: 0000000500
Quantity Stored At One Time: MIXTURES
Annual Quantity String: 1000.00
Material Safety Data Sheet: M
1st Hazard Category: Not reported
2nd Hazard Category: FIRE HAZARD

Chemical Name: CARCINOGEN & REPROD. TOXINS, LESS THAN STATE DISCLOSURE.
Item Number: D060
Stored at 1 Time: 1.00
Measurement Units: 0000000001 Storage Method: Not reported
Carcinogen: Yes Annual Qty String: 0000000001
Quantity Stored At One Time: CARCINOGEN
Annual Quantity String: 1.00
Material Safety Data Sheet: Not reported
1st Hazard Category: Not reported
2nd Hazard Category: DELAYD HLTH HAZARD

Chemical Name: ARGON & ARGON/C02 (CAS# 124-38-9)
Item Number: D002
Stored at 1 Time: 4000.00
Measurement Units: 0000018000 Storage Method: Not reported
Carcinogen: Yes Annual Qty String: 0000004000
Quantity Stored At One Time: 7440-37-1
Annual Quantity String: 18000.00
Material Safety Data Sheet: C
1st Hazard Category: Not reported
2nd Hazard Category: SUDDN RLSE OF PRES

Chemical Name: LACQUER THINNER
Item Number: D018
Stored at 1 Time: 200.00
Measurement Units: 0000000500 Storage Method: Not reported
Carcinogen: Yes Annual Qty String: 0000000200

PALOMAR COMMUNITY COLLEGE (Continued) **1000334331**

Quantity Stored At One Time: 64742-89-8
Annual Quantity String: 500.00
Material Safety Data Sheet: M
1st Hazard Category: Not reported
2nd Hazard Category: FIRE HAZARD

Chemical Name: ACETYLENE COMPRESSED GAS
Item Number: D001
Stored at 1 Time: 4000.00
Measurement Units0000008000 Storage Method: Not reported
Carcinogen: Yes Annual Qty String: 0000004000
Quantity Stored At One Time: 74-86-2
Annual Quantity String: 8000.00
Material Safety Data Sheet: C
1st Hazard Category: Not reported
2nd Hazard Category: FIRE HAZARD

Chemical Name: CARBON DIOXIDE COMPRESSED GAS
Item Number: D006
Stored at 1 Time: 4000.00
Measurement Units0000006000 Storage Method: Not reported
Carcinogen: Yes Annual Qty String: 0000004000
Quantity Stored At One Time: 124-38-9
Annual Quantity String: 6000.00
Material Safety Data Sheet: C
1st Hazard Category: Not reported
2nd Hazard Category: SUDDN RLSE OF PRES

Chemical Name: HELIUM COMPRESSED GAS
Item Number: D007
Stored at 1 Time: 1000.00
Measurement Units0000001000 Storage Method: Not reported
Carcinogen: Yes Annual Qty String: 0000001000
Quantity Stored At One Time: 7440-59-7
Annual Quantity String: 1000.00
Material Safety Data Sheet: C
1st Hazard Category: Not reported
2nd Hazard Category: SUDDN RLSE OF PRES

Chemical Name: HYDROGEN GAS
Item Number: D008
Stored at 1 Time: 600.00
Measurement Units0000001000 Storage Method: Not reported
Carcinogen: Yes Annual Qty String: 0000000600
Quantity Stored At One Time: 1333-74-0
Annual Quantity String: 1000.00
Material Safety Data Sheet: C
1st Hazard Category: Not reported
2nd Hazard Category: FIRE HAZARD

Chemical Name: NITROGEN GAS
Item Number: D009
Stored at 1 Time: 780.00
Measurement Units0000001000 Storage Method: Not reported
Carcinogen: Yes Annual Qty String: 0000000780
Quantity Stored At One Time: 7727-37-9
Annual Quantity String: 1000.00

PALOMAR COMMUNITY COLLEGE (Continued) **1000334331**

Material Safety Data Sheet: C
1st Hazard Category: Not reported
2nd Hazard Category: SUDDN RLSE OF PRES

Chemical Name: PROPANE GAS
Item Number: D011
Stored at 1 Time: 630.00
Measurement Units: 0000002000 Storage Method: Not reported
Carcinogen: Yes Annual Qty String: 0000000630
Quantity Stored At One Time: 74-98-6
Annual Quantity String: 2000.00
Material Safety Data Sheet: C
1st Hazard Category: Not reported
2nd Hazard Category: FIRE HAZARD

Chemical Name: AUTO TRANSMISSION FLUID & ENGINE OIL
Item Number: D012
Stored at 1 Time: 140.00
Measurement Units: 0000000500 Storage Method: Not reported
Carcinogen: Yes Annual Qty String: 0000000140
Quantity Stored At One Time: 8002-05-9
Annual Quantity String: 500.00
Material Safety Data Sheet: M
1st Hazard Category: Not reported
2nd Hazard Category: FIRE HAZARD

Chemical Name: PAINT THINNER MINERAL SPIRITS
Item Number: D016
Stored at 1 Time: 150.00
Measurement Units: 0000000500 Storage Method: Not reported
Carcinogen: Yes Annual Qty String: 0000000150
Quantity Stored At One Time: 4742-48-9
Annual Quantity String: 500.00
Material Safety Data Sheet: M
1st Hazard Category: Not reported
2nd Hazard Category: FIRE HAZARD

Chemical Name: CHEVRON 350B THINNER
Item Number: D017
Stored at 1 Time: 660.00
Measurement Units: 0000001000 Storage Method: Not reported
Carcinogen: Yes Annual Qty String: 0000000660
Quantity Stored At One Time: Not reported
Annual Quantity String: 1000.00
Material Safety Data Sheet: M
1st Hazard Category: Not reported
2nd Hazard Category: FIRE HAZARD

Chemical Name: HOT TANK SOLUTION, 10% NAOH: AUTOSHOP
Item Number: D015
Stored at 1 Time: 300.00
Measurement Units: 0000000900 Storage Method: Not reported
Carcinogen: Yes Annual Qty String: 0000000300
Quantity Stored At One Time: 1310-73-2
Annual Quantity String: 900.00
Material Safety Data Sheet: P
1st Hazard Category: Not reported

PALOMAR COMMUNITY COLLEGE (Continued) **1000334331**

2nd Hazard Category: IMMED HEALTH HAZRD

Chemical Name: OXYGEN GAS
Item Number: D010
Stored at 1 Time: 4500.00
Measurement Units0000033000 Storage Method: Not reported
Carcinogen: Yes Annual Qty String: 0000004500
Quantity Stored At One Time: 7782-44-7
Annual Quantity String: 33000.00
Material Safety Data Sheet: C
1st Hazard Category: Not reported
2nd Hazard Category: FIRE HAZARD

HMMD UNDERGROUND TANKS:

Tank Number: T001 Tank ID Number: 1
Capacity (Gal): 2000.00 Tank Exempt: No
Waste or Product: Product Tank Contents: REGULAR UNLEADED

Tank Number: T002 Tank ID Number: 2
Capacity (Gal): 1000.00 Tank Exempt: No
Waste or Product: Product Tank Contents: REGULAR UNLEADED

Tank Number: T003 Tank ID Number: 3
Capacity (Gal): 2000.00 Tank Exempt: No
Waste or Product: Product Tank Contents: REGULAR UNLEADED

HMMD WASTE STREAMS:

Inspection Date: 02/21/2002 0:00:00 Waste Item #: W001
Waste Code: 221.00 Waste Name: WASTE OIL & MIXED OIL
Qnty at Inspection: 200.00 Annual Quantity: 400.00
Measurement Unit: GAL
Treatment Method: RECYCLE Storage Method: ABVGR TNK,STEEL 10-1000 G
Waste Description: FAC MNT, T BLDG, N BLDG Haz Waste Hauler: INDUSTRIAL WASTE UTILIZAT
Carcinogen: No Annual Qty String: 0000000400
Quantity String: 0000000200

Inspection Date: 02/21/2002 0:00:00 Waste Item #: W002
Waste Code: 213.00 Waste Name: HYDROCARBON SOLVENTS
Qnty at Inspection: 253.00 Annual Quantity: 1050.00
Measurement Unit: GAL
Treatment Method: RECYCLE Storage Method: PROCESSING EQUIPMENT
Waste Description: PRTS CNRS 8-30G,3-5G,3G. Haz Waste Hauler: SAFETY-KLEEN
Carcinogen: No Annual Qty String: 0000001050
Quantity String: 0000000253

Inspection Date: 02/21/2002 0:00:00 Waste Item #: W003
Waste Code: 181.00 Waste Name: INORGANIC SOLID WASTE (OTHER)
Qnty at Inspection: 300.00 Annual Quantity: 500.00
Measurement Unit: LBS
Treatment Method: RECYCLE Storage Method: METAL DRUMS,55 GALLONS
Waste Description: BATTERIES W/ KOH Haz Waste Hauler: INDUSTRIAL WASTE UTILIZAT
Carcinogen: No Annual Qty String: 0000000500
Quantity String: 0000000300

Inspection Date: 02/21/2002 0:00:00 Waste Item #: W004
Waste Code: 551.00 Waste Name: LABORATORY WASTE CHEMICALS
Qnty at Inspection: 150.00 Annual Quantity: 200.00
Measurement Unit: LBS

PALOMAR COMMUNITY COLLEGE (Continued) **1000334331**

Treatment Method: INCINERATION
Waste Description: INORGANIC TOXIC
Carcinogen: No
Quantity String: 0000000150
Storage Method: PLASTIC DRUMS,55 GALLONS
Haz Waste Hauler: INDUSTRIAL WASTE UTILIZAT
Annual Qty String: 0000000200

Inspection Date: 02/21/2002 0:00:00
Waste Code: 551.00
Qnty at Inspection: 90.00
Measurement Unit: LBS
Treatment Method: INCINERATION
Waste Description: ORGANIC, TOXIC
Carcinogen: No
Quantity String: 0000000090
Waste Item #: W005
Waste Name: LABORATORY WASTE CHEMICALS
Annual Quantity: 180.00
Storage Method: METAL DRUMS 0-5 GALLONS
Haz Waste Hauler: INDUSTRIAL WASTE UTILIZAT
Annual Qty String: 0000000180

Inspection Date: 02/21/2002 0:00:00
Waste Code: 551.00
Qnty at Inspection: 150.00
Measurement Unit: LBS
Treatment Method: INCINERATION
Waste Description: BASIC, INORGANIC
Carcinogen: No
Quantity String: 0000000150
Waste Item #: W006
Waste Name: LABORATORY WASTE CHEMICALS
Annual Quantity: 300.00
Storage Method: PLASTIC DRUMS,55 GALLONS
Haz Waste Hauler: INDUSTRIAL WASTE UTILIZAT
Annual Qty String: 0000000300

Inspection Date: 02/21/2002 0:00:00
Waste Code: 551.00
Qnty at Inspection: 250.00
Measurement Unit: LBS
Treatment Method: INCINERATION
Waste Description: ACIDIC, INORGANIC
Carcinogen: No
Quantity String: 0000000250
Waste Item #: W007
Waste Name: LABORATORY WASTE CHEMICALS
Annual Quantity: 500.00
Storage Method: PLASTIC DRUMS,55 GALLONS
Haz Waste Hauler: INDUSTRIAL WASTE UTILIZAT
Annual Qty String: 0000000500

Inspection Date: 02/21/2002 0:00:00
Waste Code: 352.00
Qnty at Inspection: 200.00
Measurement Unit: LBS
Treatment Method: LANDFILL
Waste Description: BAGS W/ FORMALIN
Carcinogen: No
Quantity String: 0000000200
Waste Item #: W008
Waste Name: ORGANIC SOLIDS (OTHER)
Annual Quantity: 300.00
Storage Method: METAL DRUMS,55 GALLONS
Haz Waste Hauler: INDUSTRIAL WASTE UTILIZAT
Annual Qty String: 0000000300

Inspection Date: 02/21/2002 0:00:00
Waste Code: 551.00
Qnty at Inspection: 300.00
Measurement Unit: LBS
Treatment Method: INCINERATION
Waste Description: OXIDIZING, FLAMMABLE
Carcinogen: No
Quantity String: 0000000300
Waste Item #: W009
Waste Name: LABORATORY WASTE CHEMICALS
Annual Quantity: 1000.00
Storage Method: METAL DRUMS,55 GALLONS
Haz Waste Hauler: INDUSTRIAL WASTE UTILIZAT
Annual Qty String: 0000001000

Inspection Date: 02/21/2002 0:00:00
Waste Code: 551.00
Qnty at Inspection: 300.00
Measurement Unit: LBS
Treatment Method: INCINERATION
Waste Description: FLAMMABLE, CORROSIVE LIQ
Carcinogen: No
Waste Item #: W010
Waste Name: LABORATORY WASTE CHEMICALS
Annual Quantity: 700.00
Storage Method: METAL DRUMS,55 GALLONS
Haz Waste Hauler: INDUSTRIAL WASTE UTILIZAT
Annual Qty String: 0000000700

PALOMAR COMMUNITY COLLEGE (Continued) **1000334331**

Quantity String: 0000000300

Inspection Date: 02/21/2002 0:00:00
Waste Code: 331.00
Qnty at Inspection: 20.00
Measurement Unit: GAL
Treatment Method: INCINERATION
Waste Description: ETHYLENE GLYCOL W/ FORMAL
Carcinogen: No
Quantity String: 0000000020

Waste Item #: W011
Waste Name: OFF-SPEC,AGED,SURPLUS ORGANICS
Annual Quantity: 55.00
Storage Method: METAL DRUMS,55 GALLONS
Haz Waste Hauler: INDUSTRIAL WASTE UTILIZAT
Annual Qty String: 0000000055

Inspection Date: 02/21/2002 0:00:00
Waste Code: 541.00
Qnty at Inspection: 120.00
Measurement Unit: GAL
Treatment Method: RECYCLE
Waste Description: 3 PHOTO LABS
Carcinogen: No
Quantity String: 0000000120

Waste Item #: W012
Waste Name: PHOTOCHEM/PHOTOPROC WASTE
Annual Quantity: 200.00
Storage Method: METAL DRUMS,55 GALLONS
Haz Waste Hauler: INDUSTRIAL WASTE UTILIZAT
Annual Qty String: 0000000200

Inspection Date: 02/21/2002 0:00:00
Waste Code: 551.00
Qnty at Inspection: 300.00
Measurement Unit: LBS
Treatment Method: LANDFILL
Waste Description: LIFE SCI&CHEMISTRY LABS
Carcinogen: No
Quantity String: 0000000300

Waste Item #: W013
Waste Name: LABORATORY WASTE CHEMICALS
Annual Quantity: 650.00
Storage Method: METAL DRUMS,55 GALLONS
Haz Waste Hauler: INDUSTRIAL WASTE UTILIZAT
Annual Qty String: 0000000650

Inspection Date: 02/21/2002 0:00:00
Waste Code: 901.00
Qnty at Inspection: 300.00
Measurement Unit: LBS
Treatment Method: AUTOCLAVE
Waste Description: LIFE SCI, HLTH SVCS/DENTA
Carcinogen: No
Quantity String: 0000000300

Waste Item #: W014
Waste Name: INFECTIOUS WASTE, GENERAL
Annual Quantity: 1500.00
Storage Method: BAGS: BRLAP,CLOTH,PAPER,PLSTIC
Haz Waste Hauler: BFI MEDICAL WASTE SYSTEMS
Annual Qty String: 0000001500

Inspection Date: 02/21/2002 0:00:00
Waste Code: 491.00
Qnty at Inspection: 1000.00
Measurement Unit: GAL
Treatment Method: RECYCLE
Waste Description: SUMP SLUDGES
Carcinogen: No
Quantity String: 0000001000

Waste Item #: W015
Waste Name: UNSPECIFIED SLUDGE WASTE
Annual Quantity: 2250.00
Storage Method: PROCESSING EQUIPMENT
Haz Waste Hauler: INDUSTRIAL WASTE UTILIZAT
Annual Qty String: 0000002250

Inspection Date: 02/21/2002 0:00:00
Waste Code: 291.00
Qnty at Inspection: 55.00
Measurement Unit: GAL
Treatment Method: INCINERATION
Waste Description: Not reported
Carcinogen: No
Quantity String: 0000000055

Waste Item #: W016
Waste Name: LATEX WASTE
Annual Quantity: 110.00
Storage Method: METAL DRUMS,55 GALLONS
Haz Waste Hauler: INDUSTRIAL WASTE UTILIZAT
Annual Qty String: 0000000110

Inspection Date: 02/21/2002 0:00:00

Waste Item #: W017

PALOMAR COMMUNITY COLLEGE (Continued) **1000334331**

Waste Code: 181.00
Qnty at Inspection: 40.00
Measurement Unit: LBS
Treatment Method: LANDFILL
Waste Description: LEAD PIPE
Carcinogen: No
Quantity String: 0000000040

Waste Name: INORGANIC SOLID WASTE (OTHER)
Annual Quantity: 80.00

Storage Method: METAL DRUMS,55 GALLONS
Haz Waste Hauler: INDUSTRIAL WASTE UTILIZAT
Annual Qty String: 0000000080

Inspection Date: 02/21/2002 0:00:00
Waste Code: 214.00
Qnty at Inspection: 225.00
Measurement Unit: LBS
Treatment Method: RECYCLE
Waste Description: GUN CLEANING UNIT, MEK
Carcinogen: No
Quantity String: 0000000225

Waste Item #: W018
Waste Name: UNSPEC SOLVENT MIXTURE
Annual Quantity: 1592.00

Storage Method: PROCESSING EQUIPMENT
Haz Waste Hauler: SAFETY-KLEEN
Annual Qty String: 0000001592

Inspection Date: 02/21/2002 0:00:00
Waste Code: 141.00
Qnty at Inspection: 300.00
Measurement Unit: LBS
Treatment Method: LANDFILL
Waste Description: Not reported
Carcinogen: No
Quantity String: 0000000300

Waste Item #: W019
Waste Name: OFF-SPEC,AGED,SURPL INORGANICS
Annual Quantity: 300.00

Storage Method: METAL DRUMS,55 GALLONS
Haz Waste Hauler: INDUSTRIAL WASTE UTILIZAT
Annual Qty String: 0000000300

Inspection Date: 02/21/2002 0:00:00
Waste Code: 352.00
Qnty at Inspection: 300.00
Measurement Unit: LBS
Treatment Method: LANDFILL
Waste Description: CARBON WASTE
Carcinogen: No
Quantity String: 0000000300

Waste Item #: W020
Waste Name: ORGANIC SOLIDS (OTHER)
Annual Quantity: 1200.00

Storage Method: METAL DRUMS 0-5 GALLONS
Haz Waste Hauler: INDUSTRIAL WASTE UTILIZAT
Annual Qty String: 0000001200

Inspection Date: 02/21/2002 0:00:00
Waste Code: 132.00
Qnty at Inspection: 110.00
Measurement Unit: GAL
Treatment Method: RECYCLE
Waste Description: WASTE ANTIFREEZE
Carcinogen: No
Quantity String: 0000000110

Waste Item #: W021
Waste Name: AQUEOUS SOL'N WITH METALS
Annual Quantity: 200.00

Storage Method: METAL DRUMS,55 GALLONS
Haz Waste Hauler: INDUSTRIAL WASTE UTILIZAT
Annual Qty String: 0000000200

Inspection Date: 02/21/2002 0:00:00
Waste Code: 888.00
Qnty at Inspection: 400.00
Measurement Unit: LBS
Treatment Method: FILTERS/METAL RECLAI
Waste Description: USED OIL FILTERS
Carcinogen: No
Quantity String: 0000000400

Waste Item #: W022
Waste Name: USED OIL FILTERS
Annual Quantity: 500.00

Storage Method: METAL DRUMS,55 GALLONS
Haz Waste Hauler: INDUSTRIAL WASTE UTILIZAT
Annual Qty String: 0000000500

Inspection Date: 02/21/2002 0:00:00
Waste Code: 444.00
Qnty at Inspection: 180.00
Measurement Unit: LBS

Waste Item #: W023
Waste Name: USED BATTERIES
Annual Quantity: 360.00

PALOMAR COMMUNITY COLLEGE (Continued) **1000334331**

Treatment Method: UNKNOWN
Waste Description: LEAD ACID BATTERIES
Carcinogen: No
Quantity String: 0000000180

Storage Method: NONE
Haz Waste Hauler: UNREGISTERED HAZ WST HAUL
Annual Qty String: 0000000360

Inspection Date: 02/21/2002 0:00:00
Waste Code: 903.00
Qnty at Inspection: 300.00
Measurement Unit: LBS
Treatment Method: AUTOCLAVE
Waste Description: Not reported
Carcinogen: No
Quantity String: 0000000300

Waste Item #: W024
Waste Name: INF WST,TISSUE/ANAT. REMAINS
Annual Quantity: 550.00

Storage Method: BAGS: BRLAP,CLOTH,PAPER,PLSTIC
Haz Waste Hauler: BFI MEDICAL WASTE SYSTEMS
Annual Qty String: 0000000550

Inspection Date: 02/21/2002 0:00:00
Waste Code: 513.00
Qnty at Inspection: 150.00
Measurement Unit: LBS
Treatment Method: UNKNOWN
Waste Description: AEROSOL CANS/LAB PACKS
Carcinogen: No
Quantity String: 0000000150

Waste Item #: W025
Waste Name: EMPTY CONTNR(LESS THAN 30 GAL)
Annual Quantity: 150.00

Storage Method: METAL DRUMS,55 GALLONS
Haz Waste Hauler: INDUSTRIAL WASTE UTILIZAT
Annual Qty String: 0000000150

Inspection Date: 02/21/2002 0:00:00
Waste Code: 151.00
Qnty at Inspection: 200.00
Measurement Unit: LBS
Treatment Method: LANDFILL
Waste Description: ASBESTOS
Carcinogen: No
Quantity String: 0000000200

Waste Item #: W026
Waste Name: ASBESTOS CONTAINING WASTE
Annual Quantity: 400.00

Storage Method: METAL DRUMS 6-110 GALLONS
Haz Waste Hauler: INDUSTRIAL WASTE UTILIZAT
Annual Qty String: 0000000400

Inspection Date: 02/21/2002 0:00:00
Waste Code: 725.00
Qnty at Inspection: 20.00
Measurement Unit: LBS
Treatment Method: INCINERATION
Waste Description: MERCURY THERMOMETERS
Carcinogen: No
Quantity String: 0000000020

Waste Item #: W027
Waste Name: LIQUIDS W MERCURY - R
Annual Quantity: 60.00

Storage Method: METAL DRUMS 0-5 GALLONS
Haz Waste Hauler: INDUSTRIAL WASTE UTILIZAT
Annual Qty String: 0000000060

Inspection Date: 02/21/2002 0:00:00
Waste Code: 223.00
Qnty at Inspection: 115.00
Measurement Unit: LBS
Treatment Method: INCINERATION
Waste Description: OIL/DIRT/ABSORBENTS/RAGS
Carcinogen: No
Quantity String: 0000000115

Waste Item #: W029
Waste Name: UNSPEC OIL CONTAINING WASTE
Annual Quantity: 554.00

Storage Method: METAL DRUMS,55 GALLONS
Haz Waste Hauler: INDUSTRIAL WASTE UTILIZAT
Annual Qty String: 0000000554

Inspection Date: 02/21/2002 0:00:00
Waste Code: 214.00
Qnty at Inspection: 85.00
Measurement Unit: GAL
Treatment Method: RECYCLE
Waste Description: PAINT WASTES:ARTS/GRAPHIC
Carcinogen: No

Waste Item #: W030
Waste Name: UNSPEC SOLVENT MIXTURE
Annual Quantity: 160.00

Storage Method: METAL DRUMS,55 GALLONS
Haz Waste Hauler: INDUSTRIAL WASTE UTILIZAT
Annual Qty String: 0000000160

PALOMAR COMMUNITY COLLEGE (Continued) **1000334331**

Quantity String: 0000000085

Inspection Date: 02/21/2002 0:00:00
Waste Code: 352.00
Qnty at Inspection: 20.00
Measurement Unit: LBS
Treatment Method: INCINERATION
Waste Description: PAINT FILTERS
Carcinogen: No
Quantity String: 0000000020
Waste Item #: W031
Waste Name: ORGANIC SOLIDS (OTHER)
Annual Quantity: 20.00
Storage Method: PLASTIC DRUMS 0-5 GALLONS
Haz Waste Hauler: INDUSTRIAL WASTE UTILIZAT
Annual Qty String: 0000000020

Inspection Date: 02/21/2002 0:00:00
Waste Code: 902.00
Qnty at Inspection: 30.00
Measurement Unit: LBS
Treatment Method: DISENFECTION/ENCAPSU
Waste Description: Not reported
Carcinogen: No
Quantity String: 0000000030
Waste Item #: W032
Waste Name: INFECTIOUS WASTE, SHARPS
Annual Quantity: 120.00
Storage Method: FIBER/PLSTIC BOXES,CRTNS,CASES
Haz Waste Hauler: BFI MEDICAL WASTE SYSTEMS
Annual Qty String: 0000000120

Inspection Date: 02/21/2002 0:00:00
Waste Code: 352.00
Qnty at Inspection: 200.00
Measurement Unit: LBS
Treatment Method: RECYCLE
Waste Description: INK/SOLVNT RAGS,LAUNDRY S
Carcinogen: No
Quantity String: 0000000200
Waste Item #: W033
Waste Name: ORGANIC SOLIDS (OTHER)
Annual Quantity: 2400.00
Storage Method: METAL DRUMS,55 GALLONS
Haz Waste Hauler: UNREGISTERED HAZ WST HAUL
Annual Qty String: 0000002400

Inspection Date: 02/21/2002 0:00:00
Waste Code: 181.00
Qnty at Inspection: 50.00
Measurement Unit: LBS
Treatment Method: INCINERATION
Waste Description: GLASS BEAD WASTE
Carcinogen: No
Quantity String: 0000000050
Waste Item #: W034
Waste Name: INORGANIC SOLID WASTE (OTHER)
Annual Quantity: 150.00
Storage Method: METAL DRUMS 0-5 GALLONS
Haz Waste Hauler: INDUSTRIAL WASTE UTILIZAT
Annual Qty String: 0000000150

Inspection Date: 02/21/2002 0:00:00
Waste Code: 134.00
Qnty at Inspection: 55.00
Measurement Unit: GAL
Treatment Method: RECYCLE
Waste Description: WATER W/ GASOLINE
Carcinogen: No
Quantity String: 0000000055
Waste Item #: W035
Waste Name: AQUEOUS SOL'N W/LESS 10% ORG
Annual Quantity: 55.00
Storage Method: METAL DRUMS,55 GALLONS
Haz Waste Hauler: INDUSTRIAL WASTE UTILIZAT
Annual Qty String: 0000000055

HMMD VIOLATIONS:

Inspection Date: 02/21/2002 0:00:00
Waste Code: Not reported
Type of Violation: GENERAL VIOLATION
Violation Description: UNDERGROUND STORAGE TANK MONITORING/MAINTENANCE/CALIBRATION RECORDS ARE NOT MAINTAINED ON SITE. HSC 25293; CCR 2712(B), 2641(I)
Occurrences: 01

Inspection Date: 07/02/1999 0:00:00
Waste Code: Not reported
Type of Violation: GENERAL VIOLATION
Occurrences: 01

PALOMAR COMMUNITY COLLEGE (Continued) **1000334331**

Violation Description: CONTINUOUS AUDIBLE/VISUAL INTERSTITIAL SPACE MONITORING SYSTEM IS NOT FUNCTIONAL. CCR 2632(C)(2)(B), 2634(B)(1)(A)

Inspection Date: 02/21/2002 0:00:00 Occurrences: 01
Waste Code: Not reported
Type of Violation: GENERAL VIOLATION
Violation Description: OPERATOR DID NOT POST AN APPRVD. AND LEGIBLE BIO. HAZ. WST.

Inspection Date: 02/21/2002 0:00:00 Occurrences: 01
Waste Code: Not reported
Type of Violation: GENERAL VIOLATION
Violation Description: DOCUMENTATION SHOWING EVIDENCE OF FINANCIAL RESPONSIBILITY IS NOT AVAILABLE. HSC 25292.2

Inspection Date: 02/21/2002 0:00:00 Occurrences: 01
Waste Code: Not reported
Type of Violation: GENERAL VIOLATION
Violation Description: PERSONNEL TRAINING RECORDS ARE INADEQUATE TO DOCUMENT COMPLIANCE WITH REQUIREMENTS FOR CURRENT AND FORMER EMPLOYEES CCR 66265.16

Inspection Date: 02/21/2002 0:00:00 Occurrences: 01
Waste Code: Not reported
Type of Violation: GENERAL VIOLATION
Violation Description: DISPOSAL OR CAUSING THE DISPOSAL OF HAZARDOUS WASTE TO AN UNAUTHORIZED POINT(GROUND, STORM DRAIN, SEWER SYSTEM, TRASH OR AIR) HSC 25189.5

Inspection Date: 07/02/1999 0:00:00 Occurrences: 02
Waste Code: Not reported
Type of Violation: GENERAL VIOLATION
Violation Description: HAZARDOUS WASTE CONTAINERS ARE MISSING LABELS, ACCUMULATION DATE AND/OR ARE IMPROPERLY LABELED CCR 66262.34

Inspection Date: 08/05/1997 0:00:00 Occurrences: 01
Waste Code: Not reported
Type of Violation: GENERAL VIOLATION
Violation Description: MAXIMUM HOLDING TIME EXCEEDED FOR NON-PUTRESCIBLE MEDICAL WASTE, E.G. GREATER THAN 180 DAYS. 68.1203

Inspection Date: 08/05/1997 0:00:00 Occurrences: 01
Waste Code: Not reported
Type of Violation: GENERAL VIOLATION
Violation Description: OWNER/OPERATOR HAS NOT TESTED THE PRESSURIZED PRODUCT LINE LEAK DETECTION DEVICE ANNUALLY AS REQUIRED. HSC 25292(B) (4) (C)

Inspection Date: 08/05/1997 0:00:00 Occurrences: 01
Waste Code: Not reported
Type of Violation: GENERAL VIOLATION
Violation Description: OWNER/OPERATOR HAS NOT HAD MONITORING EQUIPMENT TESTED ANNUALLY AS REQUIRED. 23CCR 2630, 2641 (J)

Inspection Date: 08/05/1997 0:00:00 Occurrences: 01

PALOMAR COMMUNITY COLLEGE (Continued) **1000334331**

Waste Code: Not reported
Type of Violation: GENERAL VIOLATION
Violation Description: GENERATOR OF WASTE OIL HAS IMPROPERLY CONTAMINATED THE WASTE OIL WITH OTHER HAZARDOUS WASTES HSC 25250.7

Inspection Date: 07/02/1999 0:00:00 Occurrences: 01
Waste Code: Not reported
Type of Violation: GENERAL VIOLATION
Violation Description: HAZARDOUS WASTE STORAGE CONTAINER IS NOT HANDLED OR STORED IN A MANNER WHICH WILL PREVENT LEAKS OR RUPTURE CCR 66265.173

HMMD ENVIRONMENTAL ASSESSMENT INFORMATION:
Case Status Date: 04/02/1991 0:00:00
Case Type: TANK, RELEASE
Case Status: CLOSED
Release Occurrence Number: 001
Historical Name: PALOMAR COMMUNITY COLLEGE
Date Release Began: 06/07/1989 0:00:00
Lead Agency: DEH

Case Status Date: 03/22/1996 0:00:00
Case Type: TANK, RELEASE
Case Status: CLOSED
Release Occurrence Number: 002
Historical Name: PALOMAR COMMUNITY COLLEGE
Date Release Began: 12/23/1993 0:00:00
Lead Agency: DEH

The CA HMMD database may contain additional details for this site.
Please click here or contact your EDR Account Executive for more information.

UST HIST:

Facility ID:	45743	Tank Used for:	PRODUCT
Tank Num:	1	Container Num:	#2
Tank Capacity:	1000	Year Installed:	1979
Type of Fuel:	UNLEADED	Tank Construction:	Not reported
Leak Detection:	Stock Inventor		
Contact Name:	TOM KNOX	Telephone:	(619) 744-1150
Total Tanks:	2	Region:	STATE
Facility Type:	Other	Other Type:	COMMUNITY COLLEGE

Facility ID:	45743	Tank Used for:	PRODUCT
Tank Num:	2	Container Num:	#1
Tank Capacity:	2000	Year Installed:	Not reported
Type of Fuel:	UNLEADED	Tank Construction:	Not reported
Leak Detection:	Stock Inventor		
Contact Name:	TOM KNOX	Telephone:	(619) 744-1150
Total Tanks:	2	Region:	STATE
Facility Type:	Other	Other Type:	COMMUNITY COLLEGE

State UST:
Facility ID: H03452
Region: STATE
Local Agency: 37000

PALOMAR COMMUNITY COLLEGE (Continued) — **1000334331**

34
West
1/4-1/2
1585 ft.

185 N PACIFICA ST
SAN MARCOS, CA 92069

CHMIRS — **S100216663** / **N/A**

Relative:
Lower

Actual:
573 ft.

CHMIRS:

OES Control Number:	8890746
Chemical Name:	Not reported
Extent of Release:	Not reported
Property Use:	Storage
Incident Date:	02-MAR-88
Date Completed:	02-MAR-88
Time Completed :	1353
Agency Id Number :	37145
Agency Incident Number :	8805051
OES Incident Number :	8890746
Time Notified :	1153
Surrounding Area :	500
Estimated Temperature :	68
Property Management :	P
More Than Two Substances Involved? :	N
Special Studies 1 :	Not reported
Special Studies 2 :	Not reported
Special Studies 3 :	Not reported
Special Studies 4 :	Not reported
Special Studies 5 :	Not reported
Special Studies 6 :	Not reported
Responding Agency Personel # Of Injuries :	0
Responding Agency Personel # Of Fatalities :	0
Resp Agncy Personel # Of Decontaminated :	2
Others Number Of Decontaminated :	0
Others Number Of Injuries :	0
Others Number Of Fatalities :	0
Vehicle Make/year :	Not reported
Vehicle License Number :	Not reported
Vehicle State :	Not reported
Vehicle Id Number :	Not reported
CA/DOT/PUC/ICC Number :	Not reported
Company Name :	Not reported
Reporting Officer Name/ID :	CHRISTOPHER G. MARCHISID,CAPT.
Report Date :	02-MAR-88
Comments :	No
Facility Telephone Number :	619 744-7200
Waterway Involved :	Not reported
Waterway :	Not reported
Spill Site :	Not reported
Cleanup By :	Not reported
Containment :	Not reported
What Happened :	Not reported
Type :	Not reported
Other :	Not reported
Chemical 1 :	Not Reported
Chemical 2 :	Not Reported
Chemical 3 :	Not Reported
Date/Time :	Not reported
Evacuations :	Not reported

(Continued) S100216663

35
SE
1/4-1/2
2183 ft.

Relative:
Lower

Actual:
560 ft.

SIGNET ARMORLITE
130 N BINGHAM DR
SAN MARCOS, CA 92069

Database(s): RCRIS-LQG, RCRIS-TSD, FINDS, TRIS, CORRACTS, CERC-NFRAP, LUST, HAZNET, Cortese, San Diego Co. HMMD, CA SLIC, EMI

EDR ID Number: 1000314091
EPA ID Number: 92069SGNTR10

CERCLIS-NFRAP Classification Data:
Site Incident Category: Not reported
Non NPL Code: DR
Ownership Status: Private
Federal Facility: Not a Federal Facility
NPL Status: Not on the NPL

CERCLIS-NFRAP Assessment History:

Assessment:	DISCOVERY	Completed:	03/01/1991
Assessment:	PRELIMINARY ASSESSMENT	Completed:	08/26/1991
Assessment:	ARCHIVE SITE	Completed:	01/23/1996

CORRACTS Data:

EPA Id:	CAD008362634
Region:	9
Area Name:	ENTIRE FACILITY
Original Scheduled Date:	Not reported
Actual Date:	01/01/1996
Corrective Action:	CA600GW - Stabilization Measures Implemented , Groundwater extraction and treatment
2002 NAICS Title:	All Other Plastics Product Manufacturing Ophthalmic Goods Manufacturing Ophthalmic Goods Manufacturing Ophthalmic Goods Manufacturing

EPA Id:	CAD008362634
Region:	9
Area Name:	ENTIRE FACILITY
Original Scheduled Date:	Not reported
Actual Date:	01/01/1996
Corrective Action:	CA600SR - Stabilization Measures Implemented , Primary measure is source removal and/or treatment
2002 NAICS Title:	All Other Plastics Product Manufacturing Ophthalmic Goods Manufacturing Ophthalmic Goods Manufacturing Ophthalmic Goods Manufacturing

EPA Id:	CAD008362634
Region:	9
Area Name:	ENTIRE FACILITY
Original Scheduled Date:	Not reported
Actual Date:	12/15/1997
Corrective Action:	CA725YE - Current Human Exposures Under Control, Yes, Current Human Exposures Under Control has been verified
2002 NAICS Title:	All Other Plastics Product Manufacturing Ophthalmic Goods Manufacturing Ophthalmic Goods Manufacturing

SIGNET ARMORLITE (Continued) **1000314091**

Ophthalmic Goods Manufacturing

EPA Id: CAD008362634
Region: 9
Area Name: ENTIRE FACILITY
Original Scheduled Date: Not reported
Actual Date: 01/15/1992
Corrective Action: CA075LO - CA Prioritization, Facility or area was assigned a low corrective action priority
2002 NAICS Title: All Other Plastics Product Manufacturing
Ophthalmic Goods Manufacturing
Ophthalmic Goods Manufacturing
Ophthalmic Goods Manufacturing

EPA Id: CAD008362634
Region: 9
Area Name: ENTIRE FACILITY
Original Scheduled Date: Not reported
Actual Date: 08/08/1991
Corrective Action: CA075LO - CA Prioritization, Facility or area was assigned a low corrective action priority
2002 NAICS Title: All Other Plastics Product Manufacturing
Ophthalmic Goods Manufacturing
Ophthalmic Goods Manufacturing
Ophthalmic Goods Manufacturing

The CORRACTS database contains 2 additional records for this site.
Please contact your EDR Account Executive for more information.

RCRIS Corrective Action Summary:

Event: Current Human Exposures under Control, Yes, Current Human Exposures Under Control has been verified. Based on a review of information contained in the EI determination, current human exposures are expected to be under control at the facility under current and reasonably expected conditions. This determination will be re-evaluated when the Agency/State becomes aware of significant changes at the facility.
Event Date: 12/15/1997

Event: Igration of Contaminated Groundwater under Control, Unacceptable migration of contaminated groundwater is observed or expected.
Event Date: 12/15/1997

Event: Stabilization Measures Implemented, Groundwater extraction and treatment (e.g., to achieve groundwater containment, to achieve MCL).
Event Date: 01/01/1996

Event: Stabilization Measures Implemented, Primary measure is source removal and/or treatment (e.g., soil or waste excavation, in-situ soil treatment, off-site treatment).
Event Date: 01/01/1996

Event: Stabilization Measures Evaluation,This facility is not amenable to stabilization activity at the present time for reasons other than 1) it appears to be technically infeasible or inappropriate (NF) or 2) there is a lack of technical information (IN). Reasons for this conclusion may be the status of closure at the facility, the degree of risk, timing considerations, the status of corrective action work at the facility, or other administrative considerations.
Event Date: 01/31/1992

SIGNET ARMORLITE (Continued) **1000314091**

Event: CA Prioritization, Facility or area was assigned a low corrective action priority.
Event Date: 01/15/1992

Event: CA Prioritization, Facility or area was assigned a low corrective action priority.
Event Date: 08/08/1991

RCRIS:
Owner: SIGNET ARMORLITE INC
(619) 744-4000
EPA ID: CAD008362634

Contact: Not reported

Classification: Large Quantity Generator, TSDF
TSDF Activities: Not reported

BIENNIAL REPORTS:
Last Biennial Reporting Year: 1999

Waste	Quantity (Lbs)	Waste	Quantity (Lbs)
D001	47204.18	D002	60502.06
D006	560.00	D008	560.00
D018	1064.04	D039	1064.04
D040	1064.04	F002	112660.52
F003	44480.10		

Violation Status: Violations exist

Regulation Violated: 262.10-12.A
Area of Violation: GENERATOR-ALL REQUIREMENTS (OVERSIGHT)
Date Violation Determined: 07/22/1993
Actual Date Achieved Compliance: 07/22/1998

Enforcement Action: WRITTEN INFORMAL
Enforcement Action Date: 07/05/1988
Penalty Type: Not reported

Regulation Violated: 264.170-177.I
Area of Violation: TSD-OTHER REQUIREMENTS (OVERSIGHT)
Date Violation Determined: 04/20/1992
Actual Date Achieved Compliance: 09/10/1992

Regulation Violated: 264.10-18.B
Area of Violation: TSD-OTHER REQUIREMENTS (OVERSIGHT)
Date Violation Determined: 04/20/1992
Actual Date Achieved Compliance: 09/10/1992

Regulation Violated: 264.110-120.G
Area of Violation: TSD-CLOSURE/POST-CLOSURE REQUIREMENTS
Date Violation Determined: 04/20/1992
Actual Date Achieved Compliance: 09/10/1992

Regulation Violated: 262.40-43.D
Area of Violation: GENERATOR-ALL REQUIREMENTS (OVERSIGHT)
Date Violation Determined: 04/20/1992
Actual Date Achieved Compliance: 09/10/1992

Regulation Violated: 264.50-56.D
Area of Violation: TSD-OTHER REQUIREMENTS (OVERSIGHT)
Date Violation Determined: 04/20/1992
Actual Date Achieved Compliance: 09/10/1992

SIGNET ARMORLITE (Continued) **1000314091**

Regulation Violated: 262.10-12.A
Area of Violation: GENERATOR-ALL REQUIREMENTS (OVERSIGHT)
Date Violation Determined: 03/07/1991
Actual Date Achieved Compliance: 03/13/1992

Enforcement Action: WRITTEN INFORMAL
Enforcement Action Date: 12/22/1987
Penalty Type: Not reported

Regulation Violated: 262.10-12.A
Area of Violation: GENERATOR-ALL REQUIREMENTS (OVERSIGHT)
Date Violation Determined: 01/17/1990
Actual Date Achieved Compliance: 03/07/1991

Enforcement Action: WRITTEN INFORMAL
Enforcement Action Date: 12/22/1987
Penalty Type: Not reported

Regulation Violated: 264.140-150.H
Area of Violation: TSD-FINANCIAL RESPONSIBILITY REQUIREMENTS
Date Violation Determined: 01/26/1988
Actual Date Achieved Compliance: 04/26/1989

Enforcement Action: WRITTEN INFORMAL
Enforcement Action Date: 02/24/1988
Penalty Type: Final Monetary Penalty

Enforcement Action: INITIAL 3008(A) COMPLIANCE ORDER
Enforcement Action Date: 02/01/1989
Penalty Type: Final Monetary Penalty

Regulation Violated: 268 ALL
Area of Violation: TSD-LAND BAN REQUIREMENTS
Date Violation Determined: 01/21/1988
Actual Date Achieved Compliance: 07/25/1988

Enforcement Action: WRITTEN INFORMAL
Enforcement Action Date: 07/05/1988
Penalty Type: Not reported

Regulation Violated: 268.7
Area of Violation: GENERATOR-LAND BAN REQUIREMENTS
Date Violation Determined: 01/21/1988
Actual Date Achieved Compliance: 07/25/1988

Enforcement Action: WRITTEN INFORMAL
Enforcement Action Date: 07/05/1988
Penalty Type: Not reported

Regulation Violated: 270
Area of Violation: TSD-OTHER REQUIREMENTS (OVERSIGHT)
Date Violation Determined: 10/21/1987
Actual Date Achieved Compliance: 03/13/1992

Enforcement Action: WRITTEN INFORMAL
Enforcement Action Date: 12/22/1987
Penalty Type: Not reported

Regulation Violated: 264.110-120.G
Area of Violation: TSD-CLOSURE/POST-CLOSURE REQUIREMENTS
Date Violation Determined: 10/21/1987
Actual Date Achieved Compliance: 09/10/1992

Enforcement Action: WRITTEN INFORMAL

SIGNET ARMORLITE (Continued) **1000314091**

Enforcement Action Date: 12/22/1987
Penalty Type: Not reported

There are 13 violation record(s) reported at this site:

Evaluation	Area of Violation	Date of Compliance
Compliance Evaluation Inspection	GENERATOR-ALL REQUIREMENTS (OVERSIGHT)	19980722
Compliance Evaluation Inspection	TSD-OTHER REQUIREMENTS (OVERSIGHT)	19920910
	TSD-OTHER REQUIREMENTS (OVERSIGHT)	19920910
	TSD-OTHER REQUIREMENTS (OVERSIGHT)	19920910
	TSD-CLOSURE/POST-CLOSURE REQUIREMENTS	19920910
	GENERATOR-ALL REQUIREMENTS (OVERSIGHT)	19920910
Compliance Evaluation Inspection	GENERATOR-ALL REQUIREMENTS (OVERSIGHT)	19920313
Compliance Evaluation Inspection	GENERATOR-ALL REQUIREMENTS (OVERSIGHT)	19910307
Financial Record Review	TSD-FINANCIAL RESPONSIBILITY REQUIREMENTS	19890426
Other Evaluation	TSD-LAND BAN REQUIREMENTS	19880725
	GENERATOR-LAND BAN REQUIREMENTS	19880725
Compliance Evaluation Inspection	TSD-OTHER REQUIREMENTS (OVERSIGHT)	19920313
	TSD-CLOSURE/POST-CLOSURE REQUIREMENTS	19920910

FINDS:
Other Pertinent Environmental Activity Identified at Site:
AIRS Facility System (AIRS/AFS)
Biennial Reporting System (BRS)
Facility Registry System (FRS)
NEI
National Emissions Trends (NET)
National Toxics Inventory (NTI)
Resource Conservation and Recovery Act Information system (RCRAINFO)
Toxic Chemical Release Inventory System (TRIS)

State LUST:

Cross Street:	Not reported		
Qty Leaked:	Not reported		
Case Number	9UT493		
Reg Board:	9		
Chemical:	Diesel		
Lead Agency:	Local Agency		
Local Agency :	0		
Case Type:	Soil only		
Status:	No Action		
Review Date:	Not reported	Confirm Leak:	Not reported
Workplan:	8/31/93	Prelim Assess:	8/31/93
Pollution Char:	Not reported	Remed Plan:	Not reported
Remed Action:	1/3/65		
Monitoring:	Not reported		
Close Date:	09/22/1986		
Release Date:	Not reported		
Cleanup Fund Id :	Not reported		
Discover Date :	08/26/1986		
Enforcement Dt :	Not reported		
Enf Type:	Not reported		
Enter Date :	/ /		
Funding:	Not reported		
Staff Initials:	HKE		
How Discovered:	Not reported		
How Stopped:	Not reported		
Interim :	Not reported		

SIGNET ARMORLITE (Continued) **1000314091**

Leak Cause: Not reported
Leak Source: Not reported
MTBE Date : / /
Max MTBE GW : 0 Parts per Billion
MTBE Tested: Not Required to be Tested.
Priority: Low priority. Priority ranking can change over time.
Local Case # : H02662-001
Beneficial: Not reported
Staff : UNK
GW Qualifier : Not reported
Max MTBE Soil : Not reported
Soil Qualifier : Not reported
Hydr Basin #: Not reported
Operator : Not reported
Oversight Prgm: Local Oversight Program UST
Oversight Prgm : LOP
Review Date : Not reported
Stop Date : / /
Work Suspended :Not reported
Responsible PartyNot reported
RP Address: Not reported
Global Id: T0607302793
Org Name: Not reported
Contact Person: Not reported
MTBE Conc: 0
Mtbe Fuel: 0
Water System Name: Not reported
Well Name: Not reported
Distance To Lust: 0
Waste Discharge Global ID: Not reported
Waste Disch Assigned Name: Not reported

SIGNET ARMORLITE (Continued) **1000314091**

LUST Region 9:

Case Number:	9UT493	Release Date:	08/26/1986
Local Agency:	37000		
Substance:	12034	Qty Leaked:	Not reported
Date Found:	08/22/1986	How Found:	Tank Closure
Date Stopped:	/ /	How Stopped:	Close Tank
Source:	Tank	Cause:	Corrosion
Lead Agency:	Local Agency		
Status:	Case Closed		
Case Type:	Aquifer affected		
Confirm Date:	Not reported	Submit Workplan:	Not reported
Prelim Assess:	Not reported	Desc Pollution:	Not reported
Remed Plan:	Not reported	Remed Action:	Not reported
Began Monitor:	9/22/86	Closed Date:	9/22/86
Enforce Type:	Not reported		
Enforce Date:	Not reported		
Pilot Program:	LOP	Local Case:	H02662-001
Basin Number:	904.52	Gwater Depth:	6 ft
File Dispn:	File discarded, case closed		
Interim Remedial Actions:	Yes		
Beneficial Use:	MUN		
Cleanup and Abatement order Number:	Not reported		
Waste Discharge Requirement Number:	Not reported		
NPDES Number:	Not reported		

HAZNET:

Gepaid:	CAD008362634
TSD EPA ID:	CAD050806850
Gen County:	San Diego
Tsd County:	Los Angeles
Tons:	3.851
Waste Category:	Solids or sludges with halogenated organic compounds > 1000mg/kg
Disposal Method:	Transfer Station
Contact:	INDUSTRIE OTTICHE EUROPEE VIA
Telephone:	(000) 000-0000
Mailing Address:	1001 ARMORLITE DR
	SAN MARCOS, CA 92069 - 1431
County	San Diego

Gepaid:	CAD008362634
TSD EPA ID:	CAD088504881
Gen County:	San Diego
Tsd County:	Orange
Tons:	0.015
Waste Category:	Other inorganic solid waste
Disposal Method:	Transfer Station
Contact:	INDUSTRIE OTTICHE EUROPEE VIA
Telephone:	(000) 000-0000
Mailing Address:	1001 ARMORLITE DR
	SAN MARCOS, CA 92069 - 1431
County	San Diego

SIGNET ARMORLITE (Continued) **1000314091**

Gepaid: CAD008362634
TSD EPA ID: CAD088504881
Gen County: San Diego
Tsd County: Orange
Tons: 0.125
Waste Category: Other inorganic solid waste
Disposal Method: Recycler
Contact: INDUSTRIE OTTICHE EUROPEE VIA
Telephone: (000) 000-0000
Mailing Address: 1001 ARMORLITE DR
SAN MARCOS, CA 92069 - 1431
County San Diego

Gepaid: CAD008362634
TSD EPA ID: CAD097030993
Gen County: San Diego
Tsd County: Los Angeles
Tons: 0.1105
Waste Category: Alkaline solution without metals (pH > 12.5)
Disposal Method: Disposal, Other
Contact: INDUSTRIE OTTICHE EUROPEE VIA
Telephone: (000) 000-0000
Mailing Address: 1001 ARMORLITE DR
SAN MARCOS, CA 92069 - 1431
County San Diego

Gepaid: CAD008362634
TSD EPA ID: CAD097030993
Gen County: San Diego
Tsd County: Los Angeles
Tons: 23.3936
Waste Category: Alkaline solution without metals (pH > 12.5)
Disposal Method: Recycler
Contact: INDUSTRIE OTTICHE EUROPEE VIA
Telephone: (000) 000-0000
Mailing Address: 1001 ARMORLITE DR
SAN MARCOS, CA 92069 - 1431
County San Diego

The CA HAZNET database contains 173 additional records for this site.
Please click here or contact your EDR Account Executive for more information.

CORTESE:
Reg Id: 9UT493
Region: CORTESE
Reg By: Leaking Underground Storage Tanks

SLIC Region 9:
Facility Id: H02662-002
File Code Number : 20-0274.05
Waste Discharger Id : 9 000274N97
Local Case Number : H02662-002
Primary Name : SIGNET ARMORLITE
Secondary Name : Not reported
Class : SLIC
Facilty Type : Cleanup And Abatement Order
Order Number : Not reported
Category : ENFORCEMENT
File Number : 1

SIGNET ARMORLITE (Continued) **1000314091**

Start Date : 08/1987
End Date : 08/1993
Status : Closed
Archive Box Number : 0
Remarks : Not reported
Archive Box Storage Location : Not reported

Facility Id: H02662-002
File Code Number : 20-0274.05
Waste Discharger Id : 9 000274N97
Local Case Number : H02662-002
Primary Name : SIGNET ARMORLITE
Secondary Name : Not reported
Class : SLIC
Facilty Type : Cleanup And Abatement Order
Order Number : Not reported
Category : ENFORCEMENT
File Number : 2
Start Date : 09/1993
End Date : 06/1998
Status : Closed
Archive Box Number : 0
Remarks : Not reported
Archive Box Storage Location : Not reported

Facility Id: H02662-002
File Code Number : 20-0274.05
Waste Discharger Id : 9 000274N97
Local Case Number : H02662-002
Primary Name : SIGNET ARMORLITE
Secondary Name : Not reported
Class : SLIC
Facilty Type : Cleanup And Abatement Order
Order Number : Not reported
Category : ENFORCEMENT
File Number : 3
Start Date : 06/1998
End Date : 08/2000
Status : Closed
Archive Box Number : 0
Remarks : Not reported
Archive Box Storage Location : Not reported

Facility Id: H02662-002
File Code Number : 20-0274.05
Waste Discharger Id : 9 000274N97
Local Case Number : H02662-002
Primary Name : SIGNET ARMORLITE
Secondary Name : Not reported
Class : SLIC
Facilty Type : Cleanup And Abatement Order
Order Number : Not reported
Category : ENFORCEMENT
File Number : 4
Start Date : 08/2000
End Date : Not reported
Status : Open

SIGNET ARMORLITE (Continued) **1000314091**

Archive Box Number : 0
Remarks : Not reported
Archive Box Storage Location : Not reported

Facility Id: H02662-002
File Code Number : 20-0274.051
Waste Discharger Id : 9 000274N97
Local Case Number : H02662-002
Primary Name : SIGNET ARMORLITE
Secondary Name : Not reported
Class : SLIC
Facilty Type : Cleanup And Abatement Order
Order Number : Not reported
Category : ENF. REPORT
File Number : 1
Start Date : 01/1993
End Date : 02/1994
Status : Closed
Archive Box Number : 0
Remarks : Not reported
Archive Box Storage Location : Not reported

Facility Id: H02662-002
File Code Number : 20-0274.051
Waste Discharger Id : 9 000274N97
Local Case Number : H02662-002
Primary Name : SIGNET ARMORLITE
Secondary Name : Not reported
Class : SLIC
Facilty Type : Cleanup And Abatement Order
Order Number : Not reported
Category : ENF. REPORT
File Number : 2
Start Date : 03/1994
End Date : 04/1996
Status : Closed
Archive Box Number : 0
Remarks : Not reported
Archive Box Storage Location : Not reported

Facility Id: H02662-002
File Code Number : 20-0274.051
Waste Discharger Id : 9 000274N97
Local Case Number : H02662-002
Primary Name : SIGNET ARMORLITE
Secondary Name : Not reported
Class : SLIC
Facilty Type : Cleanup And Abatement Order
Order Number : Not reported
Category : ENF. REPORT
File Number : 3
Start Date : 05/1996
End Date : 09/1996
Status : Closed
Archive Box Number : 0
Remarks : Not reported
Archive Box Storage Location : Not reported

SIGNET ARMORLITE (Continued) **1000314091**

Facility Id: H02662-002
File Code Number : 20-0274.051
Waste Discharger Id : 9 000274N97
Local Case Number : H02662-002
Primary Name : SIGNET ARMORLITE
Secondary Name : Not reported
Class : SLIC
Facilty Type : Cleanup And Abatement Order
Order Number : Not reported
Category : ENF. REPORT
File Number : 4
Start Date : 10/1996
End Date : 03/1997
Status : Closed
Archive Box Number : 0
Remarks : Not reported
Archive Box Storage Location : Not reported

Facility Id: H02662-002
File Code Number : 20-0274.051
Waste Discharger Id : 9 000274N97
Local Case Number : H02662-002
Primary Name : SIGNET ARMORLITE
Secondary Name : Not reported
Class : SLIC
Facilty Type : Cleanup And Abatement Order
Order Number : Not reported
Category : ENF. REPORT
File Number : 5
Start Date : 04/1997
End Date : 05/1998
Status : Closed
Archive Box Number : 0
Remarks : Not reported
Archive Box Storage Location : Not reported

Facility Id: H02662-002
File Code Number : 20-0274.051
Waste Discharger Id : 9 000274N97
Local Case Number : H02662-002
Primary Name : SIGNET ARMORLITE
Secondary Name : Not reported
Class : SLIC
Facilty Type : Cleanup And Abatement Order
Order Number : Not reported
Category : ENF. REPORT
File Number : 6
Start Date : 06/1998
End Date : 03/2000
Status : Closed
Archive Box Number : 0
Remarks : Not reported
Archive Box Storage Location : Not reported

Facility Id: H02662-002
File Code Number : 20-0274.051

SIGNET ARMORLITE (Continued) **1000314091**

Waste Discharger Id : 9 000274N97
Local Case Number : H02662-002
Primary Name : SIGNET ARMORLITE
Secondary Name : Not reported
Class : SLIC
Facilty Type : Cleanup And Abatement Order
Order Number : Not reported
Category : ENF. REPORT
File Number : 7
Start Date : 04/2000
End Date : Not reported
Status : Open
Archive Box Number : 0
Remarks : Not reported
Archive Box Storage Location : Not reported

HMMD:

Facility ID:	H02662		
Inactive Indicator:	Active	Business Code:	BIOMEDICAL OR BIOTECH
SIC:	3800	Permit Expiration:	05/31
Owner:	INDUSTRIE OTTICHE EUROPEE	2nd Name:	Not reported
Mailing Address:	SAN MARCOS		
	CA		
	92069, 1431		
Corporate Code:	18	Fire Dept District:	SAN MARCOS FPD
Census Tract #:	20009	EPA ID:	CAD008362634
Inspection Date:	10/24/2000 0:00:00	Reinspection Date:	12/01
Inspector Name:	MONNIER	Gas Station:	Not reported
Facility Contact:	GREG SALO	Delinquent Flag:	Not Delinquent
Property Owner:	JEPSON CORP		
PO Address:	SAN MARCOS		
	CA		
	92069		
Tank Owner:	JEPSON CORP		
TO Address:	ELMHURST		
	IL		
	60126		
Last Update:	03/03/2002 0:00:00		

Last Delinquent Letter: Not reported
Last Letter Type: Not reported
Violation Notice Issued: Not reported
Map Code/Business Plan on File: Yes
Business Plan Acceptance Date: 07/12/00
Reinspection Date Y2K Compatible: Dec 2001

HMMD DISCLOSURE INVENTORY:

Chemical Name: CARCINOGEN AND/OR REPRO TOXINS, LESS THAN STATE DISCLOSURE AMTS.
Item Number: D162
Stored at 1 Time: 1.00
Measurement Units 0000000001 Storage Method: Not reported
Carcinogen: Yes Annual Qty String: 0000000001
Quantity Stored At One Time: CARCINOGEN
Annual Quantity String: 1.00
Material Safety Data Sheet: Not reported
1st Hazard Category: Not reported
2nd Hazard Category: DELAYD HLTH HAZARD

Chemical Name: POTASSIUM HYDROXIDE : STRIPPER 4C

SIGNET ARMORLITE (Continued) **1000314091**

Item Number: D154
Stored at 1 Time: 1975.00
Measurement Units: 0000006600 Storage Method: Not reported
Carcinogen: Yes Annual Qty String: 0000001975
Quantity Stored At One Time: 1310-58-3
Annual Quantity String: 6600.00
Material Safety Data Sheet: M
1st Hazard Category: Not reported
2nd Hazard Category: DELAYD HLTH HAZARD

Chemical Name: ETHYLENE GLYCOL : ANTICONGELANTE
Item Number: D156
Stored at 1 Time: 110.00
Measurement Units: 0000000220 Storage Method: Not reported
Carcinogen: Yes Annual Qty String: 0000000110
Quantity Stored At One Time: 107-21-1
Annual Quantity String: 220.00
Material Safety Data Sheet: M
1st Hazard Category: Not reported
2nd Hazard Category: DELAYD HLTH HAZARD

Chemical Name: BYTECH 12 T-SOAP
Item Number: D157
Stored at 1 Time: 1975.00
Measurement Units: 0000006600 Storage Method: Not reported
Carcinogen: Yes Annual Qty String: 0000001975
Quantity Stored At One Time: MIXTURE
Annual Quantity String: 6600.00
Material Safety Data Sheet: P
1st Hazard Category: Not reported
2nd Hazard Category: DELAYD HLTH HAZARD

Chemical Name: NONYL PHENOL ETHOXYLATE 12-T DETERGENT
Item Number: D169
Stored at 1 Time: 600.00
Measurement Units: 0000003600 Storage Method: Not reported
Carcinogen: Yes Annual Qty String: 0000000600
Quantity Stored At One Time: 9016-45-9
Annual Quantity String: 3600.00
Material Safety Data Sheet: P
1st Hazard Category: Not reported
2nd Hazard Category: IMMED HEALTH HAZRD

Chemical Name: SODIUM NITRITE : RI-700 RUST INHIBITOR
Item Number: D158
Stored at 1 Time: 55.00
Measurement Units: 0000000165 Storage Method: Not reported
Carcinogen: Yes Annual Qty String: 0000000055
Quantity Stored At One Time: 7632-00-0
Annual Quantity String: 165.00
Material Safety Data Sheet: P
1st Hazard Category: Not reported
2nd Hazard Category: DELAYD HLTH HAZARD

Chemical Name: MICRO SOAP 90: 20% GLYCERINE
Item Number: D020
Stored at 1 Time: 275.00

SIGNET ARMORLITE (Continued) **1000314091**

Measurement Units: 0000001000 Storage Method: Not reported
Carcinogen: Yes Annual Qty String: 0000000275
Quantity Stored At One Time: 64-02-8
Annual Quantity String: 1000.00
Material Safety Data Sheet: M
1st Hazard Category: Not reported
2nd Hazard Category: IMMED HEALTH HAZRD

Chemical Name: METHYL METHACRYLATE (MMA)
Item Number: D168
Stored at 1 Time: 110.00
Measurement Units: 0000000330 Storage Method: Not reported
Carcinogen: Yes Annual Qty String: 0000000110
Quantity Stored At One Time: 80-62-6
Annual Quantity String: 330.00
Material Safety Data Sheet: M
1st Hazard Category: Not reported
2nd Hazard Category: IMMED HEALTH HAZRD

Chemical Name: OXYGEN, COMPRESSED GAS :
Item Number: D161
Stored at 1 Time: 500.00
Measurement Units: 0000001000 Storage Method: Not reported
Carcinogen: Yes Annual Qty String: 0000000500
Quantity Stored At One Time: 7782-44-7
Annual Quantity String: 1000.00
Material Safety Data Sheet: C
1st Hazard Category: Not reported
2nd Hazard Category: OTHER

Chemical Name: DIOCTYL PHTHALATE DAP
Item Number: D163
Stored at 1 Time: 110.00
Measurement Units: 0000000330 Storage Method: Not reported
Carcinogen: Yes Annual Qty String: 0000000110
Quantity Stored At One Time: 131-17-9
Annual Quantity String: 330.00
Material Safety Data Sheet: M
1st Hazard Category: Not reported
2nd Hazard Category: DELAYD HLTH HAZARD

Chemical Name: SODIUM BISULFITE DECHLOR 20%
Item Number: D164
Stored at 1 Time: 275.00
Measurement Units: 0000000530 Storage Method: Not reported
Carcinogen: Yes Annual Qty String: 0000000275
Quantity Stored At One Time: 7631-90-5
Annual Quantity String: 530.00
Material Safety Data Sheet: A
1st Hazard Category: Not reported
2nd Hazard Category: IMMED HEALTH HAZRD

Chemical Name: ALKYL PHENOL ETHOXYLATE CHEM 6031 DET ADD
Item Number: D165
Stored at 1 Time: 110.00
Measurement Units: 0000000220 Storage Method: Not reported
Carcinogen: Yes Annual Qty String: 0000000110

SIGNET ARMORLITE (Continued) **1000314091**

Quantity Stored At One Time: 9016-45-9
Annual Quantity String: 220.00
Material Safety Data Sheet: P
1st Hazard Category: Not reported
2nd Hazard Category: IMMED HEALTH HAZRD

Chemical Name: OIL LUBRICATING PETROLEUM
Item Number: D166
Stored at 1 Time: 55.00
Measurement Units: 0000000165 Storage Method: Not reported
Carcinogen: Yes Annual Qty String: 0000000055
Quantity Stored At One Time: 64742-54-7
Annual Quantity String: 165.00
Material Safety Data Sheet: M
1st Hazard Category: Not reported
2nd Hazard Category: FIRE HAZARD

Chemical Name: SODIUM MOLYBDATE CLT 545 WT
Item Number: D167
Stored at 1 Time: 220.00
Measurement Units: 0000001100 Storage Method: Not reported
Carcinogen: Yes Annual Qty String: 0000000220
Quantity Stored At One Time: 7631-95-0
Annual Quantity String: 1100.00
Material Safety Data Sheet: M
1st Hazard Category: Not reported
2nd Hazard Category: IMMED HEALTH HAZRD

Chemical Name: ARGON, HELIUM COMPRESSED GAS :
Item Number: D153
Stored at 1 Time: 670.00
Measurement Units: 0000000670 Storage Method: Not reported
Carcinogen: Yes Annual Qty String: 0000000670
Quantity Stored At One Time: 7440-37-1
Annual Quantity String: 670.00
Material Safety Data Sheet: C
1st Hazard Category: Not reported
2nd Hazard Category: SUDDN RLSE OF PRES

Chemical Name: SULFURIC ACID 35% :
Item Number: D159
Stored at 1 Time: 55.00
Measurement Units: 0000000165 Storage Method: Not reported
Carcinogen: Yes Annual Qty String: 0000000055
Quantity Stored At One Time: 7664-93-9
Annual Quantity String: 165.00
Material Safety Data Sheet: P
1st Hazard Category: Not reported
2nd Hazard Category: IMMED HEALTH HAZRD

Chemical Name: D-LIMONENE
Item Number: D010
Stored at 1 Time: 55.00
Measurement Units: 0000000110 Storage Method: Not reported
Carcinogen: Yes Annual Qty String: 0000000055
Quantity Stored At One Time: 5989-27-5
Annual Quantity String: 110.00

SIGNET ARMORLITE (Continued) **1000314091**

Material Safety Data Sheet: M
1st Hazard Category: Not reported
2nd Hazard Category: FIRE HAZARD

Chemical Name: HYDROGEN GAS :
Item Number: D152
Stored at 1 Time: 250.00
Measurement Units0000000500 Storage Method: Not reported
Carcinogen: Yes Annual Qty String: 0000000250
Quantity Stored At One Time: 1333-74-0
Annual Quantity String: 500.00
Material Safety Data Sheet: C
1st Hazard Category: Not reported
2nd Hazard Category: FIRE HAZARD

Chemical Name: ACETONE
Item Number: D001
Stored at 1 Time: 330.00
Measurement Units0000010000 Storage Method: Not reported
Carcinogen: Yes Annual Qty String: 0000000330
Quantity Stored At One Time: 67-64-1
Annual Quantity String: 10000.00
Material Safety Data Sheet: M
1st Hazard Category: Not reported
2nd Hazard Category: FIRE HAZARD

Chemical Name: METHYLENE COATING: COATING SLN
Item Number: D002
Stored at 1 Time: 750.00
Measurement Units0000004550 Storage Method: Not reported
Carcinogen: Yes Annual Qty String: 0000000750
Quantity Stored At One Time: 75-09-2
Annual Quantity String: 4550.00
Material Safety Data Sheet: A
1st Hazard Category: Not reported
2nd Hazard Category: IMMED HEALTH HAZRD

Chemical Name: ALLYAL DIGLYCOL CARBONATE : CR39 MONOMER
Item Number: D003
Stored at 1 Time: 110000.00
Measurement Units0001320000 Storage Method: Not reported
Carcinogen: Yes Annual Qty String: 0000110000
Quantity Stored At One Time: 142-22-3
Annual Quantity String: 1320000.00
Material Safety Data Sheet: C
1st Hazard Category: Not reported
2nd Hazard Category: IMMED HEALTH HAZRD

Chemical Name: METHYL PYRROLIDONE: M-PYROL
Item Number: D009
Stored at 1 Time: 1000.00
Measurement Units0000009000 Storage Method: Not reported
Carcinogen: Yes Annual Qty String: 0000001000
Quantity Stored At One Time: 872-50-4
Annual Quantity String: 9000.00
Material Safety Data Sheet: M
1st Hazard Category: Not reported

SIGNET ARMORLITE (Continued) **1000314091**

2nd Hazard Category: FIRE HAZARD

Chemical Name: PROPANE
Item Number: D025
Stored at 1 Time: 250.00
Measurement Units: 0000001000 Storage Method: Not reported
Carcinogen: Yes Annual Qty String: 0000000250
Quantity Stored At One Time: 74-98-6
Annual Quantity String: 1000.00
Material Safety Data Sheet: A
1st Hazard Category: Not reported
2nd Hazard Category: FIRE HAZARD

Chemical Name: DIISOPROPYL PEROXYDICARBONATE NATE
Item Number: D011
Stored at 1 Time: 7500.00
Measurement Units: 0000030000 Storage Method: Not reported
Carcinogen: Yes Annual Qty String: 0000007500
Quantity Stored At One Time: 105-64-6
Annual Quantity String: 30000.00
Material Safety Data Sheet: False
1st Hazard Category: Not reported
2nd Hazard Category: REACTIVE

Chemical Name: NITROGEN
Item Number: D012
Stored at 1 Time: 2500.00
Measurement Units: 0000005000 Storage Method: Not reported
Carcinogen: Yes Annual Qty String: 0000002500
Quantity Stored At One Time: 7727-37-9
Annual Quantity String: 5000.00
Material Safety Data Sheet: A
1st Hazard Category: Not reported
2nd Hazard Category: Not reported

Chemical Name: ETHYLENE GLYCOL
Item Number: D013
Stored at 1 Time: 110.00
Measurement Units: 0000000220 Storage Method: Not reported
Carcinogen: Yes Annual Qty String: 0000000110
Quantity Stored At One Time: 107-21-1
Annual Quantity String: 220.00
Material Safety Data Sheet: M
1st Hazard Category: Not reported
2nd Hazard Category: IMMED HEALTH HAZRD

Chemical Name: METHYL ALCOHOL
Item Number: D023
Stored at 1 Time: 110.00
Measurement Units: 0000000110 Storage Method: Not reported
Carcinogen: Yes Annual Qty String: 0000000110
Quantity Stored At One Time: 67-56-1
Annual Quantity String: 110.00
Material Safety Data Sheet: M
1st Hazard Category: Not reported
2nd Hazard Category: FIRE HAZARD

SIGNET ARMORLITE (Continued) **1000314091**

Chemical Name: DIBUTYL MALEATE
Item Number: D030
Stored at 1 Time: 55.00
Measurement Units: D000000110
Carcinogen: Yes
Quantity Stored At One Time: 105-76-0
Annual Quantity String: 110.00
Material Safety Data Sheet: M
1st Hazard Category: Not reported
2nd Hazard Category: IMMED HEALTH HAZRD
Storage Method: Not reported
Annual Qty String: 0000000055

Chemical Name: ETHYL ALCOHOL
Item Number: D031
Stored at 1 Time: 55.00
Measurement Units: D000000110
Carcinogen: Yes
Quantity Stored At One Time: 64-17-5
Annual Quantity String: 110.00
Material Safety Data Sheet: M
1st Hazard Category: Not reported
2nd Hazard Category: FIRE HAZARD
Storage Method: Not reported
Annual Qty String: 0000000055

Chemical Name: STYRENE, 99%
Item Number: D085
Stored at 1 Time: 660.00
Measurement Units: D000003300
Carcinogen: Yes
Quantity Stored At One Time: 100-42-5
Annual Quantity String: 3300.00
Material Safety Data Sheet: M
1st Hazard Category: Not reported
2nd Hazard Category: IMMED HEALTH HAZRD
Storage Method: Not reported
Annual Qty String: 0000000660

Chemical Name: MONOMER, 80%: SP19
Item Number: D004
Stored at 1 Time: 825.00
Measurement Units: D000004950
Carcinogen: Yes
Quantity Stored At One Time: MIXTURE
Annual Quantity String: 4950.00
Material Safety Data Sheet: M
1st Hazard Category: Not reported
2nd Hazard Category: IMMED HEALTH HAZRD
Storage Method: Not reported
Annual Qty String: 0000000825

HMMD UNDERGROUND TANKS:
Tank Number: Not reported
Capacity (Gal): Not reported
Waste or Product: Not reported
Tank ID Number: Not reported
Tank Exempt: Not reported
Tank Contents: Not reported

HMMD WASTE STREAMS:
Inspection Date: 10/24/2000 0:00:00
Waste Code: 212.00
Qnty at Inspection: 110.00
Measurement Unit: GAL
Treatment Method: RECYCLE
Waste Description: WASTE ACETONE
Carcinogen: No
Waste Item #: W004
Waste Name: OXYGENATED SOLVENTS
Annual Quantity: 275.00
Storage Method: METAL DRUMS,55 GALLONS
Haz Waste Hauler: ENVIROSERV
Annual Qty String: 0000000275

SIGNET ARMORLITE (Continued) **1000314091**

Quantity String: 0000000110

Inspection Date: 10/24/2000 0:00:00
Waste Code: 213.00
Qnty at Inspection: 25.00
Measurement Unit: GAL
Treatment Method: RECYCLE
Waste Description: PARTS CLEANER-30 GAL
Carcinogen: No
Quantity String: 0000000025

Waste Item #: W006
Waste Name: HYDROCARBON SOLVENTS
Annual Quantity: 150.00

Storage Method: PROCESSING EQUIPMENT
Haz Waste Hauler: SAFETY-KLEEN
Annual Qty String: 0000000150

Inspection Date: 10/24/2000 0:00:00
Waste Code: 791.00
Qnty at Inspection: 250.00
Measurement Unit: GAL
Treatment Method: RECYCLE
Waste Description: ACETIC SLD WST H2O4
Carcinogen: No
Quantity String: 0000000250

Waste Item #: W016
Waste Name: LIQUIDS WITH PH <OR= 2
Annual Quantity: 1760.00

Storage Method: METAL DRUMS,55 GALLONS
Haz Waste Hauler: ENVIROSERV
Annual Qty String: 0000001760

Inspection Date: 10/24/2000 0:00:00
Waste Code: 272.00
Qnty at Inspection: 15.00
Measurement Unit: TON
Treatment Method: LANDFILL
Waste Description: MONOMER/RAGS/DEBRI
Carcinogen: No
Quantity String: 0000000015

Waste Item #: W020
Waste Name: POLYMERIC RESIN WASTE
Annual Quantity: 250.00

Storage Method: MTL BOXES,CARTONS,CASES
Haz Waste Hauler: K V S TRANSPORTATION, INC
Annual Qty String: 0000000250

Inspection Date: 10/24/2000 0:00:00
Waste Code: 352.00
Qnty at Inspection: 10000.00
Measurement Unit: LBS
Treatment Method: INCINERATION
Waste Description: ACETONE WIPES
Carcinogen: No
Quantity String: 0000010000

Waste Item #: W022
Waste Name: ORGANIC SOLIDS (OTHER)
Annual Quantity: 62570.00

Storage Method: METAL DRUMS,55 GALLONS
Haz Waste Hauler: ENVIROSERV
Annual Qty String: 0000062570

Inspection Date: 10/24/2000 0:00:00
Waste Code: 551.00
Qnty at Inspection: 110.00
Measurement Unit: GAL
Treatment Method: NO STORAGE CODE
Waste Description: METHANOL
Carcinogen: No
Quantity String: 0000000110

Waste Item #: W026
Waste Name: LABORATORY WASTE CHEMICALS
Annual Quantity: 165.00

Storage Method: METAL DRUMS,55 GALLONS
Haz Waste Hauler: ENVIROSERV
Annual Qty String: 0000000165

Inspection Date: 10/24/2000 0:00:00
Waste Code: 135.00
Qnty at Inspection: 2400.00
Measurement Unit: GAL
Treatment Method: RECYCLE
Waste Description: ETHYLENE GLYCOL WASTE
Carcinogen: No
Quantity String: 0000002400

Waste Item #: W028
Waste Name: UNSPECIFIED AQUEOUS SOL'N
Annual Quantity: 6815.00

Storage Method: METAL DRUMS,55 GALLONS
Haz Waste Hauler: SAFETY KLEEN
Annual Qty String: 0000006815

Inspection Date: 10/24/2000 0:00:00

Waste Item #: W030

SIGNET ARMORLITE (Continued) **1000314091**

Waste Code: 252.00
Qnty at Inspection: 2000.00
Measurement Unit: LBS
Treatment Method: RECYCLE
Waste Description: STILL BOTTOM SLUDGE
Carcinogen: No
Quantity String: 0000002000

Waste Name: STILL BOTTOM WASTE (OTHER)
Annual Quantity: 4238.00

Storage Method: METAL DRUMS,55 GALLONS
Haz Waste Hauler: ENVIROSERV
Annual Qty String: 0000004238

Inspection Date: 10/24/2000 0:00:00
Waste Code: 123.00
Qnty at Inspection: 55.00
Measurement Unit: LBS
Treatment Method: RECYCLE
Waste Description: DELIMONINE : CITRUS WST
Carcinogen: No
Quantity String: 0000000055

Waste Item #: W031
Waste Name: UNSPECIFIED ALKALINE SOL'N
Annual Quantity: 55.00

Storage Method: METAL DRUMS,55 GALLONS
Haz Waste Hauler: ENVIROSERV
Annual Qty String: 0000000055

Inspection Date: 10/24/2000 0:00:00
Waste Code: 221.00
Qnty at Inspection: 2000.00
Measurement Unit: GAL
Treatment Method: RECYCLE
Waste Description: WASTE OIL
Carcinogen: No
Quantity String: 0000002000

Waste Item #: W035
Waste Name: WASTE OIL & MIXED OIL
Annual Quantity: 2330.00

Storage Method: METAL DRUMS,55 GALLONS
Haz Waste Hauler: ENVIROSERV
Annual Qty String: 0000002330

Inspection Date: 10/24/2000 0:00:00
Waste Code: 122.00
Qnty at Inspection: 1320.00
Measurement Unit: GAL
Treatment Method: UNKNOWN
Waste Description: POTASSIUM HYDROXIDE
Carcinogen: No
Quantity String: 0000001320

Waste Item #: W037
Waste Name: ALKALINE SOL'N W/OUT METALS
Annual Quantity: 4180.00

Storage Method: METAL DRUMS,55 GALLONS
Haz Waste Hauler: ENVIROSERV
Annual Qty String: 0000004180

Inspection Date: 10/24/2000 0:00:00
Waste Code: 351.00
Qnty at Inspection: 2365.00
Measurement Unit: GAL
Treatment Method: UNKNOWN
Waste Description: MC
Carcinogen: No
Quantity String: 0000002365

Waste Item #: W038
Waste Name: ORGANIC SOLIDS WITH HALOGENS
Annual Quantity: 8140.00

Storage Method: METAL DRUMS,55 GALLONS
Haz Waste Hauler: ENVIROSERV
Annual Qty String: 0000008140

Inspection Date: 10/24/2000 0:00:00
Waste Code: 352.00
Qnty at Inspection: 1650.00
Measurement Unit: GAL
Treatment Method: UNKNOWN
Waste Description: MINERAL SPIRITS, M-PY POL
Carcinogen: No
Quantity String: 0000001650

Waste Item #: W039
Waste Name: ORGANIC SOLIDS (OTHER)
Annual Quantity: 6600.00

Storage Method: METAL DRUMS,55 GALLONS
Haz Waste Hauler: ENVIROSERV
Annual Qty String: 0000006600

Inspection Date: 10/24/2000 0:00:00
Waste Code: 343.00
Qnty at Inspection: 165.00
Measurement Unit: GAL

Waste Item #: W040
Waste Name: UNSPEC ORGANIC LIQUID MIXTURE
Annual Quantity: 165.00

SIGNET ARMORLITE (Continued) **1000314091**

Treatment Method: RECYCLE
Waste Description: METHYL STYRENE
Carcinogen: No
Quantity String: 0000000165

Storage Method: METAL DRUMS,55 GALLONS
Haz Waste Hauler: ENVIROSERV
Annual Qty String: 0000000165

Inspection Date: 10/24/2000 0:00:00
Waste Code: 352.00
Qnty at Inspection: 250.00
Measurement Unit: LBS
Treatment Method: RECYCLE
Waste Description: OIL ABSORBANT
Carcinogen: No
Quantity String: 0000000250

Waste Item #: W041
Waste Name: ORGANIC SOLIDS (OTHER)
Annual Quantity: 250.00

Storage Method: METAL DRUMS,55 GALLONS
Haz Waste Hauler: ENVIROSERV
Annual Qty String: 0000000250

Inspection Date: 10/24/2000 0:00:00
Waste Code: 751.00
Qnty at Inspection: 3600.00
Measurement Unit: GAL
Treatment Method: RECYCLE
Waste Description: METHYLENE CHLORIDE
Carcinogen: No
Quantity String: 0000003600

Waste Item #: W042
Waste Name: SOLD/SLDG W HAL ORG>=1000MG/KG
Annual Quantity: 24822.00

Storage Method: METAL DRUMS,55 GALLONS
Haz Waste Hauler: ENVIROSERV
Annual Qty String: 0000024822

Inspection Date: 10/24/2000 0:00:00
Waste Code: 181.00
Qnty at Inspection: 400.00
Measurement Unit: LBS
Treatment Method: LANDFILL
Waste Description: SODA ASH
Carcinogen: No
Quantity String: 0000000400

Waste Item #: W043
Waste Name: INORGANIC SOLID WASTE (OTHER)
Annual Quantity: 400.00

Storage Method: METAL DRUMS,55 GALLONS
Haz Waste Hauler: ENVIROSERV
Annual Qty String: 0000000400

HMMD VIOLATIONS:

Inspection Date: 10/24/2000 0:00:00
Waste Code: Not reported
Type of Violation: GENERAL VIOLATION
Violation Description: HAZARDOUS MATERIALS HAVE NOT BEEN ADEQUATELY LABELED WITHIN 10 DAYS AND ARE NOW DECLARED HAZARDOUS WASTE HSC 25124(E)

Occurrences: 01

Inspection Date: 10/24/2000 0:00:00
Waste Code: Not reported
Type of Violation: GENERAL VIOLATION
Violation Description: HAZARDOUS WASTE STORAGE CONTAINER IS NOT ADEQUATELY SEPARATED FROM NEARBY INCOMPATIBLE WASTES OR MATERIALS CCR 66265.177

Occurrences: 01

Inspection Date: 10/08/1999 0:00:00
Waste Code: Not reported
Type of Violation: GENERAL VIOLATION
Violation Description: WRITTEN OPERATING INSTRUCTIONS AND/OR RECORDS OF THE DATES, VOLUMES, RESIDUAL MANAGEMENT AND TYPES OF WASTES TREATED IN UNIT

Occurrences: 01

Inspection Date: 10/08/1999 0:00:00
Waste Code: Not reported
Type of Violation: GENERAL VIOLATION
Violation Description: TITLE 22, CCR, SECTION 67450.2 (B) (3). THE NUMBER OF TANKS AND CONTAINERS IS NOT ACCURATE ON DTSC 1772 FORM. HSC 25200.3.(F)

Occurrences: 01

SIGNET ARMORLITE (Continued) **1000314091**

Inspection Date: 10/08/1999 0:00:00 Occurrences: 01
Waste Code: Not reported
Type of Violation: GENERAL VIOLATION
Violation Description: TREATING HAZARDOUS WASTE ONSITE WITHOUT FIRST HAVING OBTAINED AUTHORIZATION FROM LOCAL CUPA HSC 25201.4 (B)

Inspection Date: 10/08/1999 0:00:00 Occurrences: 01
Waste Code: Not reported
Type of Violation: GENERAL VIOLATION
Violation Description: GENERATOR OF A WASTE HAS NOT DETERMINED IF THAT WASTE IS A HAZARDOUS WASTE AS DEFINED BY LAW
CCR 66262.11

Inspection Date: 10/08/1999 0:00:00 Occurrences: 02
Waste Code: Not reported
Type of Violation: GENERAL VIOLATION
Violation Description: HAZARDOUS WASTE CONTAINERS ARE NOT KEPT CLOSED WHILE IN STORAGE
CCR 66265.173

Inspection Date: 10/08/1999 0:00:00 Occurrences: 01
Waste Code: Not reported
Type of Violation: GENERAL VIOLATION
Violation Description: HAZARDOUS WASTE IS STORED IN EXCESS OF ALLOWABLE TIME PERIOD WITHOUT A STATE PERMIT OR WRITTEN VARIANCE
CCR 66262.34

HMMD ENVIRONMENTAL ASSESSMENT INFORMATION:
Case Status Date: 09/22/1986 0:00:00
Case Type: TANK, RELEASE
Case Status: CLOSED
Release Occurrence Number: 001
Historical Name: ARMORLITE INC
Date Release Began: 08/26/1986 0:00:00
Lead Agency: DEH

Case Status Date: 09/15/1993 0:00:00
Case Type: TANK, RELEASE (W)
Case Status: OPEN
Release Occurrence Number: 002
Historical Name: SIGNET ARMORLITE
Date Release Began: 09/15/1993 0:00:00
Lead Agency: DEH

The CA HMMD database may contain additional details for this site.
Please click here or contact your EDR Account Executive for more information.

EMISSIONS :
Facility ID : 172
Air District Code : SD
SIC Code : 3851
Total Priority Score : Not reported
Health Risk Assessment : Not reported
Non-cancer Chronic Haz Index : Not reported
Non-cancer Acute Haz Index : Not reported
Air Basin : SD
Air District Name : SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System : Not reported

SIGNET ARMORLITE (Continued) **1000314091**

Consolidated Emission Reporting Rule :	Not reported
Total Organic Hydrocarbon Gases :	20
Reactive Organic Gases :	0
Carbon Monoxide Emissions :	0
NOX Gas Emissions (Nitrogen - Oxygen) :	0
SOX Gas Emissions (Sulphur - Oxygen) :	0
Facility ID :	172
Air District Code :	SD
SIC Code :	3851
Total Priority Score :	20
Health Risk Assessment :	5
Non-cancer Chronic Haz Index :	0
Non-cancer Acute Haz Index :	Not reported
Air Basin :	SD
Air District Name :	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System :	Not reported
Consolidated Emission Reporting Rule :	Not reported
Total Organic Hydrocarbon Gases :	Not reported
Reactive Organic Gases :	Not reported
Carbon Monoxide Emissions :	Not reported
NOX Gas Emissions (Nitrogen - Oxygen) :	Not reported
SOX Gas Emissions (Sulphur - Oxygen) :	Not reported

36
SE
1/4-1/2
2262 ft.

PATIO GUYS INC **RCRIS-SQG** **1000258796**
935 BAILEY CT STE D **FINDS** **CAD982488181**
SAN MARCOS, CA 92069 **San Diego Co. HMMD**
LUST

Relative:
Lower

Actual:
565 ft.

RCRIS:
Owner: NOT REQUIRED
(415) 555-1212
EPA ID: CAD982488181
Contact: Not reported
Classification: Small Quantity Generator
TSDF Activities: Not reported

Violation Status: No violations found

FINDS:
Other Pertinent Environmental Activity Identified at Site:
Facility Registry System (FRS)
Resource Conservation and Recovery Act Information system (RCRAINFO)

State LUST:

Cross Street:	Not reported		
Qty Leaked:	Not reported		
Case Number	Not reported		
Reg Board:	9		
Chemical:	0		
Lead Agency:	Local Agency		
Local Agency :	0		
Case Type:	Soil only		
Status:	Case Closed		
Review Date:	Not reported	Confirm Leak:	Not reported
Workplan:	1/3/65	Prelim Assess:	1/3/65
Pollution Char:	Not reported	Remed Plan:	Not reported
Remed Action:	1/3/65		

PATIO GUYS INC (Continued) **1000258796**

Monitoring: Not reported
Close Date: 02/15/1991
Release Date: Not reported
Cleanup Fund Id : Not reported
Discover Date : 01/11/1990
Enforcement Dt : Not reported
Enf Type: Not reported
Enter Date : / /
Funding: Not reported
Staff Initials: NAL
How Discovered: Not reported
How Stopped: Not reported
Interim : Not reported
Leak Cause: Not reported
Leak Source: Not reported
MTBE Date : / /
Max MTBE GW : 0 Parts per Billion
MTBE Tested: Not Required to be Tested.
Priority: 3VA
Local Case # : H06559-001
Beneficial: Not reported
Staff : UNK
GW Qualifier : Not reported
Max MTBE Soil : Not reported
Soil Qualifier : Not reported
Hydr Basin #: Not reported
Operator : Not reported
Oversight Prgm: Spills, Leaks, Investigations and Cleanup UST
Oversight Prgm : SLIC
Review Date : Not reported
Stop Date : / /
Work Suspended : Not reported
Responsible Party Not reported
RP Address: Not reported
Global Id: T0608199583
Org Name: Not reported
Contact Person: Not reported
MTBE Conc: 0
Mtbe Fuel: 0
Water System Name: Not reported
Well Name: Not reported
Distance To Lust: 0
Waste Discharge Global ID: Not reported
Waste Disch Assigned Name: Not reported

HMMD:

Facility ID:	H06559		
Inactive Indicator:	Inactive	Business Code:	Not reported
SIC:	2891	Permit Expiration:	04/30
Owner:	STEVE COULTER/NICK MONTEMARANO	Old Name:	Not reported
Mailing Address:	SAN MARCOS CA 92069, 1448		
Corporate Code:	18	Fire Dept District:	SAN MARCOS FPD
Census Tract #:	20009	EPA ID:	CAD982488181
Inspection Date:	02/14/1991 0:00:00	Reinspection Date:	02/92
Inspector Name:	AVASTU	Gas Station:	Not reported
Facility Contact:	DON LOWERY	Delinquent Flag:	Not Delinquent

PATIO GUYS INC (Continued) **1000258796**

Property Owner: Not reported
PO Address: Not reported
Tank Owner: Not reported
TO Address: Not reported
Last Update: 07/02/1998 0:00:00
Last Delinquent Letter: Not reported
Last Letter Type: Not reported
Violation Notice Issued: Not reported
Map Code/Business Plan on File: Not reported
Business Plan Acceptance Date: Not reported
Reinspection Date Y2K Compatible: Feb 1992

HMMD DISCLOSURE INVENTORY:
Chemical Name: Not reported
Item Number: Not reported
Stored at 1 Time: Not reported
Measurement Units: Not reported
Carcinogen: No
Quantity Stored At One Time: Not reported
Annual Quantity String: Not reported
Material Safety Data Sheet: Not reported
1st Hazard Category: Not reported
2nd Hazard Category: Not reported

Storage Method: Not reported
Annual Qty String: Not reported

HMMD UNDERGROUND TANKS:
Tank Number: Not reported
Capacity (Gal): Not reported
Waste or Product: Not reported

Tank ID Number: Not reported
Tank Exempt: Not reported
Tank Contents: Not reported

HMMD WASTE STREAMS:
Inspection Date: 02/14/1991 0:00:00
Waste Code: 181.00
Qnty at Inspection: 250.00
Measurement Unit: LBS
Treatment Method: OTHER
Waste Description: ABRSVE BLST WST-
Carcinogen: No
Quantity String: 0000000250

Waste Item #: W001
Waste Name: INORGANIC SOLID WASTE (OTHER)
Annual Quantity: 6800.00

Storage Method: PLASTIC DRUMS,30 GALLONS
Haz Waste Hauler: NO HAULER
Annual Qty String: 0000006800

Inspection Date: 02/14/1991 0:00:00
Waste Code: 122.00
Qnty at Inspection: 35.00
Measurement Unit: GAL
Treatment Method: UNKNOWN
Waste Description: OAKITE OKEMCOAT 2000/LIQ
Carcinogen: No
Quantity String: 0000000035

Waste Item #: W003
Waste Name: ALKALINE SOL'N W/OUT METALS
Annual Quantity: 35.00

Storage Method: INVALID CODE
Haz Waste Hauler: NO HAULER
Annual Qty String: 0000000035

Inspection Date: 02/14/1991 0:00:00
Waste Code: 181.00
Qnty at Inspection: 250.00
Measurement Unit: LBS
Treatment Method: UNKNOWN
Waste Description: CHROMATING WST IN TANK
Carcinogen: No
Quantity String: 0000000250

Waste Item #: W005
Waste Name: INORGANIC SOLID WASTE (OTHER)
Annual Quantity: 250.00

Storage Method: PROCESSING EQUIPMENT
Haz Waste Hauler: NO HAULER
Annual Qty String: 0000000250

HMMD VIOLATIONS:
Inspection Date: Not reported

Occurrences: Not reported

PATIO GUYS INC (Continued) **1000258796**

Waste Code: Not reported
Type of Violation: Not reported
Violation Description:

HMMD ENVIRONMENTAL ASSESSMENT INFORMATION:
Case Status Date: 02/15/1991 0:00:00
Case Type: TANK, RELEASE
Case Status: CLOSED
Release Occurrence Number: 001
Historical Name: PATIO GUYS
Date Release Began: 01/11/1990 0:00:00
Lead Agency: DEH

The CA HMMD database may contain additional details for this site.
Please click here or contact your EDR Account Executive for more information.

I37 **CA SLIC** **S105548592**
SSW **1325 GRAND AVE** **N/A**
1/4-1/2 **SAN MARCOS, CA**
2424 ft.

Site 1 of 2 in cluster I

Relative:
Lower

Actual:
541 ft.

SLIC Region 9:
Facility Id: Not reported
File Code Number : 20-0305.05
Waste Discharger Id : 9 U00000305
Local Case Number : Not reported
Primary Name : GRAND AVENUE BUSINESS PARK
Secondary Name : MR. ALBERT COLUCCI
Class : Not reported
Facilty Type : SLIC
Order Number : Not reported
Category : ENFORCMENT
File Number : 1
Start Date : 11/1986
End Date : Not reported
Status : Open
Archive Box Number : 0
Remarks : Not reported
Archive Box Storage Location : Not reported

I38 **CHMIRS** **S100278891**
SSW **1320 GRAND AVE** **N/A**
1/4-1/2 **SAN MARCOS, CA 92069**
2425 ft.

Site 2 of 2 in cluster I

Relative:
Lower

Actual:
542 ft.

CHMIRS:
OES Control Number: 8802059
Chemical Name: Not reported
Extent of Release: Not reported
Property Use: Mercantile, Business
Incident Date: 01-JUL-88
Date Completed: 01-JUL-88
Time Completed : 1630
Agency Id Number : 37145
Agency Incident Number : 88-1418-2
OES Incident Number : 8802059
Time Notified : 1430

(Continued) **S100278891**

Surrounding Area :	600
Estimated Temperature :	Not reported
Property Management :	P
More Than Two Substances Involved? :	N
Special Studies 1 :	Not reported
Special Studies 2 :	Not reported
Special Studies 3 :	Not reported
Special Studies 4 :	Not reported
Special Studies 5 :	Not reported
Special Studies 6 :	Not reported
Responding Agency Personel # Of Injuries :	Not reported
Responding Agency Personel # Of Fatalities :	Not reported
Resp Agncy Personel # Of Decontaminated :	Not reported
Others Number Of Decontaminated :	Not reported
Others Number Of Injuries :	Not reported
Others Number Of Fatalities :	Not reported
Vehicle Make/year :	Not reported
Vehicle License Number :	Not reported
Vehicle State :	Not reported
Vehicle Id Number :	Not reported
CA/DOT/PUC/ICC Number :	Not reported
Company Name :	Not reported
Reporting Officer Name/ID :	C MORTON
Report Date :	01-JUL-88
Comments :	No
Facility Telephone Number :	619 744-7200
Waterway Involved :	Not reported
Waterway :	Not reported
Spill Site :	Not reported
Cleanup By :	Not reported
Containment :	Not reported
What Happened :	Not reported
Type :	Not reported
Other :	Not reported
Chemical 1 :	Not Reported
Chemical 2 :	Not Reported
Chemical 3 :	Not Reported
Date/Time :	Not reported
Evacuations :	Not reported

J39 **CHMIRS** **S100275100**
SSW **1365 GRAND AVE** **N/A**
1/4-1/2 **SAN MARCOS, CA 92069**
2431 ft.

Site 1 of 2 in cluster J

Relative:
Lower

Actual:
544 ft.

CHMIRS:

OES Control Number:	8907848
Chemical Name:	Not reported
Extent of Release:	Not reported
Property Use:	Mercantile, Business
Incident Date:	11-SEP-89
Date Completed:	11-SEP-89
Time Completed :	1918
Agency Id Number :	37145
Agency Incident Number :	89-
OES Incident Number :	8907848
Time Notified :	1617
Surrounding Area :	500

(Continued) **S100275100**

Estimated Temperature :	80
Property Management :	P
More Than Two Substances Involved? :	N
Special Studies 1 :	Not reported
Special Studies 2 :	Not reported
Special Studies 3 :	Not reported
Special Studies 4 :	Not reported
Special Studies 5 :	Not reported
Special Studies 6 :	Not reported
Responding Agency Personel # Of Injuries :	0
Responding Agency Personel # Of Fatalities :	0
Resp Agncy Personel # Of Decontaminated :	2
Others Number Of Decontaminated :	1
Others Number Of Injuries :	1
Others Number Of Fatalities :	0
Vehicle Make/year :	Not reported
Vehicle License Number :	Not reported
Vehicle State :	Not reported
Vehicle Id Number :	Not reported
CA/DOT/PUC/ICC Number :	Not reported
Company Name :	Not reported
Reporting Officer Name/ID :	F/F CHARLES MORTON
Report Date :	11-SEP-89
Comments :	Not reported
Facility Telephone Number :	619 744-7200
Waterway Involved :	Not reported
Waterway :	Not reported
Spill Site :	Not reported
Cleanup By :	Not reported
Containment :	Not reported
What Happened :	Not reported
Type :	Not reported
Other :	Not reported
Chemical 1 :	Not Reported
Chemical 2 :	Not Reported
Chemical 3 :	Not Reported
Date/Time :	Not reported
Evacuations :	Not reported

J40 **DEWEY PEST CONTROL** **RCRIS-SQG** **1000226169**
SSW **1370 GRAND AVENUE** **FINDS** **CAD981430937**
1/4-1/2 **SAN MARCOS, CA 92069** **UST**
2437 ft. **LUST**
Site 2 of 2 in cluster J **HAZNET**
Relative: **Cortese**
Lower **San Diego Co. HMMD**

Actual:
545 ft.

DEWEY PEST CONTROL (Continued) **1000226169**

RCRIS:
Owner: NOT REQUIRED
(415) 555-1212
EPA ID: CAD981430937

Contact: Not reported

Classification: Small Quantity Generator
TSDF Activities: Not reported

Violation Status: No violations found

FINDS:
Other Pertinent Environmental Activity Identified at Site:
Facility Registry System (FRS)
Resource Conservation and Recovery Act Information system (RCRAINFO)

State LUST:
Cross Street: Not reported
Qty Leaked: Not reported
Case Number 9UT301
Reg Board: 9
Chemical: 0
Lead Agency: Local Agency
Local Agency : 0
Case Type: Soil only
Status: Case Closed
Review Date: Not reported
Workplan: 1/3/65
Pollution Char: Not reported
Remed Action: 1/3/65
Monitoring: Not reported
Close Date: 08/26/1987
Release Date: Not reported
Cleanup Fund Id : Not reported
Discover Date : 04/13/1987
Enforcement Dt : Not reported
Enf Type: Not reported
Enter Date : / /
Funding: Not reported
Staff Initials: FJI
How Discovered: Not reported
How Stopped: Not reported
Interim : Not reported
Leak Cause: Not reported
Leak Source: Not reported
MTBE Date : / /
Max MTBE GW : 0 Parts per Billion
MTBE Tested: Not Required to be Tested.
Priority: 3VA
Local Case # : H04345-001
Beneficial: Not reported
Staff : UNK
GW Qualifier : Not reported
Max MTBE Soil : Not reported
Soil Qualifier : Not reported
Hydr Basin #: Not reported
Operator : Not reported
Oversight Prgm: Spills, Leaks, Investigations and Cleanup UST

Confirm Leak: Not reported
Prelim Assess: 1/3/65
Remed Plan: Not reported

DEWEY PEST CONTROL (Continued) **1000226169**

Oversight Prgm : SLIC
Review Date : Not reported
Stop Date : / /
Work Suspended :Not reported
Responsible PartyNot reported
RP Address: Not reported
Global Id: T0607301777
Org Name: Not reported
Contact Person: Not reported
MTBE Conc: 0
Mtbe Fuel: 0
Water System Name: Not reported
Well Name: Not reported
Distance To Lust: 0
Waste Discharge Global ID: Not reported
Waste Disch Assigned Name: Not reported

LUST Region 9:
Case Number: 9UT301
Local Agency: 37000
Substance: 0
Date Found: 04/07/1987
Date Stopped: 04/07/1987
Source: Tank
Lead Agency: Local Agency
Status: Case Closed
Case Type: Other ground water affected
Confirm Date: Not reported
Prelim Assess: Not reported
Remed Plan: Not reported
Began Monitor: 8/26/87
Enforce Type: Not reported
Enforce Date: Not reported
Pilot Program: LOP
Basin Number: 904.52
File Dispn: File discarded, case closed
Interim Remedial Actions: Yes
Beneficial Use: MUN
Cleanup and Abatement order Number: Not reported
Waste Discharge Requirement Number: Not reported
NPDES Number: Not reported

Release Date: 04/09/1987
Qty Leaked: 0
How Found: Tank Closure
How Stopped: Remove Contents
Cause: Corrosion
Submit Workplan: Not reported
Desc Pollution: Not reported
Remed Action: Not reported
Closed Date: 8/26/87
Local Case: H04345-001
Gwater Depth: -10

HAZNET:
Gepaid: CAD981430937
TSD EPA ID: CAT080013352
Gen County: San Diego
Tsd County: Los Angeles
Tons: .5004
Waste Category: Unspecified oil-containing waste
Disposal Method: Recycler
Contact: Not reported
Telephone: (000) 000-0000
Mailing Address: 3711 BEVERLY BLVD
LOS ANGELES, CA 90004
County San Diego

CORTESE:
Reg Id: 9UT301
Region: CORTESE

DEWEY PEST CONTROL (Continued) **1000226169**

Reg By: Leaking Underground Storage Tanks

HMMD:

Facility ID:	H04345		
Inactive Indicator:	Active	Business Code:	PESTICIDE APPL/FUMIGATE
SIC:	7342	Permit Expiration:	06/30
Owner:	Not reported	2nd Name:	Not reported
Mailing Address:	SAN MARCOS CA 92069, 2404		
Corporate Code:	18	Fire Dept District:	SAN MARCOS FPD
Census Tract #:	20009	EPA ID:	Not reported
Inspection Date:	07/31/2001 0:00:00	Reinspection Date:	07/02
Inspector Name:	MONNIER	Gas Station:	Not reported
Facility Contact:	MIKE LAWSON	Delinquent Flag:	Not Delinquent
Property Owner:	DEWEY PEST CONTROL		
PO Address:	LOS ANGELES CA 90004		
Tank Owner:	DEWEY PEST CONTROL		
TO Address:	LOS ANGELES CA 90004		
Last Update:	03/03/2002 0:00:00		
Last Delinquent Letter:	Not reported		
Last Letter Type:	Not reported		
Violation Notice Issued:	Not reported		
Map Code/Business Plan on File:	Yes		
Business Plan Acceptance Date:	07/20/01		
Reinspection Date Y2K Compatible:	Jul 2002		

HMMD DISCLOSURE INVENTORY:

Chemical Name:	Not reported		
Item Number:	Not reported		
Stored at 1 Time:	Not reported		
Measurement Units:	Not reported	Storage Method:	Not reported
Carcinogen:	No	Annual Qty String:	Not reported
Quantity Stored At One Time:	Not reported		
Annual Quantity String:	Not reported		
Material Safety Data Sheet:	Not reported		
1st Hazard Category:	Not reported		
2nd Hazard Category:	Not reported		

HMMD UNDERGROUND TANKS:

Tank Number:	T001	Tank ID Number:	1
Capacity (Gal):	550.00	Tank Exempt:	No
Waste or Product:	Product	Tank Contents:	REGULAR UNLEADED
Tank Number:	T002	Tank ID Number:	2
Capacity (Gal):	550.00	Tank Exempt:	No
Waste or Product:	Product	Tank Contents:	LEADED
Tank Number:	T003	Tank ID Number:	3
Capacity (Gal):	5000.00	Tank Exempt:	No
Waste or Product:	Product	Tank Contents:	REGULAR UNLEADED

HMMD WASTE STREAMS:

Inspection Date:	Not reported	Waste Item #:	Not reported
Waste Code:	Not reported	Waste Name:	Not reported

DEWEY PEST CONTROL (Continued) **1000226169**

Qnty at Inspection: Not reported
Measurement Unit: Not reported
Treatment Method: Not reported
Waste Description: Not reported
Carcinogen: No
Quantity String: Not reported
Annual Quantity: Not reported
Storage Method: Not reported
Haz Waste Hauler: Not reported
Annual Qty String: Not reported

HMMD VIOLATIONS:

Inspection Date: 11/23/1999 0:00:00
Waste Code: Not reported
Type of Violation: GENERAL VIOLATION
Violation Description: WRITTEN RESPONSE PLAN FOR RELEASES INTO SECONDARY CONTAINMENT IS NOT AVAILABLE. CCR 2632(E)(2), 2634(C)
Occurrences: 01

Inspection Date: 11/23/1999 0:00:00
Waste Code: Not reported
Type of Violation: GENERAL VIOLATION
Violation Description: WRITTEN ROUTINE MONITORING PROCEDURE FOR THE UNDERGROUND STORAGE TANK SYSTEM HAS NOT BEEN PREPARED AND IMPLEMENTED. CCR2632(E)(1),2634(B)(2)
Occurrences: 01

Inspection Date: 07/31/2001 0:00:00
Waste Code: Not reported
Type of Violation: GENERAL VIOLATION
Violation Description: OWNER/OPERATOR HAS NOT HAD MONITORING EQUIPMENT TESTED ANNUALLY AS REQUIRED. 23CCR 2630, 2641 (J)
Occurrences: 01

Inspection Date: 11/23/1999 0:00:00
Waste Code: Not reported
Type of Violation: GENERAL VIOLATION
Violation Description: DOCUMENTATION SHOWING EVIDENCE OF FINANCIAL RESPONSIBILITY IS NOT AVAILABLE. HSC 25292.2
Occurrences: 01

Inspection Date: 11/23/1999 0:00:00
Waste Code: Not reported
Type of Violation: GENERAL VIOLATION
Violation Description: OWNER/OPERATOR HAS NOT HAD MONITORING EQUIPMENT TESTED ANNUALLY AS REQUIRED. 23CCR 2630, 2641 (J)
Occurrences: 01

Inspection Date: 07/31/2001 0:00:00
Waste Code: Not reported
Type of Violation: GENERAL VIOLATION
Violation Description: UNDERGROUND STORAGE TANK MONITORING/MAINTENANCE/CALIBRATION RECORDS ARE NOT MAINTAINED ON SITE. HSC 25293; CCR 2712(B), 2641(I)
Occurrences: 01

HMMD ENVIRONMENTAL ASSESSMENT INFORMATION:

Case Status Date: 08/26/1987 0:00:00
Case Type: TANK, RELEASE
Case Status: CLOSED
Release Occurrence Number: 001
Historical Name: DEWEY PEST CONTROL
Date Release Began: 04/13/1987 0:00:00
Lead Agency: DEH

DEWEY PEST CONTROL (Continued) **1000226169**

The CA HMMD database may contain additional details for this site.
Please click here or contact your EDR Account Executive for more information.

State UST:
Facility ID: H04345
Region: STATE
Local Agency: 37000

K41 **AIR PRODUCTS AND CHEMICALS INC** **LUST S102423760**
SW **1415 GRAND AVE** **HAZNET N/A**
1/4-1/2 **SAN MARCOS, CA 92069**
2495 ft.

Site 1 of 2 in cluster K

Relative: Lower

Actual: 552 ft.

LUST Region 9:

Case Number:	9UT1661	Release Date:	03/23/1990
Local Agency:	37000		
Substance:	12034	Qty Leaked:	Not reported
Date Found:	03/23/1990	How Found:	Tank Closure
Date Stopped:	03/23/1990	How Stopped:	Close Tank
Source:	Unknown	Cause:	Unknown
Lead Agency:	Local Agency		
Status:	Case Closed		
Case Type:	Other ground water affected		
Abate Method:	Excavate and Dispose - remove contaminated soil and dispose in approved site		
Confirm Date:	Not reported	Submit Workplan:	Not reported
Prelim Assess:	Not reported	Desc Pollution:	Not reported
Remed Plan:	Not reported	Remed Action:	Not reported
Began Monitor:	2/4/91	Closed Date:	2/4/91
Enforce Type:	Not reported		
Enforce Date:	Not reported		
Pilot Program:	LOP	Local Case:	H02614-001
Basin Number:	904.52	Gwater Depth:	10
File Dispn:	File discarded, case closed		
Interim Remedial Actions:	Yes		
Beneficial Use:	MUN		
Cleanup and Abatement order Number:	Not reported		
Waste Discharge Requirement Number:	Not reported		
NPDES Number:	Not reported		

HAZNET:

Gepaid:	CAL000027654
TSD EPA ID:	CAT000646117
Gen County:	San Diego
Tsd County:	Kings
Tons:	.3500
Waste Category:	Baghouse waste
Disposal Method:	Treatment, Tank
Contact:	AIR PRODUCTS AND CHEMICALS INC
Telephone:	(610) 481-3354
Mailing Address:	1415 GRAND AVE
	SAN MARCOS, CA 92069 - 2405
County	San Diego

AIR PRODUCTS AND CHEMICALS INC (Continued) **S102423760**

Gepaid:	CAL000027654
TSD EPA ID:	CAT000646117
Gen County:	San Diego
Tsd County:	Kings
Tons:	.2250
Waste Category:	Baghouse waste
Disposal Method:	Treatment, Tank
Contact:	AIR PRODUCTS AND CHEMICALS INC
Telephone:	(610) 481-3354
Mailing Address:	1415 GRAND AVE
	SAN MARCOS, CA 92069 - 2405
County	San Diego

Gepaid:	CAL000027654
TSD EPA ID:	CAT000646117
Gen County:	San Diego
Tsd County:	Kings
Tons:	.3000
Waste Category:	Other organic solids
Disposal Method:	Treatment, Tank
Contact:	AIR PRODUCTS AND CHEMICALS INC
Telephone:	(610) 481-3354
Mailing Address:	1415 GRAND AVE
	SAN MARCOS, CA 92069 - 2405
County	San Diego

Gepaid:	CAL000027654
TSD EPA ID:	CAT000646117
Gen County:	San Diego
Tsd County:	Kings
Tons:	.3375
Waste Category:	Baghouse waste
Disposal Method:	Disposal, Other
Contact:	AIR PRODUCTS AND CHEMICALS INC
Telephone:	(610) 481-3354
Mailing Address:	1415 GRAND AVE
	SAN MARCOS, CA 92069 - 2405
County	San Diego

Gepaid:	CAL000027654
TSD EPA ID:	CAT000646117
Gen County:	San Diego
Tsd County:	Kings
Tons:	.1250
Waste Category:	Baghouse waste
Disposal Method:	Treatment, Tank
Contact:	AIR PRODUCTS AND CHEMICALS INC
Telephone:	(610) 481-3354
Mailing Address:	1415 GRAND AVE
	SAN MARCOS, CA 92069 - 2405
County	San Diego

The CA HAZNET database contains 1 additional record for this site.
Please click here or contact your EDR Account Executive for more information.

AIR PRODUCTS AND CHEMICALS INC (Continued) **S102423760**

K42
SW
1/4-1/2
2495 ft.

Relative:
Lower

Actual:
552 ft.

AIR PRODUCTS AND CHEMICAL
1415 GRAND
SAN MARCOS, CA 92069

Cortese **S104745513**
San Diego Co. HMMD **N/A**
LUST

Site 2 of 2 in cluster K

State LUST:

Cross Street:	Not reported		
Qty Leaked:	Not reported		
Case Number	9UT1661		
Reg Board:	9		
Chemical:	Diesel		
Lead Agency:	Local Agency		
Local Agency :	0		
Case Type:	Soil only		
Status:	Case Closed		
Review Date:	Not reported	Confirm Leak:	Not reported
Workplan:	3/23/90	Prelim Assess:	3/23/90
Pollution Char:	Not reported	Remed Plan:	Not reported
Remed Action:	4/30/90		
Monitoring:	Not reported		
Close Date:	02/05/1991		
Release Date:	Not reported		
Cleanup Fund Id :	Not reported		
Discover Date :	03/23/1990		
Enforcement Dt :	Not reported		
Enf Type:	Not reported		
Enter Date :	/ /		
Funding:	Not reported		
Staff Initials:	NAL		
How Discovered:	Not reported		
How Stopped:	Not reported		
Interim :	Not reported		
Leak Cause:	Not reported		
Leak Source:	Not reported		
MTBE Date :	/ /		
Max MTBE GW :	0 Parts per Billion		
MTBE Tested:	Not Required to be Tested.		
Priority:	Low priority. Priority ranking can change over time.		
Local Case # :	H02614-001		
Beneficial:	Not reported		
Staff :	UNK		
GW Qualifier :	Not reported		
Max MTBE Soil :	Not reported		
Soil Qualifier :	Not reported		
Hydr Basin #:	Not reported		
Operator :	Not reported		
Oversight Prgm:	Local Oversight Program UST		
Oversight Prgm :	LOP		
Review Date :	Not reported		
Stop Date :	/ /		
Work Suspended :	Not reported		
Responsible Party	Not reported		
RP Address:	Not reported		
Global Id:	T0607300476		
Org Name:	Not reported		
Contact Person:	Not reported		
MTBE Conc:	0		

AIR PRODUCTS AND CHEMICAL (Continued) **S104745513**

Mtbe Fuel: 0
Water System Name: Not reported
Well Name: Not reported
Distance To Lust: 0
Waste Discharge Global ID: Not reported
Waste Disch Assigned Name: Not reported

CORTESE:
Reg Id: 9UT1661
Region: CORTESE
Reg By: Leaking Underground Storage Tanks

HMMD:
Facility ID: H02614
Inactive Indicator: Active
SIC: 5169
Owner: AIR PRODUCTS & CHEMICALS, INC.
Mailing Address: SAN MARCOS
CA
92069, 2405
Corporate Code: 18
Census Tract #: 20009
Inspection Date: 12/14/2000 0:00:00
Inspector Name: MONNIER
Facility Contact: DAVID WILLIAMS
Property Owner: L & V INDUSTRIAL SUPPLY INC
PO Address: SAN MARCOS
CA
92069
Tank Owner: LEROY LAVINE
TO Address: SAN MARCOS
CA
92069
Last Update: 11/04/2001 0:00:00
Business Code: INDUSTRIAL GAS SUPPLIERS
Permit Expiration: 01/31
2nd Name: Not reported
Fire Dept District: SAN MARCOS FPD
EPA ID: CAL000027654
Reinspection Date: 02/02
Gas Station: Not reported
Delinquent Flag: Not Delinquent
Last Delinquent Letter: Not reported
Last Letter Type: Not reported
Violation Notice Issued: Not reported
Map Code/Business Plan on File: Yes
Business Plan Acceptance Date: 05/24/99
Reinspection Date Y2K Compatible: Feb 2002

HMMD DISCLOSURE INVENTORY:
Chemical Name: HYDROGEN SULFIDE
Item Number: D029
Stored at 1 Time: 1.00
Measurement Units 0000000001
Carcinogen: Yes
Quantity Stored At One Time: 7783-06-4
Annual Quantity String: 1.00
Material Safety Data Sheet: C
1st Hazard Category: Not reported
2nd Hazard Category: XTREMLY HAZRDS-GAS
Storage Method: Not reported
Annual Qty String: 0000000001

Chemical Name: SULFUR HEXAFLUORIDE
Item Number: D018
Stored at 1 Time: 32500.00
Measurement Units 0000281900
Carcinogen: Yes
Quantity Stored At One Time: 2551-62-4
Storage Method: Not reported
Annual Qty String: 0000032500

AIR PRODUCTS AND CHEMICAL (Continued) **S104745513**

Annual Quantity String: 281900.00
Material Safety Data Sheet: C
1st Hazard Category: Not reported
2nd Hazard Category: IMMED HEALTH HAZRD

Chemical Name: TRIFLUOROMETHANE : FLUOROFORM
Item Number: D021
Stored at 1 Time: 300.00
Measurement Units: 0000000900 Storage Method: Not reported
Carcinogen: Yes Annual Qty String: 0000000300
Quantity Stored At One Time: 76-16-4
Annual Quantity String: 900.00
Material Safety Data Sheet: C
1st Hazard Category: Not reported
2nd Hazard Category: Not reported

Chemical Name: CHLORINE GAS: EXTREMELY HAZ: TLV GAS
Item Number: D022
Stored at 1 Time: 95.00
Measurement Units: 0000000570 Storage Method: 1
Carcinogen: Yes Annual Qty String: 0000000095
Quantity Stored At One Time: 7782-50-5
Annual Quantity String: 570.00
Material Safety Data Sheet: C
1st Hazard Category: Not reported
2nd Hazard Category: XTREMLY HAZRDS-GAS

Chemical Name: AMMONIA GAS:
Item Number: D024
Stored at 1 Time: 450.00
Measurement Units: 0000003600 Storage Method: 1
Carcinogen: Yes Annual Qty String: 0000000450
Quantity Stored At One Time: 7664-41-7
Annual Quantity String: 3600.00
Material Safety Data Sheet: C
1st Hazard Category: Not reported
2nd Hazard Category: XTREMLY HAZRDS-GAS

Chemical Name: BORON TRIFLUORIDE COMPRESSED GAS: EXTREMELY HAZ: TLV GAS
Item Number: D025
Stored at 1 Time: 4.00
Measurement Units: 0000000016 Storage Method: Not reported
Carcinogen: Yes Annual Qty String: 0000000004
Quantity Stored At One Time: 7637-07-2
Annual Quantity String: 16.00
Material Safety Data Sheet: C
1st Hazard Category: Not reported
2nd Hazard Category: SUDDN RLSE OF PRES

Chemical Name: PROPYLENE
Item Number: D026
Stored at 1 Time: 500.00
Measurement Units: 0000001500 Storage Method: Not reported
Carcinogen: Yes Annual Qty String: 0000000500
Quantity Stored At One Time: 115-07-1
Annual Quantity String: 1500.00
Material Safety Data Sheet: C

AIR PRODUCTS AND CHEMICAL (Continued) **S104745513**

1st Hazard Category: Not reported
2nd Hazard Category: FIRE HAZARD

Chemical Name: TETRAFLUOROMETHANE
Item Number: D028
Stored at 1 Time: 450.00
Measurement Units: 0000002700
Storage Method: Not reported
Carcinogen: Yes
Annual Qty String: 0000000450
Quantity Stored At One Time: 75-73-0
Annual Quantity String: 2700.00
Material Safety Data Sheet: C
1st Hazard Category: Not reported
2nd Hazard Category: SUDDN RLSE OF PRES

Chemical Name: HYDROGEN FLUORIDE
Item Number: D030
Stored at 1 Time: 95.00
Measurement Units: 0000000095
Storage Method: Not reported
Carcinogen: Yes
Annual Qty String: 0000000095
Quantity Stored At One Time: 7664-39-3
Annual Quantity String: 95.00
Material Safety Data Sheet: C
1st Hazard Category: Not reported
2nd Hazard Category: REACTIVE

Chemical Name: HYDROGEN CHLORIDE(APPROXIMATELY 120 LBS): TLV GAS
Item Number: D016
Stored at 1 Time: 490.00
Measurement Units: 0000001950
Storage Method: 1
Carcinogen: Yes
Annual Qty String: 0000000490
Quantity Stored At One Time: 7647-01-0
Annual Quantity String: 1950.00
Material Safety Data Sheet: C
1st Hazard Category: Not reported
2nd Hazard Category: XTREMLY HAZRDS-GAS

Chemical Name: METHANE AND METHANE ARGON MIX:
Item Number: D017
Stored at 1 Time: 4600.00
Measurement Units: 0000055200
Storage Method: Not reported
Carcinogen: Yes
Annual Qty String: 0000004600
Quantity Stored At One Time: 74-82-8
Annual Quantity String: 55200.00
Material Safety Data Sheet: C
1st Hazard Category: Not reported
2nd Hazard Category: FIRE HAZARD

Chemical Name: BUTANE
Item Number: D027
Stored at 1 Time: 480.00
Measurement Units: 0000001920
Storage Method: Not reported
Carcinogen: Yes
Annual Qty String: 0000000480
Quantity Stored At One Time: 106-97-8
Annual Quantity String: 1920.00
Material Safety Data Sheet: C
1st Hazard Category: Not reported
2nd Hazard Category: FIRE HAZARD

AIR PRODUCTS AND CHEMICAL (Continued) **S104745513**

Chemical Name: ACETYLENE COMPRESSED GAS:
Item Number: D001
Stored at 1 Time: 35000.00
Measurement Units: 0000420000 Storage Method: Not reported
Carcinogen: Yes Annual Qty String: 0000035000
Quantity Stored At One Time: 74-86-2
Annual Quantity String: 420000.00
Material Safety Data Sheet: C
1st Hazard Category: Not reported
2nd Hazard Category: FIRE HAZARD

Chemical Name: ETHANE
Item Number: D014
Stored at 1 Time: 2400.00
Measurement Units: 0000014400 Storage Method: Not reported
Carcinogen: Yes Annual Qty String: 0000002400
Quantity Stored At One Time: 74-84-0
Annual Quantity String: 14400.00
Material Safety Data Sheet: C
1st Hazard Category: Not reported
2nd Hazard Category: FIRE HAZARD

Chemical Name: SILANE COMPRESSED GAS, TLV GAS
Item Number: D019
Stored at 1 Time: 295.00
Measurement Units: 0000001080 Storage Method: 1
Carcinogen: Yes Annual Qty String: 0000000295
Quantity Stored At One Time: 7803-62-5
Annual Quantity String: 1080.00
Material Safety Data Sheet: C
1st Hazard Category: Not reported
2nd Hazard Category: FIRE HAZARD

Chemical Name: PROPANE : 900 GAL. IN TANK, 300 GAL. IN CYLINDERS
Item Number: D011
Stored at 1 Time: 54714.00
Measurement Units: 0001198707 Storage Method: Not reported
Carcinogen: Yes Annual Qty String: 0000054714
Quantity Stored At One Time: 74-98-6
Annual Quantity String: 1198707.00
Material Safety Data Sheet: A
1st Hazard Category: Not reported
2nd Hazard Category: FIRE HAZARD

Chemical Name: OXYGEN (COMPRESSED GAS AND LIQUID)
Item Number: D010
Stored at 1 Time: 452000.00
Measurement Units: 0003975000 Storage Method: Not reported
Carcinogen: Yes Annual Qty String: 0000452000
Quantity Stored At One Time: 7782-44-7
Annual Quantity String: 3975000.00
Material Safety Data Sheet: A
1st Hazard Category: Not reported
2nd Hazard Category: FIRE HAZARD

Chemical Name: NITROGEN (COMPRESSED GAS & LIQUID 9000 GAL. IN TANK, 100 GAL. IN

AIR PRODUCTS AND CHEMICAL (Continued) **S104745513**

CYLINDERS
Item Number: D009
Stored at 1 Time: 1250.00
Measurement Units: 0000015000 Storage Method: Not reported
Carcinogen: Yes Annual Qty String: 0000001250
Quantity Stored At One Time: 10024-97-2
Annual Quantity String: 15000.00
Material Safety Data Sheet: C
1st Hazard Category: Not reported
2nd Hazard Category: SUDDN RLSE OF PRES

Chemical Name: NITROGEN (COMPRESSED GAS AND LIQUID) 4200 GAL. IN TANK, 100GAL. IN CYLINDE
Item Number: D008
Stored at 1 Time: 750000.00
Measurement Units: 0006276000 Storage Method: Not reported
Carcinogen: Yes Annual Qty String: 0000750000
Quantity Stored At One Time: 7727-37-9
Annual Quantity String: 6276000.00
Material Safety Data Sheet: A
1st Hazard Category: Not reported
2nd Hazard Category: SUDDN RLSE OF PRES

Chemical Name: HYDROGEN; 150,000 C.F. TRAILERTRUCK, 10,000 C.F. CYLINDERS
Item Number: D007
Stored at 1 Time: 15000.00
Measurement Units: 0001477000 Storage Method: Not reported
Carcinogen: Yes Annual Qty String: 0000015000
Quantity Stored At One Time: 1333-74-0
Annual Quantity String: 1477000.00
Material Safety Data Sheet: C
1st Hazard Category: Not reported
2nd Hazard Category: FIRE HAZARD

Chemical Name: HELIUM (COMPRESSED GAS) 150,000 C.F. BULK TRAILER TRUCK, 50,000 C.F. CYL.
Item Number: D006
Stored at 1 Time: 285000.00
Measurement Units: 0002577000 Storage Method: Not reported
Carcinogen: Yes Annual Qty String: 0000285000
Quantity Stored At One Time: 744-59-7
Annual Quantity String: 2577000.00
Material Safety Data Sheet: C
1st Hazard Category: Not reported
2nd Hazard Category: SUDDN RLSE OF PRES

Chemical Name: CARBON DIOXIDE (COMPRESSED GAS & LIQUID) 28,000 #TANK, 5000# CYLINDERS
Item Number: D005
Stored at 1 Time: 33000.00
Measurement Units: 0000281900 Storage Method: Not reported
Carcinogen: Yes Annual Qty String: 0000033000
Quantity Stored At One Time: 124-38-9
Annual Quantity String: 281900.00
Material Safety Data Sheet: A
1st Hazard Category: Not reported
2nd Hazard Category: SUDDN RLSE OF PRES

AIR PRODUCTS AND CHEMICAL (Continued) **S104745513**

Chemical Name: ARGON (COMPRESSED GAS & LIQUID) TANK AND CYLINDERS:
Item Number: D004
Stored at 1 Time: 375000.00
Measurement Units 0003670000 Storage Method: Not reported
Carcinogen: Yes Annual Qty String: 0000375000
Quantity Stored At One Time: 7440-37-1
Annual Quantity String: 3670000.00
Material Safety Data Sheet: A
1st Hazard Category: Not reported
2nd Hazard Category: SUDDN RLSE OF PRES

Chemical Name: AIR, COMPRESSED
Item Number: D002
Stored at 1 Time: 15000.00
Measurement Units 0000180000 Storage Method: Not reported
Carcinogen: Yes Annual Qty String: 0000015000
Quantity Stored At One Time: MIXTURE
Annual Quantity String: 180000.00
Material Safety Data Sheet: C
1st Hazard Category: Not reported
2nd Hazard Category: SUDDN RLSE OF PRES

Chemical Name: ETHYLENE COMPRESSED GAS
Item Number: D015
Stored at 1 Time: 820.00
Measurement Units 0000009840 Storage Method: Not reported
Carcinogen: . Yes Annual Qty String: 0000000820
Quantity Stored At One Time: 74-85-1
Annual Quantity String: 9840.00
Material Safety Data Sheet: C
1st Hazard Category: Not reported
2nd Hazard Category: FIRE HAZARD

HMMD UNDERGROUND TANKS:
Tank Number: T001 Tank ID Number: J-106012
Capacity (Gal): 280.00 Tank Exempt: No
Waste or Product: Waste Tank Contents: WASTE OIL

Tank Number: T002 Tank ID Number: J-106023
Capacity (Gal): 5000.00 Tank Exempt: No
Waste or Product: Product Tank Contents: DIESEL

Tank Number: T003 Tank ID Number: #2
Capacity (Gal): 2000.00 Tank Exempt: No
Waste or Product: Product Tank Contents: DIESEL

HMMD WASTE STREAMS:
Inspection Date: Not reported Waste Item #: Not reported
Waste Code: Not reported Waste Name: Not reported
Qnty at Inspection: Not reported Annual Quantity: Not reported
Measurement Unit: Not reported
Treatment Method: Not reported Storage Method: Not reported
Waste Description: Not reported Haz Waste Hauler: Not reported
Carcinogen: No Annual Qty String: Not reported
Quantity String: Not reported

HMMD VIOLATIONS:
Inspection Date: Not reported Occurrences: Not reported

AIR PRODUCTS AND CHEMICAL (Continued) **S104745513**

Waste Code: Not reported
Type of Violation: Not reported
Violation Description:

HMMD ENVIRONMENTAL ASSESSMENT INFORMATION:
Case Status Date: 02/05/1991 0:00:00
Case Type: TANK, RELEASE
Case Status: CLOSED
Release Occurrence Number: 001
Historical Name: AIR PRODUCTS & CHEMICALS
Date Release Began: 03/23/1990 0:00:00
Lead Agency: DEH

The CA HMMD database may contain additional details for this site.
Please click here or contact your EDR Account Executive for more information.

L43 **SPANJIAN BUILDING** **LUST** **S105692328**
SSE **1050 LOS VALLECITOS BL** **N/A**
1/4-1/2 **SAN MARCOS, CA 92069**
2564 ft.

Site 1 of 2 in cluster L

Relative:
Lower

Actual:
551 ft.

State LUST:

Cross Street:	Not reported		
Qty Leaked:	Not reported		
Case Number	Not reported		
Reg Board:	9		
Chemical:	Chlorinated Hydrocarbons		
Lead Agency:	Local Agency		
Local Agency :	0		
Case Type:	Soil only		
Status:	Remedial action (cleanup) Underway		
Review Date:	Not reported	Confirm Leak:	Not reported
Workplan:	1/3/65	Prelim Assess:	1/3/65
Pollution Char:	Not reported	Remed Plan:	Not reported
Remed Action:	7/10/89		
Monitoring:	Not reported		
Close Date:	Not reported		
Release Date:	Not reported		
Cleanup Fund Id :	Not reported		
Discover Date :	07/10/1989		
Enforcement Dt :	Not reported		
Enf Type:	Not reported		
Enter Date :	/ /		
Funding:	Not reported		
Staff Initials:	UNA		
How Discovered:	Not reported		
How Stopped:	Not reported		
Interim :	Not reported		
Leak Cause:	Not reported		
Leak Source:	Not reported		
MTBE Date :	/ /		
Max MTBE GW :	0 Parts per Billion		
MTBE Tested:	Not Required to be Tested.		
Priority:	1VA		
Local Case # :	H29237-001		
Beneficial:	Not reported		
Staff :	PMP		
GW Qualifier :	Not reported		

SPANJIAN BUILDING (Continued) **S105692328**

Max MTBE Soil : Not reported
Soil Qualifier : Not reported
Hydr Basin #: Not reported
Operator : Not reported
Oversight Prgm: Spills, Leaks, Investigations and Cleanup UST
Oversight Prgm : SLIC
Review Date : Not reported
Stop Date : / /
Work Suspended :Not reported
Responsible PartyNot reported
RP Address: Not reported
Global Id: T0608139106
Org Name: Not reported
Contact Person: Not reported
MTBE Conc: 0
Mtbe Fuel: 0
Water System Name: Not reported
Well Name: Not reported
Distance To Lust: 0
Waste Discharge Global ID: Not reported
Waste Disch Assigned Name: Not reported

L44 **SPANJAIN/ DU FOUR** **CA SLIC** **S105548595**
SSE **1050 LOS VALLECITOS** **N/A**
1/4-1/2 **SAN MARCOS, CA 92069**
2564 ft.

Site 2 of 2 in cluster L

Relative: Lower

Actual: 551 ft.

SLIC Region 9:
Facility Id: Not reported
File Code Number : 20-0020.05
Waste Discharger Id : Not reported
Local Case Number : Not reported
Primary Name : SPANJAIN
Secondary Name : Not reported
Class : SLIC
Facilty Type : Cleanup And Abatement Order
Order Number : Not reported
Category : ENFORCEMENT
File Number : 1
Start Date : 09/1981
End Date : 11/1989
Status : Closed
Archive Box Number : 0
Remarks : Not reported
Archive Box Storage Location : Not reported

Facility Id: Not reported
File Code Number : 20-0020.05
Waste Discharger Id : Not reported
Local Case Number : Not reported
Primary Name : SPANJAIN
Secondary Name : Not reported
Class : SLIC
Facilty Type : Cleanup And Abatement Order
Order Number : Not reported
Category : ENFORCEMENT
File Number : 2
Start Date : 12/1989

SPANJAIN/ DU FOUR (Continued) **S105548595**

End Date : 03/1991
Status : Closed
Archive Box Number : 0
Remarks : Not reported
Archive Box Storage Location : Not reported

Facility Id: Not reported
File Code Number : 20-0020.05
Waste Discharger Id : Not reported
Local Case Number : Not reported
Primary Name : SPANJAIN
Secondary Name : Not reported
Class : SLIC
Facilty Type : Cleanup And Abatement Order
Order Number : 92-82
Category : ENFORCEMENT
File Number : 3
Start Date : 04/1991
End Date : 08/1992
Status : Closed
Archive Box Number : 0
Remarks : Not reported
Archive Box Storage Location : Not reported

Facility Id: Not reported
File Code Number : 20-0020.05
Waste Discharger Id : Not reported
Local Case Number : Not reported
Primary Name : SPANJAIN
Secondary Name : Not reported
Class : SLIC
Facilty Type : Cleanup And Abatement Order
Order Number : 92-82
Category : ENFORCEMENT
File Number : 4
Start Date : 08/1992
End Date : 10/1992
Status : Closed
Archive Box Number : 0
Remarks : Not reported
Archive Box Storage Location : Not reported

Facility Id: Not reported
File Code Number : 20-0020.05
Waste Discharger Id : Not reported
Local Case Number : Not reported
Primary Name : SPANJAIN
Secondary Name : Not reported
Class : SLIC
Facilty Type : Cleanup And Abatement Order
Order Number : 93-22
Category : ENFORCEMENT
File Number : 5
Start Date : 11/1992
End Date : 02/1994
Status : Closed
Archive Box Number : 0

SPANJAIN/ DU FOUR (Continued) **S105548595**

Remarks : Not reported
Archive Box Storage Location : Not reported

Facility Id: Not reported
File Code Number : 20-0020.05
Waste Discharger Id : Not reported
Local Case Number : Not reported
Primary Name : SPANJAIN
Secondary Name : Not reported
Class : SLIC
Facilty Type : Cleanup And Abatement Order
Order Number : 93-22
Category : ENFORCEMENT
File Number : 6
Start Date : 03/1994
End Date : Not reported
Status : Open
Archive Box Number : 0
Remarks : Not reported
Archive Box Storage Location : Not reported

Facility Id: Not reported
File Code Number : 20-0020.051
Waste Discharger Id : Not reported
Local Case Number : Not reported
Primary Name : SPANJAIN
Secondary Name : Not reported
Class : SLIC
Facilty Type : Cleanup And Abatement Order
Order Number : 93-22
Category : ENF. REPORT
File Number : 1
Start Date : 06/1989
End Date : 09/1991
Status : Closed
Archive Box Number : 0
Remarks : Not reported
Archive Box Storage Location : Not reported

Facility Id: Not reported
File Code Number : 20-0020.051
Waste Discharger Id : Not reported
Local Case Number : Not reported
Primary Name : SPANJAIN
Secondary Name : Not reported
Class : SLIC
Facilty Type : Cleanup And Abatement Order
Order Number : 93-22
Category : ENF. REPORT
File Number : 2
Start Date : 10/1991
End Date : Not reported
Status : Open
Archive Box Number : 0
Remarks : Not reported
Archive Box Storage Location : Not reported

SPANJAIN/ DU FOUR (Continued) **S105548595**

45
SSW
1/4-1/2
2634 ft.

MASHBURN SANITATION **LUST** **S101302225**
224 LAS POSAS RD **Cortese** **N/A**
SAN MARCOS, CA 92069

Relative:
Lower

Actual:
541 ft.

LUST Region 9:

Case Number:	9UT1425	Release Date:	01/24/1990
Local Agency:	37000		
Substance:	12035	Qty Leaked:	Not reported
Date Found:	05/18/1989	How Found:	Tank Closure
Date Stopped:	05/18/1989	How Stopped:	Close Tank
Source:	Unknown	Cause:	Unknown
Lead Agency:	Local Agency		
Status:	Case Closed		
Case Type:	Aquifer affected		
Abate Method:	Excavate and Dispose - remove contaminated soil and dispose in approved site		
Confirm Date:	Not reported	Submit Workplan:	Not reported
Prelim Assess:	Not reported	Desc Pollution:	Not reported
Remed Plan:	Not reported	Remed Action:	Not reported
Began Monitor:	2/11/98	Closed Date:	2/11/98
Enforce Type:	Not reported		
Enforce Date:	Not reported		
Pilot Program:	LOP	Local Case:	H10646-001
Basin Number:	904.52	Gwater Depth:	7'
File Dispn:	Not reported		
Interim Remedial Actions:	Yes		
Beneficial Use:	MUN		
Cleanup and Abatement order Number:	Not reported		
Waste Discharge Requirement Number:	Not reported		
NPDES Number:	Not reported		

Case Number:	9UT2285	Release Date:	09/09/1992
Local Agency:	37000		
Substance:	08	Qty Leaked:	Not reported
Date Found:	09/09/1992	How Found:	Tank Closure
Date Stopped:	09/09/1992	How Stopped:	Close Tank
Source:	Tank	Cause:	Unknown
Lead Agency:	Local Agency		
Status:	Case Closed		
Case Type:	Aquifer affected		
Abate Method:	Excavate and Dispose - remove contaminated soil and dispose in approved site		
Confirm Date:	9/23/92	Submit Workplan:	9/23/92
Prelim Assess:	Not reported	Desc Pollution:	Not reported
Remed Plan:	Not reported	Remed Action:	Not reported
Began Monitor:	2/11/98	Closed Date:	2/11/98
Enforce Type:	Not reported		
Enforce Date:	Not reported		
Pilot Program:	LOP	Local Case:	H10646-003
Basin Number:	904.52	Gwater Depth:	7
File Dispn:	Not reported		
Interim Remedial Actions:	Yes		
Beneficial Use:	MUN		
Cleanup and Abatement order Number:	Not reported		
Waste Discharge Requirement Number:	Not reported		
NPDES Number:	Not reported		

MASHBURN SANITATION (Continued) **S101302225**

CORTESE:
Reg Id: 9UT2285
Region: CORTESE
Reg By: Leaking Underground Storage Tanks

Reg Id: 9UT3726
Region: CORTESE
Reg By: Leaking Underground Storage Tanks

M46 **CHMIRS S100217232**
WNW **125 N. RANCHO SANTE FE RD.** **N/A**
1/2-1 **SAN MARCOS, CA 92069**
2714 ft.

Site 1 of 2 in cluster M

Relative: Higher

Actual: 617 ft.

CHMIRS:

OES Control Number:	8906164
Chemical Name:	Not reported
Extent of Release:	Not reported
Property Use:	Mercantile, Business
Incident Date:	11-MAY-89
Date Completed:	11-MAY-89
Time Completed :	1638
Agency Id Number :	37145
Agency Incident Number :	89-1180-1
OES Incident Number :	8906164
Time Notified :	1554
Surrounding Area :	962
Estimated Temperature :	68
Property Management :	P
More Than Two Substances Involved? :	N
Special Studies 1 :	Not reported
Special Studies 2 :	Not reported
Special Studies 3 :	Not reported
Special Studies 4 :	Not reported
Special Studies 5 :	Not reported
Special Studies 6 :	Not reported
Responding Agency Personel # Of Injuries :	0
Responding Agency Personel # Of Fatalities :	0
Resp Agncy Personel # Of Decontaminated :	0
Others Number Of Decontaminated :	0
Others Number Of Injuries :	0
Others Number Of Fatalities :	0
Vehicle Make/year :	Not reported
Vehicle License Number :	Not reported
Vehicle State :	Not reported
Vehicle Id Number :	Not reported
CA/DOT/PUC/ICC Number :	Not reported
Company Name :	Not reported
Reporting Officer Name/ID :	GREG WOOLF / 17
Report Date :	11-MAY-89
Comments :	Not reported
Facility Telephone Number :	619 744-7200
Waterway Involved :	Not reported
Waterway :	Not reported
Spill Site :	Not reported
Cleanup By :	Not reported
Containment :	Not reported

(Continued) **S100217232**

What Happened :	Not reported
Type :	Not reported
Other :	Not reported
Chemical 1 :	Not Reported
Chemical 2 :	Not Reported
Chemical 3 :	Not Reported
Date/Time :	Not reported
Evacuations :	Not reported

M47 **ARCO STATION #6200** **LUST** **S101302234**
WNW **125 RANCHO SANTA FE RD N** **Cortese** **N/A**
1/2-1 **SAN MARCOS, CA 92069** **EMI**
2714 ft.

Site 2 of 2 in cluster M

Relative: Higher

Actual: 617 ft.

LUST Region 9:

Case Number:	9UT2527	Release Date:	06/21/1993
Local Agency:	37000		
Substance:	12031	Qty Leaked:	0
Date Found:	06/21/1993	How Found:	Subsurface Monitoring
Date Stopped:	06/21/1993	How Stopped:	Not reported
Source:	Unknown	Cause:	Unknown
Lead Agency:	Local Agency		
Status:	Preliminary site assessment underway		
Case Type:	Soil only		
Confirm Date:	6/21/93	Submit Workplan:	6/21/93
Prelim Assess:	Not reported	Desc Pollution:	Not reported
Remed Plan:	Not reported	Remed Action:	Not reported
Began Monitor:	Not reported	Closed Date:	Not reported
Enforce Type:	Not reported		
Enforce Date:	Not reported		
Pilot Program:	LOP	Local Case:	H05181-004
Basin Number:	904.52	Gwater Depth:	Not reported
File Dispn:	File discarded, case closed		

Interim Remedial Actions:	No
Beneficial Use:	MUN
Cleanup and Abatement order Number:	Not reported
Waste Discharge Requirement Number:	Not reported
NPDES Number:	Not reported

CORTESE:

Reg Id:	9UT2527
Region:	CORTESE
Reg By:	Leaking Underground Storage Tanks

Reg Id:	9UT1578
Region:	CORTESE
Reg By:	Leaking Underground Storage Tanks

EMISSIONS :

Facility ID :	3844
Air District Code :	SD
SIC Code :	5541
Total Priority Score :	Not reported
Health Risk Assessment :	Not reported
Non-cancer Chronic Haz Index :	Not reported
Non-cancer Acute Haz Index :	Not reported
Air Basin :	SD
Air District Name :	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System :	Not reported

ARCO STATION #6200 (Continued) **S101302234**

Consolidated Emission Reporting Rule :	Not reported
Total Organic Hydrocarbon Gases :	Not reported
Reactive Organic Gases :	Not reported
Carbon Monoxide Emissions :	Not reported
NOX Gas Emissions (Nitrogen - Oxygen) :	Not reported
SOX Gas Emissions (Sulphur - Oxygen) :	Not reported
Facility ID :	3844
Air District Code :	SD
SIC Code :	5541
Total Priority Score :	Not reported
Health Risk Assessment :	Not reported
Non-cancer Chronic Haz Index :	Not reported
Non-cancer Acute Haz Index :	Not reported
Air Basin :	SD
Air District Name :	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System :	Not reported
Consolidated Emission Reporting Rule :	Not reported
Total Organic Hydrocarbon Gases :	2
Reactive Organic Gases :	2
Carbon Monoxide Emissions :	0
NOX Gas Emissions (Nitrogen - Oxygen) :	0
SOX Gas Emissions (Sulphur - Oxygen) :	0

48 CHMIRS **S100275446**
SSE **130 BINGHAM DR** **N/A**
1/2-1 **SAN MARCOS, CA 92069**
2726 ft.

Relative:
Lower

Actual:
554 ft.

CHMIRS:

OES Control Number:	8910801
Chemical Name:	Not reported
Extent of Release:	Not reported
Property Use:	Industrial, Utility
Incident Date:	15-OCT-89
Date Completed:	16-OCT-89
Time Completed :	222
Agency Id Number :	37145
Agency Incident Number :	89-2565-1
OES Incident Number :	8910801
Time Notified :	2307
Surrounding Area :	500
Estimated Temperature :	54
Property Management :	P
More Than Two Substances Involved? :	N
Special Studies 1 :	Not reported
Special Studies 2 :	Not reported
Special Studies 3 :	Not reported
Special Studies 4 :	Not reported
Special Studies 5 :	Not reported
Special Studies 6 :	Not reported
Responding Agency Personel # Of Injuries :	0
Responding Agency Personel # Of Fatalities :	0
Resp Agncy Personel # Of Decontaminated :	0
Others Number Of Decontaminated :	0
Others Number Of Injuries :	11
Others Number Of Fatalities :	0
Vehicle Make/year :	Not reported
Vehicle License Number :	Not reported

(Continued) **S100275446**

Vehicle State :	Not reported
Vehicle Id Number :	Not reported
CA/DOT/PUC/ICC Number :	Not reported
Company Name :	Not reported
Reporting Officer Name/ID :	MICHAEL R. MARKS
Report Date :	18-OCT-89
Comments :	Not reported
Facility Telephone Number :	619 744-7200
Waterway Involved :	Not reported
Waterway :	Not reported
Spill Site :	Not reported
Cleanup By :	Not reported
Containment :	Not reported
What Happened :	Not reported
Type :	Not reported
Other :	Not reported
Chemical 1 :	Not Reported
Chemical 2 :	Not Reported
Chemical 3 :	Not Reported
Date/Time :	Not reported
Evacuations :	Not reported

49 **CANALE FOODS, INC** **HAZNET** **S100275653**
WSW **139 PAWNEE ST** **CHMIRS** **N/A**
1/2-1 **SAN MARCOS, CA 92069**
2729 ft.

Relative:
Lower

Actual:
576 ft.

HAZNET:

Gepaid:	CAL000122914
TSD EPA ID:	CAD028409019
Gen County:	San Diego
Tsd County:	Los Angeles
Tons:	1.0341
Waste Category:	Hydrocarbon solvents (benzene, hexane, Stoddard, etc.)
Disposal Method:	Treatment, Tank
Contact:	CANALE FOODS, INC.
Telephone:	(949) 719-0669
Mailing Address:	170 NEWPORT CENTER DR SUITE 118 NEWPORT BEACH, CA 92660 - 3018
County	San Diego

Gepaid:	CAL000122914
TSD EPA ID:	CAD008252405
Gen County:	San Diego
Tsd County:	Los Angeles
Tons:	0.06
Waste Category:	Liquids with halogenated organic compounds > 1000 mg/l
Disposal Method:	Recycler
Contact:	ALAN C. SPIECKERMAN-FAC DIR
Telephone:	(949) 719-0669
Mailing Address:	3972 BARRANCA PKWY STE J IRVINE, CA 92606 - 8291
County	San Diego

CHMIRS:

OES Control Number:	9010052
Chemical Name:	Not reported
Extent of Release:	Not reported
Property Use:	Storage
Incident Date:	29-JAN-90

CANALE FOODS, INC (Continued) **S100275653**

Date Completed:	29-JAN-90
Time Completed :	1234
Agency Id Number :	37145
Agency Incident Number :	90-0280-1
OES Incident Number :	9010052
Time Notified :	1105
Surrounding Area :	600
Estimated Temperature :	76
Property Management :	P
More Than Two Substances Involved? :	N
Special Studies 1 :	Not reported
Special Studies 2 :	Not reported
Special Studies 3 :	Not reported
Special Studies 4 :	Not reported
Special Studies 5 :	Not reported
Special Studies 6 :	Not reported
Responding Agency Personel # Of Injuries :	0
Responding Agency Personel # Of Fatalities :	0
Resp Agncy Personel # Of Decontaminated :	0
Others Number Of Decontaminated :	0
Others Number Of Injuries :	1
Others Number Of Fatalities :	0
Vehicle Make/year :	FORD
Vehicle License Number :	2DQD946
Vehicle State :	CA
Vehicle Id Number :	Not reported
CA/DOT/PUC/ICC Number :	Not reported
Company Name :	ARROW POWERWASH
Reporting Officer Name/ID :	LARRY BRYSON
Report Date :	29-JAN-90
Comments :	Not reported
Facility Telephone Number :	619 744-7200
Waterway Involved :	Not reported
Waterway :	Not reported
Spill Site :	Not reported
Cleanup By :	Not reported
Containment :	Not reported
What Happened :	Not reported
Type :	Not reported
Other :	Not reported
Chemical 1 :	Not Reported
Chemical 2 :	Not Reported
Chemical 3 :	Not Reported
Date/Time :	Not reported
Evacuations :	Not reported

50
South
1/2-1
2799 ft.

CLARENCE OCHS, INC.
145 VIA VERA CRUZ
SAN MARCOS, CA

Cortese **S100852026**
N/A

Relative:
Lower

Actual:
541 ft.

CORTESE:
Reg Id: 9UT3651
Region: CORTESE
Reg By: Leaking Underground Storage Tanks

CLARENCE OCHS, INC. (Continued) **S100852026**

N51
West
1/2-1
2957 ft.

SAN DIEGO CO DPW DIV II **HAZNET** **1000110719**
1600 DESCANSO AVE **Cortese** **N/A**
SAN MARCOS, CA 92069

Site 1 of 4 in cluster N

Relative:
Equal

Actual:
583 ft.

HAZNET:

Gepaid:	CAD981454465
TSD EPA ID:	AZD049318009
Gen County:	San Diego
Tsd County:	99
Tons:	.2293
Waste Category:	Unspecified solvent mixture Waste
Disposal Method:	Transfer Station
Contact:	COUNTY/SAN DIEGO/DEPT/PUBLIC W
Telephone:	(619) 694-2233
Mailing Address:	5555 OVERLAND AVE STE MS_0-334
	SAN DIEGO, CA 92123 - 1219
County	San Diego

Gepaid:	CAD981454465
TSD EPA ID:	CAD028409019
Gen County:	San Diego
Tsd County:	Los Angeles
Tons:	.0275
Waste Category:	Other organic solids
Disposal Method:	Transfer Station
Contact:	COUNTY/SAN DIEGO/DEPT/PUBLIC W
Telephone:	(619) 694-2233
Mailing Address:	5555 OVERLAND AVE STE MS_0-334
	SAN DIEGO, CA 92123 - 1219
County	San Diego

Gepaid:	CAD981454465
TSD EPA ID:	CAT080013352
Gen County:	San Diego
Tsd County:	Los Angeles
Tons:	.4170
Waste Category:	Aqueous solution with 10% or more total organic residues
Disposal Method:	Recycler
Contact:	COUNTY/SAN DIEGO/DEPT/PUBLIC W
Telephone:	(619) 694-2233
Mailing Address:	5555 OVERLAND AVE STE MS_0-334
	SAN DIEGO, CA 92123 - 1219
County	San Diego

Gepaid:	CAD981454465
TSD EPA ID:	CAD980883177
Gen County:	San Diego
Tsd County:	Kern
Tons:	5.0040
Waste Category:	Unspecified oil-containing waste
Disposal Method:	Recycler
Contact:	COUNTY/SAN DIEGO/DEPT/PUBLIC W
Telephone:	(619) 694-2233
Mailing Address:	5555 OVERLAND AVE STE MS_0-334
	SAN DIEGO, CA 92123 - 1219
County	San Diego

SAN DIEGO CO DPW DIV II (Continued) **1000110719**

Gepaid: CAD981454465
TSD EPA ID: CAT080033681
Gen County: San Diego
Tsd County: Los Angeles
Tons: 5.4500
Waste Category: Other organic solids
Disposal Method: Disposal, Land Fill
Contact: COUNTY/SAN DIEGO/DEPT/PUBLIC W
Telephone: (619) 694-2233
Mailing Address: 5555 OVERLAND AVE STE MS_0-334
SAN DIEGO, CA 92123 - 1219
County San Diego

The CA HAZNET database contains 13 additional records for this site.
Please click here or contact your EDR Account Executive for more information.

CORTESE:
Reg Id: 9UT3514
Region: CORTESE
Reg By: Leaking Underground Storage Tanks

Reg Id: 9UT3937
Region: CORTESE
Reg By: Leaking Underground Storage Tanks

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52 **FRITO LAY, INC.** **LUST** **S100731725**
SW **235 PACIFIC ST S** **Cortese** **N/A**
1/2-1 **SAN MARCOS, CA 92069** **San Diego Co. HMMD**
2958 ft.

Relative: Lower

Actual: 557 ft.

LUST Region 9:

Case Number:	9UT2193	Release Date:	12/11/1991
Local Agency:	37000		
Substance:	8006619	Qty Leaked:	Not reported
Date Found:	12/11/1991	How Found:	Other Means
Date Stopped:	12/11/1991	How Stopped:	Other Means
Source:	Unknown	Cause:	Unknown
Lead Agency:	Local Agency		
Status:	Case Closed		
Case Type:	Other ground water affected		
Abate Method:	Excavate and Dispose - remove contaminated soil and dispose in approved site		
Confirm Date:	12/17/91	Submit Workplan:	12/17/91
Prelim Assess:	Not reported	Desc Pollution:	Not reported
Remed Plan:	Not reported	Remed Action:	Not reported
Began Monitor:	5/14/92	Closed Date:	5/14/92
Enforce Type:	Not reported		
Enforce Date:	Not reported		
Pilot Program:	LOP	Local Case:	H20791-001
Basin Number:	904.52	Gwater Depth:	~12
File Dispn:	File discarded, case closed		

Interim Remedial Actions: No
Beneficial Use: MUN
Cleanup and Abatement order Number: Not reported
Waste Discharge Requirement Number: Not reported
NPDES Number: Not reported

CORTESE:
Reg Id: 9UT2193

FRITO LAY, INC. (Continued) **S100731725**

Region: CORTESE
Reg By: Leaking Underground Storage Tanks

HMMD:

Facility ID:	H20791		
Inactive Indicator:	Active	Business Code:	Not reported
SIC:	2099	Permit Expiration:	00/00
Owner:	FRITO LAY INC	2nd Name:	Not reported
Mailing Address:	SAN MARCOS		
	CA		
	92069, 2429		
Corporate Code:	97	Fire Dept District:	SAN MARCOS FPD
Census Tract #:	00000	EPA ID:	Not reported
Inspection Date:	11/16/1990 0:00:00	Reinspection Date:	11/91
Inspector Name:	AVASTU	Gas Station:	Not reported
Facility Contact:	RON HOAK/DAVE MYERS	Delinquent Flag:	Not Delinquent
Property Owner:	FRITO LAY INC		
PO Address:	SAN MARCOS		
	CA		
	92069		
Tank Owner:	FRITO LAY INC		
TO Address:	SAN MARCOS		
	CA		
	92069		
Last Update:	11/21/1999 0:00:00		
Last Delinquent Letter:		Not reported	
Last Letter Type:		Not reported	
Violation Notice Issued:		Not reported	
Map Code/Business Plan on File:		Not reported	
Business Plan Acceptance Date:		01/31/92	
Reinspection Date Y2K Compatible:		Nov 1991	

HMMD DISCLOSURE INVENTORY:

Chemical Name:	Not reported		
Item Number:	Not reported		
Stored at 1 Time:	Not reported		
Measurement Units:	Not reported	Storage Method:	Not reported
Carcinogen:	No	Annual Qty String:	Not reported
Quantity Stored At One Time:		Not reported	
Annual Quantity String:		Not reported	
Material Safety Data Sheet:		Not reported	
1st Hazard Category:		Not reported	
2nd Hazard Category:		Not reported	

HMMD UNDERGROUND TANKS:

Tank Number:	T001	Tank ID Number:	1
Capacity (Gal):	10000.00	Tank Exempt:	No
Waste or Product:	Product	Tank Contents:	DIESEL

HMMD WASTE STREAMS:

Inspection Date:	Not reported	Waste Item #:	Not reported
Waste Code:	Not reported	Waste Name:	Not reported
Qnty at Inspection:	Not reported	Annual Quantity:	Not reported
Measurement Unit:	Not reported		
Treatment Method:	Not reported	Storage Method:	Not reported
Waste Description:	Not reported	Haz Waste Hauler:	Not reported
Carcinogen:	No	Annual Qty String:	Not reported
Quantity String:		Not reported	

FRITO LAY, INC. (Continued) **S100731725**

HMMD VIOLATIONS:
Inspection Date: 10/11/1989 0:00:00 Occurrences: 01
Waste Code: Not reported
Type of Violation: GENERAL VIOLATION
Violation Description: HAZARDOUS MATERIALS HANDLER HAS NOT ESTABLISHED/iMPLEMENTED A BUSINESS PLAN HSC 25503.5

Inspection Date: 11/16/1990 0:00:00 Occurrences: 01
Waste Code: Not reported
Type of Violation: GENERAL VIOLATION
Violation Description: OWNER/OPERATOR HAS NOT PROVIDED STATISTICAL INVENTORY RECONCILIATION CONTRACTOR OR THE LOCAL ENFORCEMENT AGENCY WITH ADEQUATE DATA RECORDS.

Inspection Date: 11/16/1990 0:00:00 Occurrences: 01
Waste Code: Not reported
Type of Violation: GENERAL VIOLATION
Violation Description: PERSONNEL TRAINING IS NOT ADEQUATE TO ENSURE COMPLIANCE WITH HAZARDOUS WASTES/MATERIALS REGULATIONS CCR 66265.16

Inspection Date: 11/16/1990 0:00:00 Occurrences: 01
Waste Code: Not reported
Type of Violation: GENERAL VIOLATION
Violation Description: SPILL CONTROL EQUIPMENT IS NOT AVAILABLE AND/OR NOT MAINTAINED CCR 66265.32

Inspection Date: 10/11/1989 0:00:00 Occurrences: 01
Waste Code: Not reported
Type of Violation: GENERAL VIOLATION
Violation Description: UNDERGROUND STORAGE TANK MONITORING/MAINTENANCE/CALIBRATION RECORDS ARE NOT MAINTAINED ON SITE. HSC 25293; CCR 2712(B), 2641(I)

HMMD ENVIRONMENTAL ASSESSMENT INFORMATION:
Case Status Date: 05/28/1992 0:00:00
Case Type: TANK, RELEASE
Case Status: CLOSED
Release Occurrence Number: 001
Historical Name: FRITO LAY, INC
Date Release Began: 12/11/1991 0:00:00
Lead Agency: DEH

The CA HMMD database may contain additional details for this site.
Please click here or contact your EDR Account Executive for more information.

N53 **TEXACO** **LUST** **S105033893**
West **105 RANCHO SANTA FE RD** **Cortese** **N/A**
1/2-1 **SAN MARCOS, CA 92069** **San Diego Co. HMMD**
2976 ft. **EMI**

Site 2 of 4 in cluster N

Relative:
Equal

Actual:
583 ft.

CORTESE:
Reg Id: 9UT535
Region: CORTESE
Reg By: Leaking Underground Storage Tanks

HMMD:

TEXACO (Continued) **S105033893**

Facility ID:	H05804		
Inactive Indicator:	Active	Business Code:	FUEL-DISPENSE NO REPAIR
SIC:	5541	Permit Expiration:	07/31
Owner:	EQUILON ENTERPRISES LLC	2nd Name:	PERMIT COORDINATOR
Mailing Address:	PHOENIX		
	AZ		
	85018		
Corporate Code:	18	Fire Dept District:	SAN MARCOS FPD
Census Tract #:	20009	EPA ID:	CAL000032882
Inspection Date:	03/01/2001 0:00:00	Reinspection Date:	03/02
Inspector Name:	MONNIER	Gas Station:	Not reported
Facility Contact:	SHAWN HINDI	Delinquent Flag:	Not Delinquent
Property Owner:	EQUILON ENTERPRISES LLC		
PO Address:	HOUSTON		
	TX		
	77210		
Tank Owner:	EQUILON ENTERPRISES LLC		
TO Address:	HOUSTON		
	TX		
	77210		
Last Update:	07/29/2001 0:00:00		
Last Delinquent Letter:	09/06/1997 0:00:00		
Last Letter Type:	30		
Violation Notice Issued:	Not reported		
Map Code/Business Plan on File:	Not reported		
Business Plan Acceptance Date:	05/12/99		
Reinspection Date Y2K Compatible:	Mar 2002		

HMMD DISCLOSURE INVENTORY:

Chemical Name:	PROPANE COMRESSED GAS		
Item Number:	D001		
Stored at 1 Time:	500.00		
Measurement Units	0000005000	Storage Method:	Not reported
Carcinogen:	Yes	Annual Qty String:	0000000500
Quantity Stored At One Time:	74-98-6		
Annual Quantity String:	5000.00		
Material Safety Data Sheet:	A		
1st Hazard Category:	Not reported		
2nd Hazard Category:	FIRE HAZARD		

HMMD UNDERGROUND TANKS:

Tank Number:	T001	Tank ID Number:	1
Capacity (Gal):	550.00	Tank Exempt:	No
Waste or Product:	Waste	Tank Contents:	WASTE OIL
Tank Number:	T002	Tank ID Number:	RT1244
Capacity (Gal):	10000.00	Tank Exempt:	No
Waste or Product:	Product	Tank Contents:	PLUS UNLEADED
Tank Number:	T003	Tank ID Number:	RT1244
Capacity (Gal):	10000.00	Tank Exempt:	No
Waste or Product:	Product	Tank Contents:	REGULAR UNLEADED
Tank Number:	T004	Tank ID Number:	RT1244
Capacity (Gal):	10000.00	Tank Exempt:	No
Waste or Product:	Product	Tank Contents:	SUPER UNLEADED
Tank Number:	T005	Tank ID Number:	RT1244

TEXACO (Continued) **S105033893**

Capacity (Gal): 10000.00 Tank Exempt: No
Waste or Product: Product Tank Contents: DIESEL

Tank Number: T006 Tank ID Number: 001
Capacity (Gal): 550.00 Tank Exempt: No
Waste or Product: Waste Tank Contents: WASTE OIL

HMMD WASTE STREAMS:
Inspection Date: 03/01/2001 0:00:00 Waste Item #: W001
Waste Code: 352.00 Waste Name: ORGANIC SOLIDS (OTHER)
Qnty at Inspection: 10.00 Annual Quantity: 10.00
Measurement Unit: LBS
Treatment Method: RECYCLE Storage Method: METAL DRUMS 6-110 GALLONS
Waste Description: USED OIL FILTERS Haz Waste Hauler: UNKNOWN HAZ WST HAULER
Carcinogen: No Annual Qty String: 0000000010
Quantity String: 0000000010

HMMD VIOLATIONS:
Inspection Date: 05/19/1999 0:00:00 Occurrences: 01
Waste Code: Not reported
Type of Violation: GENERAL VIOLATION
Violation Description: DOCUMENTATION SHOWING EVIDENCE OF FINANCIAL RESPONSIBILITY IS NOT AVAILABLE.
HSC 25292.2

Inspection Date: 03/01/2001 0:00:00 Occurrences: 03
Waste Code: Not reported
Type of Violation: GENERAL VIOLATION
Violation Description: DOCUMENTATION SHOWING EVIDENCE OF FINANCIAL RESPONSIBILITY IS NOT AVAILABLE.
HSC 25292.2

Inspection Date: 03/01/2001 0:00:00 Occurrences: 02
Waste Code: Not reported
Type of Violation: GENERAL VIOLATION
Violation Description: OPERATOR OF THE UNDERGROUND STORAGE TANK HAS NOT ENTERED INTO A WRITTEN CONTRACT WITH TANK OWNER AND NOTIFIED THE HMMD
HSC 25293(B)

Inspection Date: 07/25/2000 0:00:00 Occurrences: 02
Waste Code: Not reported
Type of Violation: GENERAL VIOLATION
Violation Description: DOCUMENTATION SHOWING EVIDENCE OF FINANCIAL RESPONSIBILITY IS NOT AVAILABLE.
HSC 25292.2

Inspection Date: 07/25/2000 0:00:00 Occurrences: 01
Waste Code: Not reported
Type of Violation: GENERAL VIOLATION
Violation Description: OPERATOR OF THE UNDERGROUND STORAGE TANK HAS NOT ENTERED INTO A WRITTEN CONTRACT WITH TANK OWNER AND NOTIFIED THE HMMD
HSC 25293(B)

Inspection Date: 05/19/1999 0:00:00 Occurrences: 01
Waste Code: Not reported
Type of Violation: GENERAL VIOLATION
Violation Description: UNDERGROUND STORAGE TANK MONITORING/MAINTENANCE/CALIBRATION RECORDS ARE NOT MAINTAINED ON SITE. HSC 25293; CCR

TEXACO (Continued) **S105033893**

2712(B), 2641(I)

Inspection Date: 05/19/1999 0:00:00 Occurrences: 01
Waste Code: Not reported
Type of Violation: GENERAL VIOLATION
Violation Description: OWNER/OPERATOR HAS NOT TESTED THE PRESSURIZED PRODUCT LINE LEAK DETECTION DEVICE ANNUALLY AS REQUIRED. HSC 25292(B) (4) (C)

HMMD ENVIRONMENTAL ASSESSMENT INFORMATION:
Case Status Date: 08/25/1988 0:00:00
Case Type: TANK, RELEASE (W)
Case Status: CLOSED
Release Occurrence Number: 001
Historical Name: TEXACO/RANCHO SANTA FE 105
Date Release Began: 01/14/1987 0:00:00
Lead Agency: DEH

Case Status Date: 07/14/1988 0:00:00
Case Type: TANK, RELEASE (W)
Case Status: OPEN
Release Occurrence Number: 002
Historical Name: TEXACO/RANCHO SANTA FE 105
Date Release Began: 07/14/1988 0:00:00
Lead Agency: DEH

The CA HMMD database may contain additional details for this site.
Please click here or contact your EDR Account Executive for more information.

EMISSIONS :

Facility ID :	4652
Air District Code :	SD
SIC Code :	5541
Total Priority Score :	Not reported
Health Risk Assessment :	Not reported
Non-cancer Chronic Haz Index :	Not reported
Non-cancer Acute Haz Index :	Not reported
Air Basin :	SD
Air District Name :	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System :	Not reported
Consolidated Emission Reporting Rule :	Not reported
Total Organic Hydrocarbon Gases :	2
Reactive Organic Gases :	2
Carbon Monoxide Emissions :	0
NOX Gas Emissions (Nitrogen - Oxygen) :	0
SOX Gas Emissions (Sulphur - Oxygen) :	0

Facility ID :	4652
Air District Code :	SD
SIC Code :	5541
Total Priority Score :	Not reported
Health Risk Assessment :	Not reported
Non-cancer Chronic Haz Index :	Not reported
Non-cancer Acute Haz Index :	Not reported
Air Basin :	SD
Air District Name :	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System :	Not reported
Consolidated Emission Reporting Rule :	Not reported

TEXACO (Continued) **S105033893**

Total Organic Hydrocarbon Gases : Not reported
Reactive Organic Gases : Not reported
Carbon Monoxide Emissions : Not reported
NOX Gas Emissions (Nitrogen - Oxygen) : Not reported
SOX Gas Emissions (Sulphur - Oxygen) : Not reported

N54 West 1/2-1 2976 ft.

TEXACO **Cortese S105026350**
105 RANCHO SANTA FE RD **N/A**
SAN MARCOS, CA 92069

Site 3 of 4 in cluster N

Relative: Equal

Actual: 583 ft.

CORTESE:
Reg Id: 9UT2562
Region: CORTESE
Reg By: Leaking Underground Storage Tanks

N55 West 1/2-1 3005 ft.

CHEVRON SERVICE STATION#9-3496 **LUST Cortese EMI S100233170 N/A**
110 RANCHO SANTA FE RD
SAN MARCOS, CA 92069

Site 4 of 4 in cluster N

Relative: Equal

Actual: 583 ft.

LUST Region 9:
Case Number: 9UT878
Local Agency: 37000
Substance: 8006619
Date Found: 12/31/1987
Date Stopped: 01/08/1988
Source: Unknown
Lead Agency: Local Agency
Status: Remediation Plan
Case Type: Other ground water affected
Confirm Date: Not reported
Prelim Assess: Not reported
Remed Plan: Not reported
Began Monitor: Not reported
Enforce Type: Not reported
Enforce Date: Not reported
Pilot Program: LOP
Basin Number: 904.52
File Dispn: File discarded, case closed
Interim Remedial Actions: Yes
Beneficial Use: MUN
Cleanup and Abatement order Number: Not reported
Waste Discharge Requirement Number: Not reported
NPDES Number: Not reported

Release Date: 01/08/1988
Qty Leaked: Not reported
How Found: Subsurface Monitoring
How Stopped: Close Tank
Cause: Unknown
Submit Workplan: Not reported
Desc Pollution: Not reported
Remed Action: Not reported
Closed Date: Not reported
Local Case: H13261-001
Gwater Depth: 6.7'

CORTESE:
Reg Id: 9UT878
Region: CORTESE
Reg By: Leaking Underground Storage Tanks

EMISSIONS :
Facility ID : 4496
Air District Code : SD
SIC Code : 5541
Total Priority Score : Not reported
Health Risk Assessment : Not reported

CHEVRON SERVICE STATION#9-3496 (Continued) **S100233170**

Non-cancer Chronic Haz Index :	Not reported
Non-cancer Acute Haz Index :	Not reported
Air Basin :	SD
Air District Name :	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System :	Not reported
Consolidated Emission Reporting Rule :	Not reported
Total Organic Hydrocarbon Gases :	Not reported
Reactive Organic Gases :	Not reported
Carbon Monoxide Emissions :	Not reported
NOX Gas Emissions (Nitrogen - Oxygen) :	Not reported
SOX Gas Emissions (Sulphur - Oxygen) :	Not reported

Facility ID :	4496
Air District Code :	SD
SIC Code :	5541
Total Priority Score :	Not reported
Health Risk Assessment :	Not reported
Non-cancer Chronic Haz Index :	Not reported
Non-cancer Acute Haz Index :	Not reported
Air Basin :	SD
Air District Name :	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System :	Not reported
Consolidated Emission Reporting Rule :	Not reported
Total Organic Hydrocarbon Gases :	4
Reactive Organic Gases :	4
Carbon Monoxide Emissions :	0
NOX Gas Emissions (Nitrogen - Oxygen) :	0
SOX Gas Emissions (Sulphur - Oxygen) :	0

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56 **6-2-6 EQUIPMENT RENTALS** **LUST** **S102423466**
South **175 VIA VERA CRUZ** **Cortese** **N/A**
1/2-1 **SAN MARCOS, CA 92069**
3018 ft.

Relative:
Lower

Actual:
540 ft.

State LUST:

Cross Street:	Not reported		
Qty Leaked:	Not reported		
Case Number	9UT681		
Reg Board:	9		
Chemical:	Regular Gasoline		
Lead Agency:	Local Agency		
Local Agency :	0		
Case Type:	Soil only		
Status:	Case Closed		
Review Date:	Not reported	Confirm Leak:	Not reported
Workplan:	2/24/87	Prelim Assess:	2/24/87
Pollution Char:	Not reported	Remed Plan:	Not reported
Remed Action:	3/14/87		
Monitoring:	Not reported		
Close Date:	10/23/1989		
Release Date:	Not reported		
Cleanup Fund Id :	Not reported		
Discover Date :	02/24/1987		
Enforcement Dt :	Not reported		
Enf Type:	Not reported		
Enter Date :	/ /		
Funding:	Not reported		
Staff Initials:	PSU		
How Discovered:	Not reported		

6-2-6 EQUIPMENT RENTALS (Continued) **S102423466**

How Stopped: Not reported
Interim : Not reported
Leak Cause: Not reported
Leak Source: Not reported
MTBE Date : / /
Max MTBE GW : 0 Parts per Billion
MTBE Tested: Site NOT Tested for MTBE.Includes Unknown and Not Analyzed.
Priority: Low priority. Priority ranking can change over time.
Local Case # : H02554-001
Beneficial: Not reported
Staff : UNK
GW Qualifier : Not reported
Max MTBE Soil : Not reported
Soil Qualifier : Not reported
Hydr Basin #: Not reported
Operator : Not reported
Oversight Prgm: Local Oversight Program UST
Oversight Prgm : LOP
Review Date : Not reported
Stop Date : / /
Work Suspended :Not reported
Responsible PartyNot reported
RP Address: Not reported
Global Id: T0607302950
Org Name: Not reported
Contact Person: Not reported
MTBE Conc: 0
Mtbe Fuel: 1
Water System Name: Not reported
Well Name: Not reported
Distance To Lust: 0
Waste Discharge Global ID: Not reported
Waste Disch Assigned Name: Not reported

6-2-6 EQUIPMENT RENTALS (Continued) **S102423466**

LUST Region 9:

Case Number:	9UT681	Release Date:	02/23/1987
Local Agency:	37000		
Substance:	8006619	Qty Leaked:	0
Date Found:	02/17/1987	How Found:	Tank Closure
Date Stopped:	02/24/1987	How Stopped:	Close Tank
Source:	Other Source	Cause:	Other Cause
Lead Agency:	Local Agency		
Status:	Case Closed		
Case Type:	Soil only		
Abate Method:	Excavate and Dispose - remove contaminated soil and dispose in approved site		
Confirm Date:	Not reported	Submit Workplan:	Not reported
Prelim Assess:	Not reported	Desc Pollution:	Not reported
Remed Plan:	Not reported	Remed Action:	Not reported
Began Monitor:	10/23/89	Closed Date:	10/23/89
Enforce Type:	Not reported		
Enforce Date:	Not reported		
Pilot Program:	LOP	Local Case:	H02554-001
Basin Number:	904.52	Gwater Depth:	Not reported
File Dispn:	File discarded, case closed		

Interim Remedial Actions:	Yes
Beneficial Use:	MUN
Cleanup and Abatement order Number:	Not reported
Waste Discharge Requirement Number:	Not reported
NPDES Number:	Not reported

CORTESE:

Reg Id:	9UT681
Region:	CORTESE
Reg By:	Leaking Underground Storage Tanks

Reg Id:	9UT2954
Region:	CORTESE
Reg By:	Leaking Underground Storage Tanks

57
SE
1/2-1
3253 ft.

Relative:
Lower

Actual:
560 ft.

VALLECITOS DE ORO @ ARMORLITE **CHMIRS** **S100276717**
SAN MARCOS, CA 92069 **N/A**

CHMIRS:

OES Control Number:	9100345
Chemical Name:	Not reported
Extent of Release:	Not reported
Property Use:	Vacant Lot
Incident Date:	20-APR-91
Date Completed:	20-APR-91
Time Completed :	0
Agency Id Number :	37145
Agency Incident Number :	91-3
OES Incident Number :	9100345
Time Notified :	1245
Surrounding Area :	400
Estimated Temperature :	70
Property Management :	P
More Than Two Substances Involved? :	Y
Special Studies 1 :	Not reported
Special Studies 2 :	Not reported

(Continued) **S100276717**

Special Studies 3 :	Not reported
Special Studies 4 :	Not reported
Special Studies 5 :	Not reported
Special Studies 6 :	Not reported
Responding Agency Personel # Of Injuries :	0
Responding Agency Personel # Of Fatalities :	0
Resp Agncy Personel # Of Decontaminated :	0
Others Number Of Decontaminated :	0
Others Number Of Injuries :	0
Others Number Of Fatalities :	0
Vehicle Make/year :	Not reported
Vehicle License Number :	Not reported
Vehicle State :	Not reported
Vehicle Id Number :	Not reported
CA/DOT/PUC/ICC Number :	Not reported
Company Name :	Not reported
Reporting Officer Name/ID :	THOMAS DOOLONG
Report Date :	20-APR-91
Comments :	Yes
Facility Telephone Number :	619 744-7200
Waterway Involved :	Not reported
Waterway :	Not reported
Spill Site :	Not reported
Cleanup By :	Not reported
Containment :	Not reported
What Happened :	Not reported
Type :	Not reported
Other :	Not reported
Chemical 1 :	Not Reported
Chemical 2 :	Not Reported
Chemical 3 :	Not Reported
Date/Time :	Not reported
Evacuations :	Not reported

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58 **AMERICAN FENCE AND SECURITY CO INC** **HAZNET** **S103621956**
SSE **1075 GRAND** **Cortese** **N/A**
1/2-1 **SAN MARCOS, CA 92069**
3324 ft.

Relative:
Lower

Actual:
547 ft.

HAZNET:

Gepaid:	CAL000159312
TSD EPA ID:	CAT080013352
Gen County:	San Diego
Tsd County:	Los Angeles
Tons:	.2293
Waste Category:	Unspecified aqueous solution
Disposal Method:	Recycler
Contact:	DAVID VANDENBURGH FAMILY
Telephone:	(760) 744-4124
Mailing Address:	1075 GRAND AVE
	SAN MARCOS, CA 92069 - 2602
County	San Diego

AMERICAN FENCE AND SECURITY CO INC (Continued) **S103621956**

Gepaid: CAL000159312
TSD EPA ID: CAT080013352
Gen County: San Diego
Tsd County: Los Angeles
Tons: 0.1251
Waste Category: Unspecified oil-containing waste
Disposal Method: Recycler
Contact: DAVID VANDENBURGH FAMILY
Telephone: (760) 744-4124
Mailing Address: 1075 GRAND AVE
SAN MARCOS, CA 92069 - 2602
County San Diego

CORTESE:
Reg Id: 9UT1109
Region: CORTESE
Reg By: Leaking Underground Storage Tanks

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59 **CHMIRS** **S100221630**
WSW **255 PAWNEE STREET** **N/A**
1/2-1 **SAN MARCOS, CA 92069**
3617 ft.

Relative:
Lower

Actual:
573 ft.

CHMIRS:

OES Control Number:	9099617
Chemical Name:	Not reported
Extent of Release:	Not reported
Property Use:	Mercantile, Business
Incident Date:	12-OCT-90
Date Completed:	12-OCT-90
Time Completed :	1815
Agency Id Number :	37145
Agency Incident Number :	17930
OES Incident Number :	9099617
Time Notified :	955
Surrounding Area :	Not reported
Estimated Temperature :	78
Property Management :	P
More Than Two Substances Involved? :	N
Special Studies 1 :	Not reported
Special Studies 2 :	Not reported
Special Studies 3 :	Not reported
Special Studies 4 :	Not reported
Special Studies 5 :	Not reported
Special Studies 6 :	Not reported
Responding Agency Personel # Of Injuries :	0
Responding Agency Personel # Of Fatalities :	0
Resp Agncy Personel # Of Decontaminated :	0
Others Number Of Decontaminated :	0
Others Number Of Injuries :	0
Others Number Of Fatalities :	0
Vehicle Make/year :	INTERNATIONAL 85
Vehicle License Number :	3M83372
Vehicle State :	CA
Vehicle Id Number :	Not reported
CA/DOT/PUC/ICC Number :	Not reported
Company Name :	NC TRUCKING
Reporting Officer Name/ID :	MICHAEL R. MARKS CAPT. SAN MARCOS F.D
Report Date :	12-OCT-90

(Continued) **S100221630**

Comments :	Yes
Facility Telephone Number :	619 744-7200
Waterway Involved :	Not reported
Waterway :	Not reported
Spill Site :	Not reported
Cleanup By :	Not reported
Containment :	Not reported
What Happened :	Not reported
Type :	Not reported
Other :	Not reported
Chemical 1 :	Not Reported
Chemical 2 :	Not Reported
Chemical 3 :	Not Reported
Date/Time :	Not reported
Evacuations :	Not reported

60 **MORALLY WHOLESALE** **LUST S101302227**
SSE **975 LINDA VISTA DR** **Cortese N/A**
1/2-1 **SAN MARCOS, CA 92069** **San Diego Co. HMMD**
3762 ft.

Relative:
Lower

Actual:
544 ft.

LUST Region 9:

Case Number:	9UT1999	Release Date:	06/05/1991
Local Agency:	37000		
Substance:	8006619	Qty Leaked:	Not reported
Date Found:	06/05/1991	How Found:	Other Means
Date Stopped:	06/05/1991	How Stopped:	Other Means
Source:	Unknown	Cause:	Unknown
Lead Agency:	Local Agency		
Status:	Case Closed		
Case Type:	Aquifer affected		
Abate Method:	Excavate and Treat - remove contaminated soil and treat (includes spreading or land farming)		
Confirm Date:	6/21/91	Submit Workplan:	6/21/91
Prelim Assess:	Not reported	Desc Pollution:	Not reported
Remed Plan:	Not reported	Remed Action:	Not reported
Began Monitor:	2/28/97	Closed Date:	2/28/97
Enforce Type:	Not reported		
Enforce Date:	Not reported		
Pilot Program:	LOP	Local Case:	H22855-001
Basin Number:	904.52	Gwater Depth:	6'
File Dispn:	File discarded, case closed		

Interim Remedial Actions:	Yes
Beneficial Use:	MUN
Cleanup and Abatement order Number:	Not reported
Waste Discharge Requirement Number:	Not reported
NPDES Number:	Not reported

CORTESE:

Reg Id:	9UT1999
Region:	CORTESE
Reg By:	Leaking Underground Storage Tanks

HMMD:

Facility ID:	H22855		
Inactive Indicator:	Active	Business Code:	Not reported
SIC:	5074	Permit Expiration:	00/00
Owner:	JOHN MORALLY	2nd Name:	Not reported
Mailing Address:	SAN MARCOS		
	CA		

MORALLY WHOLESALE (Continued) **S101302227**

92069, 2611
Corporate Code: 18
Census Tract #: 20009
Inspection Date: Not reported
Inspector Name: Not reported
Facility Contact: JOHN MORALLY
Property Owner: Not reported
PO Address: Not reported
Tank Owner: Not reported
TO Address: Not reported
Last Update: 04/24/1998 0:00:00
Fire Dept District: SAN MARCOS FPD
EPA ID: Not reported
Reinspection Date: Not reported
Gas Station: Not reported
Delinquent Flag: Not Delinquent
Last Delinquent Letter: Not reported
Last Letter Type: Not reported
Violation Notice Issued: Not reported
Map Code/Business Plan on File: Not reported
Business Plan Acceptance Date: Not reported
Reinspection Date Y2K Compatible: Not reported

HMMD DISCLOSURE INVENTORY:
Chemical Name: Not reported
Item Number: Not reported
Stored at 1 Time: Not reported
Measurement Units Not reported
Carcinogen: No
Storage Method: Not reported
Annual Qty String: Not reported
Quantity Stored At One Time: Not reported
Annual Quantity String: Not reported
Material Safety Data Sheet: Not reported
1st Hazard Category: Not reported
2nd Hazard Category: Not reported

HMMD UNDERGROUND TANKS:
Tank Number: T001
Capacity (Gal): 500.00
Waste or Product: Product
Tank ID Number: AT2298
Tank Exempt: No
Tank Contents: REGULAR UNLEADED

Tank Number: T002
Capacity (Gal): 500.00
Waste or Product: Product
Tank ID Number: AT2298
Tank Exempt: No
Tank Contents: DIESEL

HMMD WASTE STREAMS:
Inspection Date: Not reported
Waste Code: Not reported
Qnty at Inspection: Not reported
Measurement Unit: Not reported
Treatment Method: Not reported
Waste Description: Not reported
Carcinogen: No
Quantity String: Not reported
Waste Item #: Not reported
Waste Name: Not reported
Annual Quantity: Not reported
Storage Method: Not reported
Haz Waste Hauler: Not reported
Annual Qty String: Not reported

HMMD VIOLATIONS:
Inspection Date: Not reported
Waste Code: Not reported
Type of Violation: Not reported
Violation Description:
Occurrences: Not reported

HMMD ENVIRONMENTAL ASSESSMENT INFORMATION:
Case Status Date: 02/28/1997 0:00:00
Case Type: TANK, RELEASE (W)
Case Status: CLOSED
Release Occurrence Number: 001

MORALLY WHOLESALE (Continued) **S101302227**

Historical Name: FORMER MORALLY WHOLESALE INC.
Date Release Began: 06/05/1991 0:00:00
Lead Agency: DEH

The CA HMMD database may contain additional details for this site.
Please click here or contact your EDR Account Executive for more information.

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61 **STAR BUILDERS SUPPLY** **LUST** **S105032736**
SSE **961 GRAND AVE** **Cortese** **N/A**
1/2-1 **SAN MARCOS, CA 92069** **San Diego Co. HMMD**
3904 ft.

Relative:
Lower

Actual:
550 ft.

State LUST:

Cross Street:	Not reported		
Qty Leaked:	Not reported		
Case Number	9UT872		
Reg Board:	9		
Chemical:	Regular Gasoline		
Lead Agency:	Local Agency		
Local Agency :	0		
Case Type:	Soil only		
Status:	Case Closed		
Review Date:	Not reported	Confirm Leak:	Not reported
Workplan:	12/28/87	Prelim Assess:	12/28/87
Pollution Char:	Not reported	Remed Plan:	Not reported
Remed Action:	1/3/65		
Monitoring:	Not reported		
Close Date:	06/20/1988		
Release Date:	Not reported		
Cleanup Fund Id :	Not reported		
Discover Date :	12/28/1987		
Enforcement Dt :	Not reported		
Enf Type:	Not reported		
Enter Date :	/ /		
Funding:	Not reported		
Staff Initials:	FDA		
How Discovered:	Not reported		
How Stopped:	Not reported		
Interim :	Not reported		
Leak Cause:	Not reported		
Leak Source:	Not reported		
MTBE Date :	/ /		
Max MTBE GW :	0 Parts per Billion		
MTBE Tested:	Site NOT Tested for MTBE.Includes Unknown and Not Analyzed.		
Priority:	Low priority. Priority ranking can change over time.		
Local Case # :	H03765-001		
Beneficial:	Not reported		
Staff :	UNK		
GW Qualifier :	Not reported		
Max MTBE Soil :	Not reported		
Soil Qualifier :	Not reported		
Hydr Basin #:	Not reported		
Operator :	Not reported		
Oversight Prgm:	Local Oversight Program UST		
Oversight Prgm :	LOP		
Review Date :	Not reported		
Stop Date :	/ /		
Work Suspended :	Not reported		
Responsible Party	Not reported		

STAR BUILDERS SUPPLY (Continued) **S105032736**

RP Address: Not reported
Global Id: T0607303116
Org Name: Not reported
Contact Person: Not reported
MTBE Conc: 0
Mtbe Fuel: 1
Water System Name: Not reported
Well Name: Not reported
Distance To Lust: 0
Waste Discharge Global ID: Not reported
Waste Disch Assigned Name: Not reported

CORTESE:
Reg Id: 9UT872
Region: CORTESE
Reg By: Leaking Underground Storage Tanks

HMMD:
Facility ID: H03765
Inactive Indicator: Inactive
SIC: Not reported
Owner: STAR BUILDER SUPPLY
Mailing Address: SAN MARCOS
CA
92069, 2601
Corporate Code: 18
Census Tract #: 20009
Inspection Date: Not reported
Inspector Name: Not reported
Facility Contact: Not reported
Property Owner: Not reported
PO Address: Not reported
Tank Owner: Not reported
TO Address: Not reported
Last Update: 06/29/1998 0:00:00
Last Delinquent Letter: Not reported
Last Letter Type: Not reported
Violation Notice Issued: Not reported
Map Code/Business Plan on File: Not reported
Business Plan Acceptance Date: Not reported
Reinspection Date Y2K Compatible: Not reported

Business Code: Not reported
Permit Expiration: 00/00
2nd Name: Not reported

Fire Dept District: SAN MARCOS FPD
EPA ID: Not reported
Reinspection Date: Not reported
Gas Station: Not reported
Delinquent Flag: Not Delinquent

HMMD DISCLOSURE INVENTORY:
Chemical Name: Not reported
Item Number: Not reported
Stored at 1 Time: Not reported
Measurement Units: Not reported
Carcinogen: No
Quantity Stored At One Time: Not reported
Annual Quantity String: Not reported
Material Safety Data Sheet: Not reported
1st Hazard Category: Not reported
2nd Hazard Category: Not reported

Storage Method: Not reported
Annual Qty String: Not reported

HMMD UNDERGROUND TANKS:
Tank Number: Not reported
Capacity (Gal): Not reported
Waste or Product: Not reported

Tank ID Number: Not reported
Tank Exempt: Not reported
Tank Contents: Not reported

STAR BUILDERS SUPPLY (Continued) **S105032736**

HMMD WASTE STREAMS:

Inspection Date:	Not reported	Waste Item #:	Not reported
Waste Code:	Not reported	Waste Name:	Not reported
Qnty at Inspection:	Not reported	Annual Quantity:	Not reported
Measurement Unit:	Not reported		
Treatment Method:	Not reported	Storage Method:	Not reported
Waste Description:	Not reported	Haz Waste Hauler:	Not reported
Carcinogen:	No	Annual Qty String:	Not reported
Quantity String:	Not reported		

HMMD VIOLATIONS:

Inspection Date:	Not reported	Occurrences:	Not reported
Waste Code:	Not reported		
Type of Violation:	Not reported		
Violation Description:			

HMMD ENVIRONMENTAL ASSESSMENT INFORMATION:

Case Status Date:	06/20/1988 0:00:00
Case Type:	TANK, RELEASE
Case Status:	CLOSED
Release Occurrence Number:	001
Historical Name:	STAR BUILDER SUPPLY
Date Release Began:	12/28/1987 0:00:00
Lead Agency:	DEH

The CA HMMD database may contain additional details for this site.
Please click here or contact your EDR Account Executive for more information.

O62 **D & J TRUCK & AUTO REPAIR** **HAZNET** **S100859843**
SW **1539 LA MIRADA** **Cortese** **N/A**
1/2-1 **SAN MARCOS, CA 92069**
3909 ft.

Site 1 of 2 in cluster O

Relative: Lower

Actual: 557 ft.

HAZNET:

Gepaid:	CAL000038929
TSD EPA ID:	CAD008252405
Gen County:	San Diego
Tsd County:	Los Angeles
Tons:	.0375
Waste Category:	Unspecified solvent mixture Waste
Disposal Method:	Recycler
Contact:	SCOTT PETERS
Telephone:	(619) 744-5440
Mailing Address:	1539 LA MIRADA DR
	SAN MARCOS, CA 92069 - 2415
County	San Diego

Gepaid:	CAL000038929
TSD EPA ID:	CAD008252405
Gen County:	San Diego
Tsd County:	Los Angeles
Tons:	.0458
Waste Category:	Unspecified solvent mixture Waste
Disposal Method:	Recycler
Contact:	SCOTT PETERS
Telephone:	(619) 744-5440
Mailing Address:	1539 LA MIRADA DR
	SAN MARCOS, CA 92069 - 2415
County	San Diego

D & J TRUCK & AUTO REPAIR (Continued) **S100859843**

Gepaid: CAL000038929
TSD EPA ID: CAD008252405
Gen County: San Diego
Tsd County: Los Angeles
Tons: .0625
Waste Category: Unspecified solvent mixture Waste
Disposal Method: Recycler
Contact: SCOTT PETERS
Telephone: (619) 744-5440
Mailing Address: 1539 LA MIRADA DR
SAN MARCOS, CA 92069 - 2415
County San Diego

Gepaid: CAL000038929
TSD EPA ID: CAD008252405
Gen County: San Diego
Tsd County: Los Angeles
Tons: .0291
Waste Category: Unspecified solvent mixture Waste
Disposal Method: Recycler
Contact: SCOTT PETERS
Telephone: (619) 744-5440
Mailing Address: 1539 LA MIRADA DR
SAN MARCOS, CA 92069 - 2415
County San Diego

Gepaid: CAL000038929
TSD EPA ID: CAD009452657
Gen County: San Diego
Tsd County: San Mateo
Tons: .0625
Waste Category: Unspecified organic liquid mixture
Disposal Method: Recycler
Contact: SCOTT PETERS
Telephone: (619) 744-5440
Mailing Address: 1539 LA MIRADA DR
SAN MARCOS, CA 92069 - 2415
County San Diego

The CA HAZNET database contains 1 additional record for this site.
Please click here or contact your EDR Account Executive for more information.

CORTESE:
Reg Id: 9UT2086
Region: CORTESE
Reg By: Leaking Underground Storage Tanks

O63 **FOLLIS MILLWORK INC.** **LUST S104160453**
SW **1555 LA MIRADA DR** **HAZNET N/A**
1/2-1 **SAN MARCOS, CA 92069** **Cortese**
3969 ft. **San Diego Co. HMMD**

Site 2 of 2 in cluster O

Relative:
Lower

Actual:
557 ft.

FOLLIS MILLWORK INC. (Continued) **S104160453**

LUST Region 9:
Case Number: 9UT2007
Local Agency: 37000
Substance: 12034
Date Found: 07/02/1991
Date Stopped: 07/02/1991
Source: Unknown
Lead Agency: Local Agency
Status: Preliminary site assessment underway
Case Type: Aquifer affected
Confirm Date: 7/23/91
Prelim Assess: Not reported
Remed Plan: Not reported
Began Monitor: Not reported
Enforce Type: Not reported
Enforce Date: Not reported
Pilot Program: LOP
Basin Number: 904.5
File Dispn: Not reported
Interim Remedial Actions: Yes
Beneficial Use: MUN
Cleanup and Abatement order Number: Not reported
Waste Discharge Requirement Number: Not reported
NPDES Number: Not reported

Release Date: 07/02/1991
Qty Leaked: 0
How Found: Tank Closure
How Stopped: Close Tank
Cause: Unknown
Submit Workplan: 7/23/91
Desc Pollution: Not reported
Remed Action: Not reported
Closed Date: Not reported
Local Case: H06696-001
Gwater Depth: 9'

HAZNET:
Gepaid: CAL000068087
TSD EPA ID: CAT000646117
Gen County: San Diego
Tsd County: Kings
Tons: .1500
Waste Category: Contaminated soil from site clean-ups
Disposal Method: Disposal, Land Fill
Contact: FOLLIS ERNEST AND KENNETH
Telephone: (000) 000-0000
Mailing Address: 1555 LA MIRADA DR
SAN MARCOS, CA 92069
County San Diego

CORTESE:
Reg Id: 9UT2007
Region: CORTESE
Reg By: Leaking Underground Storage Tanks

HMMD:
Facility ID: H06696
Inactive Indicator: Active
SIC: 2431
Owner: FOLLIS MILLWORK INC
Mailing Address: SAN MARCOS
CA
92069, 2415
Corporate Code: 18
Census Tract #: 20009
Inspection Date: 10/03/2001 0:00:00
Inspector Name: MONNIER
Facility Contact: JIM FOLLIS
Property Owner: Not reported

Business Code: MISC GENERAL BUILDING
Permit Expiration: 05/31
2nd Name: Not reported
Fire Dept District: SAN MARCOS FPD
EPA ID: CAL000068087
Reinspection Date: 12/02
Gas Station: Not reported
Delinquent Flag: Not Delinquent

FOLLIS MILLWORK INC. (Continued) **S104160453**

PO Address: Not reported
Tank Owner: Not reported
TO Address: Not reported
Last Update: 03/03/2002 0:00:00
Last Delinquent Letter: Not reported
Last Letter Type: Not reported
Violation Notice Issued: Not reported
Map Code/Business Plan on File: Not reported
Business Plan Acceptance Date: 06/08/99
Reinspection Date Y2K Compatible: Dec 2002

HMMD DISCLOSURE INVENTORY:
Chemical Name: Not reported
Item Number: Not reported
Stored at 1 Time: Not reported
Measurement Units: Not reported
Storage Method: Not reported
Carcinogen: No
Annual Qty String: Not reported
Quantity Stored At One Time: Not reported
Annual Quantity String: Not reported
Material Safety Data Sheet: Not reported
1st Hazard Category: Not reported
2nd Hazard Category: Not reported

HMMD UNDERGROUND TANKS:
Tank Number: T001
Tank ID Number: 1
Capacity (Gal): 524.00
Tank Exempt: No
Waste or Product: Product
Tank Contents: LEADED

Tank Number: T002
Tank ID Number: 33165
Capacity (Gal): 550.00
Tank Exempt: No
Waste or Product: Product
Tank Contents: REGULAR UNLEADED

HMMD WASTE STREAMS:
Inspection Date: 10/03/2001 0:00:00
Waste Item #: W001
Waste Code: 221.00
Waste Name: WASTE OIL & MIXED OIL
Qnty at Inspection: 55.00
Annual Quantity: 300.00
Measurement Unit: GAL
Treatment Method: RECYCLE
Storage Method: METAL DRUMS,55 GALLONS
Waste Description: WASTE HYDRAULIC OILS
Haz Waste Hauler: ASBURY ENVIR. SERVICES
Carcinogen: No
Annual Qty String: 0000000300
Quantity String: 0000000055

Inspection Date: 10/03/2001 0:00:00
Waste Item #: W002
Waste Code: 888.00
Waste Name: USED OIL FILTERS
Qnty at Inspection: 100.00
Annual Quantity: 100.00
Measurement Unit: LBS
Treatment Method: FILTERS/METAL RECLAI
Storage Method: METAL DRUMS,55 GALLONS
Waste Description: USED OIL FILTERS
Haz Waste Hauler: ASBURY ENVIR. SERVICES
Carcinogen: No
Annual Qty String: 0000000100
Quantity String: 0000000100

Inspection Date: 10/03/2001 0:00:00
Waste Item #: W003
Waste Code: 213.00
Waste Name: HYDROCARBON SOLVENTS
Qnty at Inspection: 10.00
Annual Quantity: 50.00
Measurement Unit: GAL
Treatment Method: RECYCLE
Storage Method: PROCESSING EQUIPMENT
Waste Description: DIESEL, PARTS WASHER:
Haz Waste Hauler: UNKNOWN HAZ WST HAULER
Carcinogen: No
Annual Qty String: 0000000050
Quantity String: 0000000010

FOLLIS MILLWORK INC. (Continued) **S104160453**

HMMD VIOLATIONS:
Inspection Date: Not reported
Waste Code: Not reported
Type of Violation: Not reported
Violation Description:
Occurrences: Not reported

HMMD ENVIRONMENTAL ASSESSMENT INFORMATION:
Case Status Date: 01/30/2002 0:00:00
Case Type: TANK, RELEASE (W)
Case Status: OPEN
Release Occurrence Number: 001
Historical Name: FOLLIS MILLWORK, INC
Date Release Began: 07/02/1991 0:00:00
Lead Agency: DEH

The CA HMMD database may contain additional details for this site.
Please click here or contact your EDR Account Executive for more information.

P64
SW
1/2-1
4216 ft.

MARCON PRODUCTS INC
1615 LA MIRADA DR
SAN MARCOS, CA 92069

LUST **S100727582**
HAZNET **N/A**
Cortese
San Diego Co. HMMD

Site 1 of 2 in cluster P

Relative:
Lower

Actual:
563 ft.

State LUST:
Cross Street: Not reported
Qty Leaked: Not reported
Case Number Not reported
Reg Board: 9
Chemical: 0
Lead Agency: Local Agency
Local Agency : 0
Case Type: Soil only
Status: Case Closed
Review Date: Not reported
Workplan: 1/3/65
Pollution Char: Not reported
Remed Action: 1/3/65
Monitoring: Not reported
Close Date: 08/09/1996
Release Date: Not reported
Cleanup Fund Id : Not reported
Discover Date : 10/23/1995
Enforcement Dt : Not reported
Enf Type: Not reported
Enter Date : / /
Funding: Not reported
Staff Initials: SCA
How Discovered: Not reported
How Stopped: Not reported
Interim : Not reported
Leak Cause: Not reported
Leak Source: Not reported
MTBE Date : / /
Max MTBE GW : 0 Parts per Billion
MTBE Tested: Not Required to be Tested.
Priority: 11
Local Case # : H08257-001
Beneficial: Not reported

Confirm Leak: Not reported
Prelim Assess: 1/3/65
Remed Plan: Not reported

MARCON PRODUCTS INC (Continued) **S100727582**

Staff : UNK
GW Qualifier : Not reported
Max MTBE Soil : Not reported
Soil Qualifier : Not reported
Hydr Basin #: Not reported
Operator : Not reported
Oversight Prgm: Spills, Leaks, Investigations and Cleanup UST
Oversight Prgm : SLIC
Review Date : Not reported
Stop Date : / /
Work Suspended :Not reported
Responsible PartyNot reported
RP Address: Not reported
Global Id: T0608167966
Org Name: Not reported
Contact Person: Not reported
MTBE Conc: 0
Mtbe Fuel: 0
Water System Name: Not reported
Well Name: Not reported
Distance To Lust: 0
Waste Discharge Global ID: Not reported
Waste Disch Assigned Name: Not reported

LUST Region 9:
Case Number: 9UT3221
Local Agency: 37000
Substance: 8006619
Date Found: 07/30/1996
Date Stopped: 07/30/1996
Source: Unknown
Lead Agency: Local Agency
Status: Preliminary site assessment underway
Case Type: Other ground water affected
Confirm Date: Not reported
Prelim Assess: Not reported
Remed Plan: Not reported
Began Monitor: Not reported
Enforce Type: Not reported
Enforce Date: Not reported
Pilot Program: LOP
Basin Number: 904.52
Release Date: 07/30/1996
Qty Leaked: 0
How Found: Not reported
How Stopped: Not reported
Cause: Unknown
Submit Workplan: Not reported
Desc Pollution: Not reported
Remed Action: Not reported
Closed Date: Not reported
Local Case: H08257-002
Gwater Depth: 15'
File Dispn: Administratively opened on database, however no file physically exists
Interim Remedial Actions: Not reported
Beneficial Use: MUNBU
Cleanup and Abatement order Number: Not reported
Waste Discharge Requirement Number: Not reported
NPDES Number: Not reported

HAZNET:
Gepaid: CAC001299312
TSD EPA ID: CAT080013352
Gen County: San Diego
Tsd County: Los Angeles
Tons: .2085
Waste Category: Unspecified oil-containing waste
Disposal Method: Recycler
Contact: MARK SANTAR

MARCON PRODUCTS INC (Continued) **S100727582**

Telephone: (619) 744-3355
Mailing Address: 1615 LA MIRADA DR
SAN MARCOS, CA 92069
County San Diego

Gepaid: CAL000179659
TSD EPA ID: CAT000613976
Gen County: San Diego
Tsd County: Orange
Tons: .1334
Waste Category: Liquids with halogenated organic compounds > 1000 mg/l
Disposal Method: Transfer Station
Contact: MARK SANTAR
Telephone: (619) 744-3355
Mailing Address: 1615 LA MIRADA DR
SAN MARCOS, CA 92069
County San Diego

Gepaid: CAL000179659
TSD EPA ID: CAT000613976
Gen County: San Diego
Tsd County: Orange
Tons: 0.39
Waste Category: Liquids with halogenated organic compounds > 1000 mg/l
Disposal Method: Transfer Station
Contact: LOWELL JACKSON
Telephone: (760) 744-3355
Mailing Address: 1615 LA MIRADA DR
SAN MARCOS, CA 92069
County San Diego

CORTESE:
Reg Id: 9UT3221
Region: CORTESE
Reg By: Leaking Underground Storage Tanks

HMMD:
Facility ID: H08257
Inactive Indicator: Active
SIC: 3273
Owner: MARK SANTAR
Mailing Address: SAN MARCOS
CA
92069, 2417
Corporate Code: 18
Census Tract #: 20009
Inspection Date: 07/18/2001 0:00:00
Inspector Name: MONNIER
Facility Contact: MARK SANTAR
Property Owner: Not reported
PO Address: Not reported
Tank Owner: Not reported
TO Address: Not reported
Last Update: 09/16/2001 0:00:00
Last Delinquent Letter: Not reported
Last Letter Type: Not reported
Violation Notice Issued: Not reported
Map Code/Business Plan on File: Not reported
Business Plan Acceptance Date: 08/06/01

Business Code: MISC GENERAL BUILDING
Permit Expiration: 06/30
2nd Name: Not reported

Fire Dept District: SAN MARCOS FPD
EPA ID: CAL000039334
Reinspection Date: 09/02
Gas Station: Not reported
Delinquent Flag: Not Delinquent

MARCON PRODUCTS INC (Continued) **S100727582**

Reinspection Date Y2K Compatible: Sep 2002

HMMD DISCLOSURE INVENTORY:

Chemical Name: ENDCOR 4739
Item Number: D010
Stored at 1 Time: 110.00
Measurement Units0000000550 Storage Method: Not reported
Carcinogen: Yes Annual Qty String: 0000000110
Quantity Stored At One Time: MIXTURE
Annual Quantity String: 550.00
Material Safety Data Sheet: P
1st Hazard Category: Not reported
2nd Hazard Category: DELAYD HLTH HAZARD

Chemical Name: OIL, LUBRICATING AND ATF, MOTOR OIL: 15W-40
Item Number: D012
Stored at 1 Time: 375.00
Measurement Units0000001500 Storage Method: Not reported
Carcinogen: Yes Annual Qty String: 0000000375
Quantity Stored At One Time: 8002-05-9
Annual Quantity String: 1500.00
Material Safety Data Sheet: A
1st Hazard Category: Not reported
2nd Hazard Category: FIRE HAZARD

Chemical Name: OXYGEN & ACETYLENE : CUTTING TORCH
Item Number: D013
Stored at 1 Time: 385.00
Measurement Units0000000700 Storage Method: Not reported
Carcinogen: Yes Annual Qty String: 0000000385
Quantity Stored At One Time: 74-86-2
Annual Quantity String: 700.00
Material Safety Data Sheet: C
1st Hazard Category: Not reported
2nd Hazard Category: FIRE HAZARD

Chemical Name: CARBON DIOXIDE & CO2/ARGON MIX
Item Number: D011
Stored at 1 Time: 750.00
Measurement Units0000002000 Storage Method: Not reported
Carcinogen: Yes Annual Qty String: 0000000750
Quantity Stored At One Time: 124-38-9
Annual Quantity String: 2000.00
Material Safety Data Sheet: C
1st Hazard Category: Not reported
2nd Hazard Category: SUDDN RLSE OF PRES

Chemical Name: PHOSPHORIC ACID, 17%: PRO CHEMOR PHOSCLEAN
Item Number: D006
Stored at 1 Time: 110.00
Measurement Units0000000660 Storage Method: Not reported
Carcinogen: Yes Annual Qty String: 0000000110
Quantity Stored At One Time: 7664-38-2
Annual Quantity String: 660.00
Material Safety Data Sheet: P
1st Hazard Category: Not reported
2nd Hazard Category: IMMED HEALTH HAZRD

MARCON PRODUCTS INC (Continued) **S100727582**

Chemical Name: POZZ-CEMENT ADDITIVE: POZZOLIT
Item Number: D004
Stored at 1 Time: 1000.00
Measurement Units: 0000003000
Carcinogen: Yes
Quantity Stored At One Time:
Annual Quantity String: 3000.00
Material Safety Data Sheet: A
1st Hazard Category: Not reported
2nd Hazard Category: IMMED HEALTH HAZRD
Storage Method: Not reported
Annual Qty String: 0000001000
1310-73-2

Chemical Name: CALCIUM CHLORIDE
Item Number: D001
Stored at 1 Time: 2000.00
Measurement Units: 0000004000
Carcinogen: Yes
Quantity Stored At One Time:
Annual Quantity String: 4000.00
Material Safety Data Sheet: A
1st Hazard Category: Not reported
2nd Hazard Category: IMMED HEALTH HAZRD
Storage Method: Not reported
Annual Qty String: 0000002000
14674-72-7

Chemical Name: DIESEL FUEL 2-1000 GALLON TANKS, 1-500 GAL TANK.
Item Number: D002
Stored at 1 Time: 2500.00
Measurement Units: 0000090000
Carcinogen: Yes
Quantity Stored At One Time:
Annual Quantity String: 90000.00
Material Safety Data Sheet: A
1st Hazard Category: Not reported
2nd Hazard Category: FIRE HAZARD
Storage Method: Not reported
Annual Qty String: 0000002500
68476-34-6

Chemical Name: ANIONIC SURFACTANT; MB, AE 90 PH 11, TRIETHANOLAMINE
Item Number: D009
Stored at 1 Time: 500.00
Measurement Units: 0000001500
Carcinogen: Yes
Quantity Stored At One Time:
Annual Quantity String: 1500.00
Material Safety Data Sheet: A
1st Hazard Category: Not reported
2nd Hazard Category: FIRE HAZARD
Storage Method: Not reported
Annual Qty String: 0000000500
102-71-6

HMMD UNDERGROUND TANKS:
Tank Number: T001
Capacity (Gal): 1000.00
Waste or Product: Product
Tank ID Number: 001
Tank Exempt: No
Tank Contents: REGULAR UNLEADED

HMMD WASTE STREAMS:
Inspection Date: 07/18/2001 0:00:00
Waste Code: 221.00
Qnty at Inspection: 100.00
Measurement Unit: GAL
Treatment Method: RECYCLE
Waste Description: USED OIL
Carcinogen: No
Waste Item #: W001
Waste Name: WASTE OIL & MIXED OIL
Annual Quantity: 500.00
Storage Method: ABVGR TNK,STEEL 10-1000 G
Haz Waste Hauler: ASBURY ENVIR. SERVICES
Annual Qty String: 0000000500

MARCON PRODUCTS INC (Continued) **S100727582**

Quantity String: 0000000100

Inspection Date: 07/18/2001 0:00:00
Waste Code: 213.00
Qnty at Inspection: 30.00
Measurement Unit: GAL
Treatment Method: RECYCLE
Waste Description: PARTS WASH
Carcinogen: No
Quantity String: 0000000030

Waste Item #: W002
Waste Name: HYDROCARBON SOLVENTS
Annual Quantity: 120.00
Storage Method: PROCESSING EQUIPMENT
Haz Waste Hauler: SAFETY-KLEEN
Annual Qty String: 0000000120

Inspection Date: 07/18/2001 0:00:00
Waste Code: 888.00
Qnty at Inspection: 400.00
Measurement Unit: LBS
Treatment Method: FILTERS/METAL RECLAI
Waste Description: USED OIL FILTERS
Carcinogen: No
Quantity String: 0000000400

Waste Item #: W003
Waste Name: USED OIL FILTERS
Annual Quantity: 800.00
Storage Method: METAL DRUMS,55 GALLONS
Haz Waste Hauler: ASBURY ENVIR. SERVICES
Annual Qty String: 0000000800

Inspection Date: 07/18/2001 0:00:00
Waste Code: 444.00
Qnty at Inspection: 200.00
Measurement Unit: LBS
Treatment Method: BATTERIES RECYCLED
Waste Description: BATTERIES
Carcinogen: No
Quantity String: 0000000200

Waste Item #: W004
Waste Name: USED BATTERIES
Annual Quantity: 800.00
Storage Method: WASTE PILE
Haz Waste Hauler: UNREGISTERED HAZ WST HAUL
Annual Qty String: 0000000800

HMMD VIOLATIONS:

Inspection Date: 03/22/1999 0:00:00
Waste Code: Not reported
Type of Violation: GENERAL VIOLATION
Violation Description: HAZARDOUS MATERIALS HAVE NOT BEEN ADEQUATELY LABELED WITHIN 10 DAYS AND ARE NOW DECLARED HAZARDOUS WASTE HSC 25124(E)

Occurrences: 02

Inspection Date: 07/18/2001 0:00:00
Waste Code: Not reported
Type of Violation: GENERAL VIOLATION
Violation Description: HAZARDOUS MATERIALS HAVE NOT BEEN ADEQUATELY LABELED WITHIN 10 DAYS AND ARE NOW DECLARED HAZARDOUS WASTE HSC 25124(E)

Occurrences: 03

Inspection Date: 05/25/2000 0:00:00
Waste Code: Not reported
Type of Violation: GENERAL VIOLATION
Violation Description: BUSINESS PLAN DOES NOT INCLUDE AN ADEQUATE EMPLOYEE TRAINING PROGRAM WITH EMERGENCY NOTIFICATION,MITIGATION&EVACUATION PROCEDURES.HSC25504(C)

Occurrences: 01

Inspection Date: 05/25/2000 0:00:00
Waste Code: Not reported
Type of Violation: GENERAL VIOLATION
Violation Description: PERSONNEL TRAINING IS NOT ADEQUATE TO ENSURE COMPLIANCE WITH HAZARDOUS WASTES/MATERIALS REGULATIONS CCR 66265.16

Occurrences: 01

MARCON PRODUCTS INC (Continued) **S100727582**

Inspection Date: 05/25/2000 0:00:00 Occurrences: 03
Waste Code: Not reported
Type of Violation: GENERAL VIOLATION
Violation Description: HAZARDOUS MATERIALS HAVE NOT BEEN ADEQUATELY LABELED WITHIN 10 DAYS AND ARE NOW DECLARED HAZARDOUS WASTE HSC 25124(E)

Inspection Date: 03/22/1999 0:00:00 Occurrences: 01
Waste Code: Not reported
Type of Violation: GENERAL VIOLATION
Violation Description: BUSINESS PLAN DOES NOT HAVE A SITE MAP WHICH PROVIDES ADEQUATE INFORMATION FOR EMERGENCY RESPONSE AGENCIES HSC 25509(A)(5)

Inspection Date: 05/25/2000 0:00:00 Occurrences: 01
Waste Code: Not reported
Type of Violation: GENERAL VIOLATION
Violation Description: HAZARDOUS WASTE CONTAINERS ARE MISSING LABELS, ACCUMULATION DATE AND/OR ARE IMPROPERLY LABELED CCR 66262.34

HMMD ENVIRONMENTAL ASSESSMENT INFORMATION:
Case Status Date: 08/09/1996 0:00:00
Case Type: TANK, RELEASE
Case Status: CLOSED
Release Occurrence Number: 001
Historical Name: MARCON PRODUCTS
Date Release Began: 10/23/1995 0:00:00
Lead Agency: DEH

Case Status Date: 01/30/2002 0:00:00
Case Type: TANK, RELEASE (W)
Case Status: OPEN
Release Occurrence Number: 002
Historical Name: MAR CON PRODUCTS
Date Release Began: 07/30/1996 0:00:00
Lead Agency: DEH

The CA HMMD database may contain additional details for this site.
Please click here or contact your EDR Account Executive for more information.

P65 **KIP INC** **HAZNET** **S100865802**
SW **1621 LA MIRADA** **Cortese** **N/A**
1/2-1 **SAN MARCOS, CA 92069**
4233 ft.

Site 2 of 2 in cluster P

Relative: Lower

Actual: 564 ft.

HAZNET:
Gepaid: CAL000033828
TSD EPA ID: CAD000088252
Gen County: San Diego
Tsd County: Los Angeles
Tons: .1500
Waste Category: Unspecified oil-containing waste
Disposal Method: Transfer Station
Contact: LYNCH GILBERT G
Telephone: (000) 000-0000
Mailing Address: 1621 LA MIRADA

KIP INC (Continued) **S100865802**

SAN MARCOS, CA 92069
County San Diego

CORTESE:
Reg Id: 9UT890
Region: CORTESE
Reg By: Leaking Underground Storage Tanks

66
SSE
1/2-1
4264 ft.

SKS INC.
875 GRAND AVE
SAN MARCOS, CA 92069

LUST **S100274033**
HAZNET **N/A**
Cortese
San Diego Co. HMMD
EMI

Relative:
Lower

Actual:
553 ft.

LUST Region 9:

Case Number:	9UT2059	Release Date:	06/28/1991
Local Agency:	37000		
Substance:	12034	Qty Leaked:	0
Date Found:	06/28/1991	How Found:	Other Means
Date Stopped:	06/28/1991	How Stopped:	Other Means
Source:	Unknown	Cause:	Unknown
Lead Agency:	Local Agency		
Status:	Case Closed		
Case Type:	Other ground water affected		
Abate Method:	Excavate and Treat - remove contaminated soil and treat (includes spreading or land farming)		
Confirm Date:	Not reported	Submit Workplan:	Not reported
Prelim Assess:	Not reported	Desc Pollution:	Not reported
Remed Plan:	Not reported	Remed Action:	Not reported
Began Monitor:	1/31/96	Closed Date:	1/31/96
Enforce Type:	Not reported		
Enforce Date:	Not reported		
Pilot Program:	LOP	Local Case:	H20785-001
Basin Number:	904.52	Gwater Depth:	11'
File Dispn:	File discarded, case closed		
Interim Remedial Actions:	No		
Beneficial Use:	MUN		
Cleanup and Abatement order Number:	Not reported		
Waste Discharge Requirement Number:	Not reported		
NPDES Number:	Not reported		

HAZNET:
Gepaid: CAC002178193
TSD EPA ID: CAD028409019
Gen County: San Diego
Tsd County: Los Angeles
Tons: 10.425
Waste Category: Unspecified aqueous solution
Disposal Method: Treatment, Tank
Contact: SKS INC
Telephone: (800) 760-4757
Mailing Address: 1730 W MISSION AVE
ESCONDIDO, CA 92046
County San Diego

CORTESE:
Reg Id: 9UT2059
Region: CORTESE
Reg By: Leaking Underground Storage Tanks

SKS INC. (Continued) **S100274033**

HMMD:

Facility ID:	H20785		
Inactive Indicator:	Active	Business Code:	Not reported
SIC:	5541	Permit Expiration:	11/30
Owner:	SKS. INC	2nd Name:	Not reported
Mailing Address:	SAN DIEGO		
	CA		
	92196, 0940		
Corporate Code:	18	Fire Dept District:	SAN MARCOS FPD
Census Tract #:	20009	EPA ID:	CAL000126042
Inspection Date:	01/17/2002 0:00:00	Reinspection Date:	01/03
Inspector Name:	FERNANDEZ	Gas Station:	Not reported
Facility Contact:	NEWEL BOWDER	Delinquent Flag:	Not Delinquent
Property Owner:	ECKERTS VAN & STORAGE		
PO Address:	ESCONDIDO		
	CA		
	92025		
Tank Owner:	SKS PACIFIC PRIDE		
TO Address:	SAN MARCOS		
	CA		
	92069		
Last Update:	03/22/2002 0:00:00		
Last Delinquent Letter:	Not reported		
Last Letter Type:	Not reported		
Violation Notice Issued:	Not reported		
Map Code/Business Plan on File:	Not reported		
Business Plan Acceptance Date:	01/17/02		
Reinspection Date Y2K Compatible:	Jan 2003		

HMMD DISCLOSURE INVENTORY:

Chemical Name:	Not reported		
Item Number:	Not reported		
Stored at 1 Time:	Not reported		
Measurement Units	Not reported	Storage Method:	Not reported
Carcinogen:	No	Annual Qty String:	Not reported
Quantity Stored At One Time:	Not reported		
Annual Quantity String:	Not reported		
Material Safety Data Sheet:	Not reported		
1st Hazard Category:	Not reported		
2nd Hazard Category:	Not reported		

HMMD UNDERGROUND TANKS:

Tank Number:	T001	Tank ID Number:	1
Capacity (Gal):	12000.00	Tank Exempt:	No
Waste or Product:	Product	Tank Contents:	REGULAR UNLEADED
Tank Number:	T002	Tank ID Number:	2
Capacity (Gal):	12000.00	Tank Exempt:	No
Waste or Product:	Product	Tank Contents:	SUPER UNLEADED
Tank Number:	T003	Tank ID Number:	3
Capacity (Gal):	12000.00	Tank Exempt:	No
Waste or Product:	Product	Tank Contents:	DIESEL
Tank Number:	T004	Tank ID Number:	4
Capacity (Gal):	12000.00	Tank Exempt:	No
Waste or Product:	Product	Tank Contents:	DIESEL

SKS INC. (Continued) **S100274033**

HMMD WASTE STREAMS:
Inspection Date: Not reported
Waste Code: Not reported
Qnty at Inspection: Not reported
Measurement Unit: Not reported
Treatment Method: Not reported
Waste Description: Not reported
Carcinogen: No
Quantity String: Not reported
Waste Item #: Not reported
Waste Name: Not reported
Annual Quantity: Not reported
Storage Method: Not reported
Haz Waste Hauler: Not reported
Annual Qty String: Not reported

HMMD VIOLATIONS:
Inspection Date: 08/17/2000 0:00:00
Waste Code: Not reported
Type of Violation: GENERAL VIOLATION
Violation Description: WRITTEN ROUTINE MONITORING PROCEDURE FOR THE UNDERGROUND STORAGE TANK SYSTEM HAS NOT BEEN PREPARED AND IMPLEMENTED. CCR2632(E)(1),2634(B)(2)
Occurrences: 01

Inspection Date: 08/17/2000 0:00:00
Waste Code: Not reported
Type of Violation: GENERAL VIOLATION
Violation Description: WRITTEN ROUTINE MONITORING PROCEDURE FOR THE UNDERGROUND STORAGE TANK SYSTEM HAS NOT BEEN PREPARED AND IMPLEMENTED. CCR2632(E)(1),2634(B)(2)
Occurrences: 01

Inspection Date: 01/17/2002 0:00:00
Waste Code: Not reported
Type of Violation: GENERAL VIOLATION
Violation Description: WRITTEN ROUTINE MONITORING PROCEDURE FOR THE UNDERGROUND STORAGE TANK SYSTEM HAS NOT BEEN PREPARED AND IMPLEMENTED. CCR2632(E)(1),2634(B)(2)
Occurrences: 01

HMMD ENVIRONMENTAL ASSESSMENT INFORMATION:
Case Status Date: 01/31/1996 0:00:00
Case Type: TANK, RELEASE
Case Status: CLOSED
Release Occurrence Number: 001
Historical Name: SKS, SAN MARCOS
Date Release Began: 06/28/1991 0:00:00
Lead Agency: DEH

The CA HMMD database may contain additional details for this site.
Please click here or contact your EDR Account Executive for more information.

EMISSIONS :
Facility ID : 5561
Air District Code : SD
SIC Code : 5541
Total Priority Score : Not reported
Health Risk Assessment : Not reported
Non-cancer Chronic Haz Index : Not reported
Non-cancer Acute Haz Index : Not reported
Air Basin : SD
Air District Name : SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System : Not reported
Consolidated Emission Reporting Rule : Not reported
Total Organic Hydrocarbon Gases : 0
Reactive Organic Gases : 0

SKS INC. (Continued) **S100274033**

Carbon Monoxide Emissions :	0
NOX Gas Emissions (Nitrogen - Oxygen) :	0
SOX Gas Emissions (Sulphur - Oxygen) :	0
Facility ID :	5561
Air District Code :	SD
SIC Code :	5541
Total Priority Score :	Not reported
Health Risk Assessment :	Not reported
Non-cancer Chronic Haz Index :	Not reported
Non-cancer Acute Haz Index :	Not reported
Air Basin :	SD
Air District Name :	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System :	Not reported
Consolidated Emission Reporting Rule :	Not reported
Total Organic Hydrocarbon Gases :	Not reported
Reactive Organic Gases :	Not reported
Carbon Monoxide Emissions :	Not reported
NOX Gas Emissions (Nitrogen - Oxygen) :	Not reported
SOX Gas Emissions (Sulphur - Oxygen) :	Not reported

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67 **JUDD WIRE** **Cortese** **S104746374**
SE **870 LOS VALLECITOS BLVD** **San Diego Co. HMMD** **N/A**
1/2-1 **SAN MARCOS, CA 92069** **LUST**
4318 ft.

Relative: **Lower**

Actual: **554 ft.**

State LUST:

Cross Street:	Not reported		
Qty Leaked:	Not reported		
Case Number	9UT1424		
Reg Board:	9		
Chemical:	Waste Oil		
Lead Agency:	Local Agency		
Local Agency :	0		
Case Type:	Aquifer affected		
Status:	Case Closed		
Review Date:	Not reported	Confirm Leak:	Not reported
Workplan:	4/20/89	Prelim Assess:	4/20/89
Pollution Char:	Not reported	Remed Plan:	Not reported
Remed Action:	1/3/65		
Monitoring:	Not reported		
Close Date:	08/31/1990		
Release Date:	Not reported		
Cleanup Fund Id :	Not reported		
Discover Date :	02/28/1989		
Enforcement Dt :	Not reported		
Enf Type:	Not reported		
Enter Date :	/ /		
Funding:	Not reported		
Staff Initials:	PSU		
How Discovered:	Not reported		
How Stopped:	Not reported		
Interim :	Not reported		
Leak Cause:	Not reported		
Leak Source:	Not reported		
MTBE Date :	/ /		
Max MTBE GW :	0 Parts per Billion		
MTBE Tested:	Not Required to be Tested.		
Priority:	Medium priority		

JUDD WIRE (Continued) **S104746374**

Local Case # : H06459-001
Beneficial: Not reported
Staff : UNK
GW Qualifier : Not reported
Max MTBE Soil : Not reported
Soil Qualifier : Not reported
Hydr Basin #: Not reported
Operator : Not reported
Oversight Prgm: Local Oversight Program UST
Oversight Prgm : LOP
Review Date : Not reported
Stop Date : / /
Work Suspended :Not reported
Responsible PartyNot reported
RP Address: Not reported
Global Id: T0607300257
Org Name: Not reported
Contact Person: Not reported
MTBE Conc: 0
Mtbe Fuel: 0
Water System Name: Not reported
Well Name: Not reported
Distance To Lust: 0
Waste Discharge Global ID: Not reported
Waste Disch Assigned Name: Not reported

CORTESE:
Reg Id: 9UT1424
Region: CORTESE
Reg By: Leaking Underground Storage Tanks

HMMD:
Facility ID: H36080
Inactive Indicator: Inactive
SIC: Not reported
Owner: SUMITOMO ELECTRIC
Mailing Address: SAN MARCOS
CA
92069
Corporate Code: 18
Census Tract #: 20009
Inspection Date: 01/23/1996 0:00:00
Inspector Name: WALSH
Facility Contact: ART RUVALCABA
Property Owner: Not reported
PO Address: Not reported
Tank Owner: Not reported
TO Address: Not reported
Last Update: 08/07/1998 0:00:00
Last Delinquent Letter: Not reported
Last Letter Type: Not reported
Violation Notice Issued: Not reported
Map Code/Business Plan on File: Not reported
Business Plan Acceptance Date: 04/12/96
Reinspection Date Y2K Compatible: Jan 1997

Business Code: RESIN MANUFACTURER/USER
Permit Expiration: 04/30
2nd Name: INTERCONNECT PRODUCTS, INC.

Fire Dept District: SAN MARCOS FPD
EPA ID: CAL000174292
Reinspection Date: 01/97
Gas Station: Not reported
Delinquent Flag: Not Delinquent

HMMD DISCLOSURE INVENTORY:
Chemical Name: Not reported
Item Number: Not reported

JUDD WIRE (Continued) **S104746374**

Stored at 1 Time: Not reported
Measurement Units: Not reported
Carcinogen: No
Quantity Stored At One Time: Not reported
Annual Quantity String: Not reported
Material Safety Data Sheet: Not reported
1st Hazard Category: Not reported
2nd Hazard Category: Not reported
Storage Method: Not reported
Annual Qty String: Not reported

HMMD UNDERGROUND TANKS:
Tank Number: Not reported
Capacity (Gal): Not reported
Waste or Product: Not reported
Tank ID Number: Not reported
Tank Exempt: Not reported
Tank Contents: Not reported

HMMD WASTE STREAMS:
Inspection Date: 01/23/1996 0:00:00
Waste Code: 135.00
Qnty at Inspection: 1600.00
Measurement Unit: GAL
Treatment Method: RECYCLE
Waste Description: WASTE ANTIFREEZE
Carcinogen: No
Quantity String: 0000001600
Waste Item #: W001
Waste Name: UNSPECIFIED AQUEOUS SOL'N
Annual Quantity: 4800.00
Storage Method: ABVGR TNK,NOT STL 10-1000 G
Haz Waste Hauler: NO HAULER
Annual Qty String: 0000004800

Inspection Date: 01/23/1996 0:00:00
Waste Code: 221.00
Qnty at Inspection: 5.00
Measurement Unit: GAL
Treatment Method: RECYCLE
Waste Description: WASTE OIL
Carcinogen: No
Quantity String: 0000000005
Waste Item #: W002
Waste Name: WASTE OIL & MIXED OIL
Annual Quantity: 100.00
Storage Method: METAL DRUMS,55 GALLONS
Haz Waste Hauler: ASBURY OIL CO
Annual Qty String: 0000000100

Inspection Date: 01/23/1996 0:00:00
Waste Code: 213.00
Qnty at Inspection: 16.00
Measurement Unit: GAL
Treatment Method: RECYCLE
Waste Description: PARTS CLEANER
Carcinogen: No
Quantity String: 0000000016
Waste Item #: W003
Waste Name: HYDROCARBON SOLVENTS
Annual Quantity: 90.00
Storage Method: PROCESSING EQUIPMENT
Haz Waste Hauler: SAFETY-KLEEN
Annual Qty String: 0000000090

HMMD VIOLATIONS:
Inspection Date: Not reported
Waste Code: Not reported
Type of Violation: Not reported
Violation Description:
Occurrences: Not reported

HMMD ENVIRONMENTAL ASSESSMENT INFORMATION:
Case Status Date: Not reported
Case Type: Not reported
Case Status: Not reported
Release Occurrence Number: Not reported
Historical Name: Not reported
Date Release Began: Not reported
Lead Agency: Not reported

JUDD WIRE (Continued) **S104746374**

The CA HMMD database may contain additional details for this site.
Please click here or contact your EDR Account Executive for more information.

Facility ID:	H06459		
Inactive Indicator:	Active	Business Code:	RESIN MANUFACTURER/USER
SIC:	Not reported	Permit Expiration:	05/31
Owner:	SUMITOMO	2nd Name:	Not reported
Mailing Address:	SAN MARCOS		
	CA		
	92069, 1432		
Corporate Code:	18	Fire Dept District:	SAN MARCOS FPD
Census Tract #:	20009	EPA ID:	CAD980638266
Inspection Date:	11/15/2001 0:00:00	Reinspection Date:	01/03
Inspector Name:	MONNIER	Gas Station:	Not reported
Facility Contact:	RICK MEGGINSON	Delinquent Flag:	Not Delinquent
Property Owner:	Not reported		
PO Address:	Not reported		
Tank Owner:	Not reported		
TO Address:	Not reported		
Last Update:	03/03/2002 0:00:00		
Last Delinquent Letter:	Not reported		
Last Letter Type:	Not reported		
Violation Notice Issued:	Not reported		
Map Code/Business Plan on File:	Not reported		
Business Plan Acceptance Date:	03/07/97		
Reinspection Date Y2K Compatible:	Jan 2003		

HMMD DISCLOSURE INVENTORY:

Chemical Name:	HELIUM		
Item Number:	D045		
Stored at 1 Time:	291.00		
Measurement Units	0000000291	Storage Method:	Not reported
Carcinogen:	Yes	Annual Qty String:	0000000291
Quantity Stored At One Time:	7440-59-7		
Annual Quantity String:	291.00		
Material Safety Data Sheet:	C		
1st Hazard Category:	Not reported		
2nd Hazard Category:	SUDDN RLSE OF PRES		

Chemical Name:	KEROSENE		
Item Number:	D048		
Stored at 1 Time:	65.00		
Measurement Units	0000000165	Storage Method:	Not reported
Carcinogen:	Yes	Annual Qty String:	0000000065
Quantity Stored At One Time:	8008-20-6		
Annual Quantity String:	165.00		
Material Safety Data Sheet:	M		
1st Hazard Category:	Not reported		
2nd Hazard Category:	FIRE HAZARD		

Chemical Name:	MOTOR OIL		
Item Number:	D049		
Stored at 1 Time:	400.00		
Measurement Units	0000001000	Storage Method:	Not reported
Carcinogen:	Yes	Annual Qty String:	0000000400
Quantity Stored At One Time:	8016-28-2		
Annual Quantity String:	1000.00		
Material Safety Data Sheet:	M		

JUDD WIRE (Continued) **S104746374**

1st Hazard Category: Not reported
2nd Hazard Category: FIRE HAZARD

Chemical Name: ARGON
Item Number: D047
Stored at 1 Time: 350.00
Measurement Units: 0000000700 Storage Method: Not reported
Carcinogen: Yes Annual Qty String: 0000000350
Quantity Stored At One Time: 7440-37-1
Annual Quantity String: 700.00
Material Safety Data Sheet: C
1st Hazard Category: Not reported
2nd Hazard Category: SUDDN RLSE OF PRES

Chemical Name: OXYGEN
Item Number: D046
Stored at 1 Time: 320.00
Measurement Units: 0000001200 Storage Method: Not reported
Carcinogen: Yes Annual Qty String: 0000000320
Quantity Stored At One Time: 7782-44-7
Annual Quantity String: 1200.00
Material Safety Data Sheet: C
1st Hazard Category: Not reported
2nd Hazard Category: FIRE HAZARD

Chemical Name: VARIOUS COLORS OF SOLVENT BASED LIQUID INKS IN 1 GALLON CANS
Item Number: D041
Stored at 1 Time: 85.00
Measurement Units: 0000000160 Storage Method: Not reported
Carcinogen: Yes Annual Qty String: 0000000085
Quantity Stored At One Time: 78-93-3
Annual Quantity String: 160.00
Material Safety Data Sheet: M
1st Hazard Category: Not reported
2nd Hazard Category: FIRE HAZARD

Chemical Name: NITROGEN-8 CYLINDERS AT 304 HELIUM (291 CUFT) 7440-59-7
Item Number: D040
Stored at 1 Time: 460.00
Measurement Units: 0000000600 Storage Method: Not reported
Carcinogen: Yes Annual Qty String: 0000000460
Quantity Stored At One Time: 7727-37-9
Annual Quantity String: 600.00
Material Safety Data Sheet: C
1st Hazard Category: Not reported
2nd Hazard Category: SUDDN RLSE OF PRES

Chemical Name: PROPANE LIQUIFIED PETROLEUM GAS
Item Number: D001
Stored at 1 Time: 200.00
Measurement Units: 0000000500 Storage Method: Not reported
Carcinogen: Yes Annual Qty String: 0000000200
Quantity Stored At One Time: 68476-85-7
Annual Quantity String: 500.00
Material Safety Data Sheet: C
1st Hazard Category: Not reported
2nd Hazard Category: FIRE HAZARD

JUDD WIRE (Continued) **S104746374**

Chemical Name: SULFUR HEXAFLOURIDE-2 CY.AT 288 CUFT EA & 2012 CUFT .11 ELECTRON BEAM GENER
Item Number: D038
Stored at 1 Time: 2600.00
Measurement Units: 0000006900
Storage Method: Not reported
Carcinogen: Yes
Annual Qty String: 0000002600
Quantity Stored At One Time: 2551-62-4
Annual Quantity String: 6900.00
Material Safety Data Sheet: P
1st Hazard Category: Not reported
2nd Hazard Category: SUDDN RLSE OF PRES

Chemical Name: CARBON DIOXIDE GAS
Item Number: D044
Stored at 1 Time: 600.00
Measurement Units: 0000000900
Storage Method: Not reported
Carcinogen: Yes
Annual Qty String: 0000000600
Quantity Stored At One Time: 124-38-9
Annual Quantity String: 900.00
Material Safety Data Sheet: C
1st Hazard Category: Not reported
2nd Hazard Category: SUDDN RLSE OF PRES

HMMD UNDERGROUND TANKS:
Tank Number: T001
Tank ID Number: 1
Capacity (Gal): 550.00
Tank Exempt: No
Waste or Product: Waste
Tank Contents: WASTE OIL

HMMD WASTE STREAMS:
Inspection Date: 11/15/2001 0:00:00
Waste Item #: W002
Waste Code: 221.00
Waste Name: WASTE OIL & MIXED OIL
Qnty at Inspection: 1125.00
Annual Quantity: 4625.00
Measurement Unit: GAL
Treatment Method: RECYCLE
Storage Method: METAL DRUMS,55 GALLONS
Waste Description: WASTE OIL
Haz Waste Hauler: ADCOM EXPRESS, INC.
Carcinogen: No
Annual Qty String: 0000004625
Quantity String: 0000001125

Inspection Date: 11/15/2001 0:00:00
Waste Item #: W003
Waste Code: 213.00
Waste Name: HYDROCARBON SOLVENTS
Qnty at Inspection: 59.00
Annual Quantity: 197.00
Measurement Unit: GAL
Treatment Method: RECYCLE
Storage Method: PROCESSING EQUIPMENT
Waste Description: PARTS CLEANER
Haz Waste Hauler: SAFETY-KLEEN
Carcinogen: No
Annual Qty String: 0000000197
Quantity String: 0000000059

Inspection Date: 11/15/2001 0:00:00
Waste Item #: W005
Waste Code: 352.00
Waste Name: ORGANIC SOLIDS (OTHER)
Qnty at Inspection: 55.00
Annual Quantity: 165.00
Measurement Unit: GAL
Treatment Method: INCINERATION
Storage Method: METAL DRUMS,55 GALLONS
Waste Description: MEK & MIBK WITH INK
Haz Waste Hauler: ADCOM EXPRESS, INC.
Carcinogen: No
Annual Qty String: 0000000165
Quantity String: 0000000055

Inspection Date: 11/15/2001 0:00:00
Waste Item #: W007

JUDD WIRE (Continued) **S104746374**

Waste Code: 223.00
Qnty at Inspection: 600.00
Measurement Unit: LBS
Treatment Method: UNKNOWN
Waste Description: OILY ABSORBENT
Carcinogen: No
Quantity String: 0000000600
Waste Name: UNSPEC OIL CONTAINING WASTE
Annual Quantity: 3050.00
Storage Method: METAL DRUMS,55 GALLONS
Haz Waste Hauler: ADCOM EXPRESS, INC.
Annual Qty String: 0000003050

HMMD VIOLATIONS:
Inspection Date: Not reported
Waste Code: Not reported
Type of Violation: Not reported
Violation Description:
Occurrences: Not reported

HMMD ENVIRONMENTAL ASSESSMENT INFORMATION:
Case Status Date: 08/31/1990 0:00:00
Case Type: TANK, RELEASE (W)
Case Status: CLOSED
Release Occurrence Number: 001
Historical Name: JUDD WIRE
Date Release Began: 02/28/1989 0:00:00
Lead Agency: DEH

The CA HMMD database may contain additional details for this site.
Please click here or contact your EDR Account Executive for more information.

68
SSW
1/2-1
4438 ft.

1241 LINDA VISTA DRIVE
SAN MARCOS, CA 92069

CHMIRS **S100277480**
N/A

Relative:
Lower

Actual:
534 ft.

CHMIRS:

OES Control Number:	9116421
Chemical Name:	Not reported
Extent of Release:	Not reported
Property Use:	Mercantile, Business
Incident Date:	11-APR-91
Date Completed:	11-APR-91
Time Completed :	823
Agency Id Number :	37145
Agency Incident Number :	91-0894-1
OES Incident Number :	9116421
Time Notified :	816
Surrounding Area :	600
Estimated Temperature :	70
Property Management :	P
More Than Two Substances Involved? :	N
Special Studies 1 :	Not reported
Special Studies 2 :	Not reported
Special Studies 3 :	Not reported
Special Studies 4 :	Not reported
Special Studies 5 :	Not reported
Special Studies 6 :	Not reported
Responding Agency Personel # Of Injuries :	0
Responding Agency Personel # Of Fatalities :	0
Resp Agncy Personel # Of Decontaminated :	0
Others Number Of Decontaminated :	0
Others Number Of Injuries :	0
Others Number Of Fatalities :	0
Vehicle Make/year :	Not reported

(Continued) **S100277480**

Vehicle License Number :	Not reported
Vehicle State :	Not reported
Vehicle Id Number :	Not reported
CA/DOT/PUC/ICC Number :	Not reported
Company Name :	Not reported
Reporting Officer Name/ID :	CHUCK MORTON-CAPT. (E-1411)
Report Date :	11-APR-91
Comments :	No
Facility Telephone Number :	619 744-7200
Waterway Involved :	Not reported
Waterway :	Not reported
Spill Site :	Not reported
Cleanup By :	Not reported
Containment :	Not reported
What Happened :	Not reported
Type :	Not reported
Other :	Not reported
Chemical 1 :	Not Reported
Chemical 2 :	Not Reported
Chemical 3 :	Not Reported
Date/Time :	Not reported
Evacuations :	Not reported

69
SW
1/2-1
4438 ft.

Relative:
Lower

Actual:
547 ft.

MACDERMID PRINTING SOLUTIONS
260 S PACIFIC ST
SAN MARCOS, CA 92069

RCRIS-SQG **1000344725**
FINDS **92069NPPSY36**
TRIS
LUST
HIST UST
Cortese

RCRIS:
Owner: NOT REQUIRED
(415) 555-1212
EPA ID: CAD063237341

Contact: ENVIRONMENTAL MANAGER

Classification: Small Quantity Generator
TSDF Activities: Not reported

BIENNIAL REPORTS:
Last Biennial Reporting Year: 1999

Waste	Quantity (Lbs)	Waste	Quantity (Lbs)
D001	7120.00	D002	1000.00
D007	1000.00	D008	440.00
D009	2820.00	D035	440.00
F002	440.00	F003	1260.00
F005	1700.00	U007	1000.00

Violation Status: Violations exist

Regulation Violated:	262.10-12.A
Area of Violation:	GENERATOR-ALL REQUIREMENTS (OVERSIGHT)
Date Violation Determined:	02/23/1993
Actual Date Achieved Compliance:	02/23/1998
Regulation Violated:	262.10-12.A
Area of Violation:	GENERATOR-ALL REQUIREMENTS (OVERSIGHT)
Date Violation Determined:	12/17/1991
Actual Date Achieved Compliance:	02/23/1993
Regulation Violated:	262.10-12.A

MACDERMID PRINTING SOLUTIONS (Continued) **1000344725**

Area of Violation: GENERATOR-ALL REQUIREMENTS (OVERSIGHT)
Date Violation Determined: 12/07/1990
Actual Date Achieved Compliance: 12/17/1991

There are 3 violation record(s) reported at this site:

Evaluation	Area of Violation	Date of Compliance
Compliance Evaluation Inspection	GENERATOR-ALL REQUIREMENTS (OVERSIGHT)	19980223
Compliance Evaluation Inspection	GENERATOR-ALL REQUIREMENTS (OVERSIGHT)	19930223
Compliance Evaluation Inspection	GENERATOR-ALL REQUIREMENTS (OVERSIGHT)	19911217

FINDS:
Other Pertinent Environmental Activity Identified at Site:
Biennial Reporting System (BRS)
Facility Registry System (FRS)
NEI
National Emissions Trends (NET)
National Toxics Inventory (NTI)
Permit Compliance System (PCS)
Resource Conservation and Recovery Act information system (RCRAINFO)
Toxic Chemical Release Inventory System (TRIS)

State LUST:
Cross Street: LA MIRADA
Qty Leaked: Not reported
Case Number 9UT369
Reg Board: 9
Chemical: Solvents
Lead Agency: Regional Board
Local Agency : 0
Case Type: Aquifer affected
Status: Case Closed
Abate Method: Excavate and Treat - remove contaminated soil and treat (includes spreading or land farming), Remove Free Product - remove floating product from water table
Review Date: Not reported
Confirm Leak: Not reported
Workplan: Not reported
Prelim Assess: Not reported
Pollution Char: Not reported
Remed Plan: Not reported
Remed Action: 11/16/87
Monitoring: Not reported
Close Date: 02/29/1996
Release Date: 01/22/1985
Cleanup Fund Id : Not reported
Discover Date : 01/22/1985
Enforcement Dt : 7/19/85
Enf Type: EF
Enter Date : 01/22/1985
Funding: Responsible Party
Staff Initials: Not reported
How Discovered: OM
How Stopped: Not reported
Interim : Yes
Leak Cause: Structure Failure
Leak Source: Tank
MTBE Date : / /
Max MTBE GW : 0 Parts per Billion
MTBE Tested: Not Required to be Tested.
Priority: 1A

MACDERMID PRINTING SOLUTIONS (Continued) **1000344725**

Local Case # : H06217-001
Beneficial: MUN
Staff : VRR
GW Qualifier : Not reported
Max MTBE Soil : Not reported
Soil Qualifier : Not reported
Hydr Basin #: 904.52
Operator : NARING, JOSEPH A.
Oversight Prgm: RB Lead Underground Storage Tank
Oversight Prgm : UST
Review Date : 02/18/2000
Stop Date : 01/18/1985
Work Suspended :Not reported
Responsible PartyNAPP SYSTEMS
RP Address: 360 SOUTH PACIFIC, SAN MARCOS, CA 92060
Global Id: T0607302457
Org Name: Not reported
Contact Person: Not reported
MTBE Conc: 0
Mtbe Fuel: 0
Water System Name: Not reported
Well Name: Not reported
Distance To Lust: 0
Waste Discharge Global ID: Not reported
Waste Disch Assigned Name: Not reported

LUST Region 9:
Case Number: 9UT369
Local Agency: 37000
Substance: 13
Date Found: 01/22/1985
Date Stopped: 01/18/1985
Source: Tank
Lead Agency: Regional Board
Status: Case Closed
Case Type: Aquifer affected
Abate Method: Excavate and Treat - remove contaminated soil and treat (includes spreading or land farming), Remove Free Product - remove floating product from water table
Confirm Date: Not reported
Prelim Assess: Not reported
Remed Plan: 11/16/87
Began Monitor: 2/29/96
Enforce Type: Cleanup and Abatement Orders
Enforce Date: 7/19/85
Pilot Program: UST
Basin Number: 904.52
File Dispn: Not reported
Release Date: 01/22/1985
Qty Leaked: Not reported
How Found: Other Means
How Stopped: Remove Contents
Cause: Structure Failure
Submit Workplan: Not reported
Desc Pollution: Not reported
Remed Action: 11/16/87
Closed Date: 2/29/96
Local Case: H06217-001
Gwater Depth: 5'
Interim Remedial Actions: Yes
Beneficial Use: MUN
Cleanup and Abatement order Number: 85-70
Waste Discharge Requirement Number: Not reported
NPDES Number: Not reported

CORTESE:
Reg Id: 9UT369
Region: CORTESE
Reg By: Leaking Underground Storage Tanks

MACDERMID PRINTING SOLUTIONS (Continued) **1000344725**

UST HIST:

Facility ID:	19396	Tank Used for:	PRODUCT
Tank Num:	1	Container Num:	001
Tank Capacity:	12000	Year Installed:	1973
Type of Fuel:	DIESEL	Tank Construction:	.240 inches
Leak Detection:	Stock Inventor		
Contact Name:	AUGUST FISCHER, PRES.	Telephone:	(619) 744-4387
Total Tanks:	8	Region:	STATE
Facility Type:	Other	Other Type:	MANUFACTURING

Facility ID:	19396	Tank Used for:	PRODUCT
Tank Num:	2	Container Num:	002
Tank Capacity:	30000	Year Installed:	1975
Type of Fuel:	DIESEL	Tank Construction:	.36522 inches
Leak Detection:	Stock Inventor		
Contact Name:	AUGUST FISCHER, PRES.	Telephone:	(619) 744-4387
Total Tanks:	8	Region:	STATE
Facility Type:	Other	Other Type:	MANUFACTURING

Facility ID:	19396	Tank Used for:	WASTE
Tank Num:	3	Container Num:	003
Tank Capacity:	12000	Year Installed:	1973
Type of Fuel:	Not Reported	Tank Construction:	Not reported
Leak Detection:	None		
Contact Name:	AUGUST FISCHER, PRES.	Telephone:	(619) 744-4387
Total Tanks:	8	Region:	STATE
Facility Type:	Other	Other Type:	MANUFACTURING

Facility ID:	19396	Tank Used for:	WASTE
Tank Num:	4	Container Num:	004
Tank Capacity:	24000	Year Installed:	1973
Type of Fuel:	Not Reported	Tank Construction:	1/4 inches
Leak Detection:	None		
Contact Name:	AUGUST FISCHER, PRES.	Telephone:	(619) 744-4387
Total Tanks:	8	Region:	STATE
Facility Type:	Other	Other Type:	MANUFACTURING

Facility ID:	19396	Tank Used for:	Not Reported
Tank Num:	5	Container Num:	005
Tank Capacity:	1000	Year Installed:	1983
Type of Fuel:	Not Reported	Tank Construction:	3/16 inches
Leak Detection:	None		
Contact Name:	AUGUST FISCHER, PRES.	Telephone:	(619) 744-4387
Total Tanks:	8	Region:	STATE
Facility Type:	Other	Other Type:	MANUFACTURING

Facility ID:	19396	Tank Used for:	WASTE
Tank Num:	6	Container Num:	006
Tank Capacity:	1000	Year Installed:	1982
Type of Fuel:	Not Reported	Tank Construction:	3/16 inches
Leak Detection:	None		
Contact Name:	AUGUST FISCHER, PRES.	Telephone:	(619) 744-4387
Total Tanks:	8	Region:	STATE
Facility Type:	Other	Other Type:	MANUFACTURING

Facility ID:	19396	Tank Used for:	WASTE
Tank Num:	7	Container Num:	007

MACDERMID PRINTING SOLUTIONS (Continued) **1000344725**

Tank Capacity:	55	Year Installed:	1973
Type of Fuel:	Not Reported	Tank Construction:	4 inches
Leak Detection:	Visual		
Contact Name:	AUGUST FISCHER, PRES.	Telephone:	(619) 744-4387
Total Tanks:	8	Region:	STATE
Facility Type:	Other	Other Type:	MANUFACTURING
Facility ID:	19396	Tank Used for:	WASTE
Tank Num:	8	Container Num:	008
Tank Capacity:	2000	Year Installed:	Not reported
Type of Fuel:	Not Reported	Tank Construction:	8 inches
Leak Detection:	None		
Contact Name:	AUGUST FISCHER, PRES.	Telephone:	(619) 744-4387
Total Tanks:	8	Region:	STATE
Facility Type:	Other	Other Type:	MANUFACTURING

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70 **GOURMET LIQUOR/EZ SERVE 0** **Cortese** **S101302294**
NW **2966 SANTA FE** **N/A**
1/2-1 **VISTA, CA 92038**
4528 ft.

Relative: **Lower**

Actual: **501 ft.**

CORTESE:

Reg Id:	9UT154
Region:	CORTESE
Reg By:	Leaking Underground Storage Tanks

Q71 **MONIER COMPANY** **LUST** **S102433932**
SSW **1385 LINDA VISTA DR** **Cortese** **N/A**
1/2-1 **SAN MARCOS, CA 92069**
4723 ft.

Site 1 of 2 in cluster Q

Relative: **Lower**

Actual: **540 ft.**

LUST Region 9:

Case Number:	9UT2985	Release Date:	01/31/1995
Local Agency:	37000		
Substance:	12034	Qty Leaked:	0
Date Found:	01/20/1995	How Found:	Tank Closure
Date Stopped:	01/20/1995	How Stopped:	Close Tank
Source:	Unknown	Cause:	Unknown
Lead Agency:	Local Agency		
Status:	Case Closed		
Case Type:	Soil only		
Abate Method:	Excavate and Dispose - remove contaminated soil and dispose in approved site		
Confirm Date:	Not reported	Submit Workplan:	Not reported
Prelim Assess:	Not reported	Desc Pollution:	Not reported
Remed Plan:	Not reported	Remed Action:	Not reported
Began Monitor:	1/18/96	Closed Date:	1/18/96
Enforce Type:	Not reported		
Enforce Date:	Not reported		
Pilot Program:	LOP	Local Case:	H04990-002
Basin Number:	904.52	Gwater Depth:	12'
File Dispn:	File discarded, case closed		

Interim Remedial Actions:	Yes
Beneficial Use:	MUNBU
Cleanup and Abatement order Number:	Not reported
Waste Discharge Requirement Number:	Not reported
NPDES Number:	Not reported

MONIER COMPANY (Continued) **S102433932**

CORTESE:
Reg Id: 9UT2985
Region: CORTESE
Reg By: Leaking Underground Storage Tanks

Q72 **ROOFING WHOLESALE CO. INC** **LUST** **S100727449**
SSW **1401 LINDA VISTA DR** **HAZNET** **N/A**
1/2-1 **SAN MARCOS, CA 92069** **Cortese**
4736 ft. **San Diego Co. HMMD**

Site 2 of 2 in cluster Q

Relative: Lower

Actual: 540 ft.

State LUST:

Cross Street:	Not reported		
Qty Leaked:	Not reported		
Case Number	9UT3208		
Reg Board:	9		
Chemical:	Diesel		
Lead Agency:	Local Agency		
Local Agency :	0		
Case Type:	Aquifer affected		
Status:	Case Closed		
Review Date:	Not reported	Confirm Leak:	Not reported
Workplan:	11/30/95	Prelim Assess:	11/30/95
Pollution Char:	Not reported	Remed Plan:	Not reported
Remed Action:	11/30/95		
Monitoring:	Not reported		
Close Date:	06/27/1996		
Release Date:	Not reported		
Cleanup Fund Id :	Not reported		
Discover Date :	11/30/1995		
Enforcement Dt :	Not reported		
Enf Type:	Warning/notice of violation to uncooperative responsible parties (includes CDO and CAO)		
Enter Date :	/ /		
Funding:	Not reported		
Staff Initials:	FMA		
How Discovered:	Not reported		
How Stopped:	Not reported		
Interim :	Not reported		
Leak Cause:	Not reported		
Leak Source:	Not reported		
MTBE Date :	/ /		
Max MTBE GW :	0 Parts per Billion		
MTBE Tested:	Not Required to be Tested.		
Priority:	High priority		
Local Case # :	H07034-002		
Beneficial:	Not reported		
Staff :	UNK		
GW Qualifier :	Not reported		
Max MTBE Soil :	Not reported		
Soil Qualifier :	Not reported		
Hydr Basin #:	Not reported		
Operator :	Not reported		
Oversight Prgm:	Local Oversight Program UST		
Oversight Prgm :	LOP		
Review Date :	Not reported		
Stop Date :	/ /		
Work Suspended :	Not reported		
Responsible Party	Not reported		

ROOFING WHOLESALE CO. INC (Continued) **S100727449**

RP Address: Not reported
Global Id: T0607301964
Org Name: Not reported
Contact Person: Not reported
MTBE Conc: 0
Mtbe Fuel: 0
Water System Name: Not reported
Well Name: Not reported
Distance To Lust: 0
Waste Discharge Global ID: Not reported
Waste Disch Assigned Name: Not reported

LUST Region 9:

Case Number:	9UT3208	Release Date:	11/30/1995
Local Agency:	37000		
Substance:	12034	Qty Leaked:	0
Date Found:	11/30/1995	How Found:	Not reported
Date Stopped:	11/30/1995	How Stopped:	Not reported
Source:	Not reported	Cause:	Not reported
Lead Agency:	Local Agency		
Status:	Case Closed		
Case Type:	Other ground water affected		
Abate Method:	Excavate and Dispose - remove contaminated soil and dispose in approved site		
Confirm Date:	Not reported	Submit Workplan:	Not reported
Prelim Assess:	Not reported	Desc Pollution:	Not reported
Remed Plan:	Not reported	Remed Action:	Not reported
Began Monitor:	6/27/96	Closed Date:	6/27/96
Enforce Type:	SEL		
Enforce Date:	12/12/95		
Pilot Program:	LOP	Local Case:	H07034-002
Basin Number:	904.52	Gwater Depth:	10'
File Dispn:	Administratively opened on database, however no file physically exists		

Interim Remedial Actions: Not reported
Beneficial Use: MUNBU
Cleanup and Abatement order Number: Not reported
Waste Discharge Requirement Number: Not reported
NPDES Number: Not reported

HAZNET:

Gepaid: CAC001044016
TSD EPA ID: CAT080013352
Gen County: San Diego
Tsd County: Los Angeles
Tons: .4170
Waste Category: Waste oil and mixed oil
Disposal Method: Recycler
Contact: ROOFING WHOLESALE
Telephone: (000) 000-0000
Mailing Address: 1401 LINDA VISTA DR
SAN MARCOS, CA 92069
County San Diego

ROOFING WHOLESALE CO. INC (Continued) **S100727449**

Gepaid: CAC001044016
TSD EPA ID: CAT080013352
Gen County: San Diego
Tsd County: Los Angeles
Tons: 2.0850
Waste Category: Waste oil and mixed oil
Disposal Method: Recycler
Contact: ROOFING WHOLESALE
Telephone: (000) 000-0000
Mailing Address: 1401 LINDA VISTA DR
SAN MARCOS, CA 92069
County San Diego

CORTESE:
Reg Id: 9UT3208
Region: CORTESE
Reg By: Leaking Underground Storage Tanks

HMMD:
Facility ID: H07034
Inactive Indicator: Active
SIC: 5033
Owner: ROOFING WHOLESALE, INC
Mailing Address: SAN MARCOS
CA
92069
Corporate Code: 18
Census Tract #: 20009
Inspection Date: 05/03/2001 0:00:00
Inspector Name: MONNIER
Facility Contact: DUANE WESTON
Property Owner: BLANK LINE AMERICA
PO Address: SAN MARCOS
CA
92069
Tank Owner: BLANK LINE AMERICA
TO Address: SAN MARCOS
CA
92069
Last Update: 06/03/2001 0:00:00
Last Delinquent Letter: Not reported
Last Letter Type: 30
Violation Notice Issued: Not reported
Map Code/Business Plan on File: Not reported
Business Plan Acceptance Date: 10/21/96
Reinspection Date Y2K Compatible: Jul 2002

Business Code: MISC GENERAL BUILDING
Permit Expiration: 07/31
2nd Name: ATTN: CONTROLLER-STEVE ROLD

Fire Dept District: SAN MARCOS FPD
EPA ID: Not reported
Reinspection Date: 07/02
Gas Station: Not reported
Delinquent Flag: Not Delinquent

HMMD DISCLOSURE INVENTORY:
Chemical Name: PROPANE COMPRESSED GAS
Item Number: D003
Stored at 1 Time: 475.00
Measurement Units 0000006000
Carcinogen: Yes
Quantity Stored At One Time: 74-98-6
Annual Quantity String: 6000.00
Material Safety Data Sheet: A
1st Hazard Category: Not reported
2nd Hazard Category: FIRE HAZARD

Storage Method: Not reported
Annual Qty String: 0000000475

ROOFING WHOLESALE CO. INC (Continued) **S100727449**

Chemical Name: ASPHALT ALUMINUM PAINT, ACRYLIC WATER BASE PAINTS
Item Number: D002
Stored at 1 Time: 200.00
Measurement Units: 0000001500
Storage Method: Not reported
Carcinogen: Yes
Annual Qty String: 0000000200
Quantity Stored At One Time: 124-18-5
Annual Quantity String: 1500.00
Material Safety Data Sheet: M
1st Hazard Category: Not reported
2nd Hazard Category: FIRE HAZARD

Chemical Name: PLASTIC ROOF CEMENT, COLD ADHESIVE, ASPHALT EMOLSION
Item Number: D001
Stored at 1 Time: 3000.00
Measurement Units: 0000015000
Storage Method: Not reported
Carcinogen: Yes
Annual Qty String: 0000003000
Quantity Stored At One Time: 64742-88-7
Annual Quantity String: 15000.00
Material Safety Data Sheet: M
1st Hazard Category: Not reported
2nd Hazard Category: FIRE HAZARD

HMMD UNDERGROUND TANKS:
Tank Number: T001
Tank ID Number: 01
Capacity (Gal): 8000.00
Tank Exempt: No
Waste or Product: Product
Tank Contents: DIESEL

Tank Number: T002
Tank ID Number: 02
Capacity (Gal): 8000.00
Tank Exempt: No
Waste or Product: Product
Tank Contents: DIESEL

HMMD WASTE STREAMS:
Inspection Date: Not reported
Waste Item #: Not reported
Waste Code: Not reported
Waste Name: Not reported
Qnty at Inspection: Not reported
Annual Quantity: Not reported
Measurement Unit: Not reported
Treatment Method: Not reported
Storage Method: Not reported
Waste Description: Not reported
Haz Waste Hauler: Not reported
Carcinogen: No
Annual Qty String: Not reported
Quantity String: Not reported

HMMD VIOLATIONS:
Inspection Date: 02/22/2000 0:00:00
Occurrences: 02
Waste Code: Not reported
Type of Violation: GENERAL VIOLATION
Violation Description: PERSONNEL TRAINING RECORDS NOT AVAILABLE TO SHOW THAT PERSONNEL HAVE RECEIVED INITIAL AND ANNUAL REFRESHER TRAINING. CCR 2732(B)

HMMD ENVIRONMENTAL ASSESSMENT INFORMATION:
Case Status Date: 06/27/1996 0:00:00
Case Type: TANK, RELEASE (W)
Case Status: CLOSED
Release Occurrence Number: 002
Historical Name: ROOFING WHOLESALE CO. INC
Date Release Began: 11/30/1995 0:00:00
Lead Agency: DEH

ROOFING WHOLESALE CO. INC (Continued) **S100727449**

The CA HMMD database may contain additional details for this site.
Please click here or contact your EDR Account Executive for more information.

73
SW
1/2-1
4741 ft.

Relative:
Lower

Actual:
544 ft.

1455 LINDA VISTA DRIVE # D
SAN MARCOS, CA 92069

CHMIRS **S100277339**
N/A

CHMIRS:

OES Control Number:	9115784
Chemical Name:	Not reported
Extent of Release:	Not reported
Property Use:	Manufacturing
Incident Date:	08-MAR-91
Date Completed:	08-MAR-92
Time Completed :	406
Agency Id Number :	37145
Agency Incident Number :	91-619-2
OES Incident Number :	9115784
Time Notified :	124
Surrounding Area :	500
Estimated Temperature :	40
Property Management :	P
More Than Two Substances Involved? :	N
Special Studies 1 :	Not reported
Special Studies 2 :	Not reported
Special Studies 3 :	Not reported
Special Studies 4 :	Not reported
Special Studies 5 :	Not reported
Special Studies 6 :	Not reported
Responding Agency Personel # Of Injuries :	0
Responding Agency Personel # Of Fatalities :	0
Resp Agncy Personel # Of Decontaminated :	0
Others Number Of Decontaminated :	0
Others Number Of Injuries :	0
Others Number Of Fatalities :	0
Vehicle Make/year :	Not reported
Vehicle License Number :	Not reported
Vehicle State :	Not reported
Vehicle Id Number :	Not reported
CA/DOT/PUC/ICC Number :	Not reported
Company Name :	Not reported
Reporting Officer Name/ID :	GREG WOOLF
Report Date :	08-MAY-91
Comments :	Yes
Facility Telephone Number :	619 744-7200
Waterway Involved :	Not reported
Waterway :	Not reported
Spill Site :	Not reported
Cleanup By :	Not reported
Containment :	Not reported
What Happened :	Not reported
Type :	Not reported
Other :	Not reported
Chemical 1 :	Not Reported
Chemical 2 :	Not Reported
Chemical 3 :	Not Reported
Date/Time :	Not reported
Evacuations :	Not reported

(Continued) S100277339

74
SSE
1/2-1
4822 ft.

R.D. WALTER TRUCKING
174 BENT AVE S
SAN MARCOS, CA 92069

LUST **S101302220**
Cortese **N/A**

Relative:
Lower

Actual:
547 ft.

LUST Region 9:

Case Number:	9UT1540	Release Date:	10/12/1989
Local Agency:	37000		
Substance:	12034	Qty Leaked:	Not reported
Date Found:	08/10/1989	How Found:	Tank Closure
Date Stopped:	08/10/1989	How Stopped:	Close Tank
Source:	Tank	Cause:	Overfill
Lead Agency:	Local Agency		
Status:	Case Closed		
Case Type:	Other ground water affected		
Abate Method:	Excavate and Dispose - remove contaminated soil and dispose in approved site		
Confirm Date:	4/26/92	Submit Workplan:	4/26/92
Prelim Assess:	Not reported	Desc Pollution:	Not reported
Remed Plan:	Not reported	Remed Action:	Not reported
Began Monitor:	11/3/95	Closed Date:	11/3/95
Enforce Type:	Not reported		
Enforce Date:	Not reported		
Pilot Program:	LOP	Local Case:	H02912-001
Basin Number:	904.52	Gwater Depth:	8'
File Dispn:	File discarded, case closed		

Interim Remedial Actions:	Yes
Beneficial Use:	MUN
Cleanup and Abatement order Number:	Not reported
Waste Discharge Requirement Number:	Not reported
NPDES Number:	Not reported

CORTESE:

Reg Id:	9UT1540
Region:	CORTESE
Reg By:	Leaking Underground Storage Tanks

75
SW
1/2-1
4909 ft.

SCHMID INSULATION
1520 LINDA VISTA DR
SAN MARCOS, CA 92069

LUST **S105036390**
Cortese **N/A**

Relative:
Lower

Actual:
543 ft.

State LUST:

Cross Street:	Not reported		
Qty Leaked:	Not reported		
Case Number	9UT1700		
Reg Board:	9		
Chemical:	Gasoline		
Lead Agency:	Local Agency		
Local Agency :	0		
Case Type:	Soil only		
Status:	Case Closed		
Review Date:	Not reported	Confirm Leak:	Not reported
Workplan:	5/4/90	Prelim Assess:	5/4/90
Pollution Char:	Not reported	Remed Plan:	Not reported
Remed Action:	1/3/65		
Monitoring:	Not reported		
Close Date:	02/08/1991		

SCHMID INSULATION (Continued) **S105036390**

Release Date: Not reported
Cleanup Fund Id : Not reported
Discover Date : 05/01/1990
Enforcement Dt : Not reported
Enf Type: Warning/notice of violation to uncooperative responsible parties (includes CDO and CAO)
Enter Date : / /
Funding: Not reported
Staff Initials: PSU
How Discovered: Not reported
How Stopped: Not reported
Interim : Not reported
Leak Cause: Not reported
Leak Source: Not reported
MTBE Date : / /
Max MTBE GW : 0 Parts per Billion
MTBE Tested: Site NOT Tested for MTBE.Includes Unknown and Not Analyzed.
Priority: Low priority. Priority ranking can change over time.
Local Case # : H04083-001
Beneficial: Not reported
Staff : UNK
GW Qualifier : Not reported
Max MTBE Soil : Not reported
Soil Qualifier : Not reported
Hydr Basin #: Not reported
Operator : Not reported
Oversight Prgm: Local Oversight Program UST
Oversight Prgm : LOP
Review Date : Not reported
Stop Date : / /
Work Suspended :Not reported
Responsible PartyNot reported
RP Address: Not reported
Global Id: T0607300498
Org Name: Not reported
Contact Person: Not reported
MTBE Conc: 0
Mtbe Fuel: 1
Water System Name: Not reported
Well Name: Not reported
Distance To Lust: 0
Waste Discharge Global ID: Not reported
Waste Disch Assigned Name: Not reported

CORTESE:
Reg Id: 9UT1700
Region: CORTESE
Reg By: Leaking Underground Storage Tanks

76
SW
1/2-1
5029 ft.

LUSARDI CONSTRUCTION
1570 LINDA VISTA DR
SAN MARCOS, CA 92069

LUST **1000155063**
HIST UST **N/A**
HAZNET
Cortese

Relative:
Lower

Actual:
547 ft.

State LUST:
Cross Street: Not reported
Qty Leaked: Not reported
Case Number 9UT3759
Reg Board: 9
Chemical: 0

LUSARDI CONSTRUCTION (Continued) **1000155063**

Lead Agency:	Local Agency		
Local Agency :	0		
Case Type:	Aquifer affected		
Status:	Remedial action (cleanup) Underway		
Review Date:	Not reported	Confirm Leak:	Not reported
Workplan:	1/3/65	Prelim Assess:	1/3/65
Pollution Char:	Not reported	Remed Plan:	Not reported
Remed Action:	1/3/65		
Monitoring:	Not reported		
Close Date:	Not reported		
Release Date:	Not reported		
Cleanup Fund Id :	Not reported		
Discover Date :	08/17/1998		
Enforcement Dt :	Not reported		
Enf Type:	Not reported		
Enter Date :	/ /		
Funding:	Not reported		
Staff Initials:	SCA		
How Discovered:	Not reported		
How Stopped:	Not reported		
Interim :	Not reported		
Leak Cause:	Not reported		
Leak Source:	Not reported		
MTBE Date :	01/01/1965		
Max MTBE GW :	3100 Parts per Billion		
MTBE Tested:	MTBE Detected. Site tested for MTBE & MTBE detected		
Priority:	1A		
Local Case # :	H05008-001		
Beneficial:	Not reported		
Staff :	UNK		
GW Qualifier :	=		
Max MTBE Soil :	0.33 Parts per Million		
Soil Qualifier :	=		
Hydr Basin #:	Not reported		
Operator :	Not reported		
Oversight Prgm:	Local Oversight Program UST		
Oversight Prgm :	LOP		
Review Date :	Not reported		
Stop Date :	/ /		
Work Suspended :	Not reported		
Responsible Party	Not reported		
RP Address:	Not reported		
Global Id:	T0607302526		
Org Name:	Not reported		
Contact Person:	Not reported		
MTBE Conc:	4		
Mtbe Fuel:	0		
Water System Name:	Not reported		
Well Name:	Not reported		
Distance To Lust:	0		
Waste Discharge Global ID:	Not reported		
Waste Disch Assigned Name:	Not reported		

LUSARDI CONSTRUCTION (Continued) **1000155063**

LUST Region 9:

Case Number:	9UT3759	Release Date:	10/30/1998
Local Agency:	37000		
Substance:	8006619	Qty Leaked:	0
Date Found:	08/17/1998	How Found:	Tank Closure
Date Stopped:	08/17/1998	How Stopped:	Close Tank
Source:	Unknown	Cause:	Unknown
Lead Agency:	Local Agency		
Status:	Preliminary site assessment underway		
Case Type:	Soil only		
Confirm Date:	Not reported	Submit Workplan:	Not reported
Prelim Assess:	Not reported	Desc Pollution:	Not reported
Remed Plan:	Not reported	Remed Action:	Not reported
Began Monitor:	Not reported	Closed Date:	Not reported
Enforce Type:	Not reported		
Enforce Date:	Not reported		
Pilot Program:	LOP	Local Case:	H05008-001
Basin Number:	904.52	Gwater Depth:	Not reported
File Dispn:	Administratively opened on database, however no file physically exists		
Interim Remedial Actions:	Not reported		
Beneficial Use:	MUNBU		
Cleanup and Abatement order Number:	Not reported		
Waste Discharge Requirement Number:	Not reported		
NPDES Number:	Not reported		

HAZNET:

Gepaid:	CAD982003972
TSD EPA ID:	CAD093459485
Gen County:	San Diego
Tsd County:	Fresno
Tons:	.0332
Waste Category:	Unspecified solvent mixture Waste
Disposal Method:	Transfer Station
Contact:	LUSARDI CONSTRUCTION CO A CA
Telephone:	(619) 744-3133
Mailing Address:	1570 LINDA VISTA DR
	SAN MARCOS, CA 92069 - 3808
County	San Diego

Gepaid:	CAD982003972
TSD EPA ID:	CAT000613976
Gen County:	San Diego
Tsd County:	Orange
Tons:	.4400
Waste Category:	Unspecified organic liquid mixture
Disposal Method:	Transfer Station
Contact:	LUSARDI CONSTRUCTION CO A CA
Telephone:	(619) 744-3133
Mailing Address:	1570 LINDA VISTA DR
	SAN MARCOS, CA 92069 - 3808
County	San Diego

LUSARDI CONSTRUCTION (Continued) **1000155063**

Gepaid: CAD982003972
TSD EPA ID: CAT080033681
Gen County: San Diego
Tsd County: Los Angeles
Tons: .2293
Waste Category: Aqueous solution with less than 10% total organic residues
Disposal Method: Disposal, Land Fill
Contact: LUSARDI CONSTRUCTION CO A CA
Telephone: (619) 744-3133
Mailing Address: 1570 LINDA VISTA DR
SAN MARCOS, CA 92069 - 3808
County San Diego

Gepaid: CAD982003972
TSD EPA ID: CAD982444481
Gen County: San Diego
Tsd County: San Bernardino
Tons: .5375
Waste Category: Other organic solids
Disposal Method: Transfer Station
Contact: LUSARDI CONSTRUCTION CO A CA
Telephone: (619) 744-3133
Mailing Address: 1570 LINDA VISTA DR
SAN MARCOS, CA 92069 - 3808
County San Diego

Gepaid: CAD982003972
TSD EPA ID: CAD982444481
Gen County: San Diego
Tsd County: San Bernardino
Tons: .0425
Waste Category: Other organic solids
Disposal Method: Not reported
Contact: LUSARDI CONSTRUCTION CO A CA
Telephone: (619) 744-3133
Mailing Address: 1570 LINDA VISTA DR
SAN MARCOS, CA 92069 - 3808
County San Diego

The CA HAZNET database contains 37 additional records for this site.
Please click here or contact your EDR Account Executive for more information.

CORTESE:
Reg Id: 9UT3759
Region: CORTESE
Reg By: Leaking Underground Storage Tanks

UST HIST:
Facility ID: 46853 Tank Used for: PRODUCT
Tank Num: 1 Container Num: 1
Tank Capacity: 12000 Year Installed: 1979
Type of Fuel: UNLEADED Tank Construction: Not reported
Leak Detection: Visual
Contact Name: Not reported Telephone: (619) 727-3211
Total Tanks: 3 Region: STATE
Facility Type: Other Other Type: CONSTRUCTION

Facility ID: 46853 Tank Used for: PRODUCT
Tank Num: 2 Container Num: 2

LUSARDI CONSTRUCTION (Continued) **1000155063**

Tank Capacity:	12000	Year Installed:	1979
Type of Fuel:	PREMIUM	Tank Construction:	Not reported
Leak Detection:	Visual		
Contact Name:	Not reported	Telephone:	(619) 727-3211
Total Tanks:	3	Region:	STATE
Facility Type:	Other	Other Type:	CONSTRUCTION
Facility ID:	46853	Tank Used for:	PRODUCT
Tank Num:	3	Container Num:	3
Tank Capacity:	12000	Year Installed:	1979
Type of Fuel:	DIESEL	Tank Construction:	Not reported
Leak Detection:	Visual		
Contact Name:	Not reported	Telephone:	(619) 727-3211
Total Tanks:	3	Region:	STATE
Facility Type:	Other	Other Type:	CONSTRUCTION

77 **MARDEN SUSCO INC.** **Cortese** **S104745544**
SW **1550 LINDA VISTA DR W** **San Diego Co. HMMD** **N/A**
1/2-1 **SAN MARCOS, CA 92069** **LUST**
5059 ft.

Relative:
Lower

Actual:
552 ft.

State LUST:

Cross Street:	Not reported		
Qty Leaked:	Not reported		
Case Number	9UT1149		
Reg Board:	9		
Chemical:	Gasoline		
Lead Agency:	Local Agency		
Local Agency :	0		
Case Type:	Soil only		
Status:	Case Closed		
Review Date:	Not reported	Confirm Leak:	Not reported
Workplan:	10/5/88	Prelim Assess:	10/5/88
Pollution Char:	Not reported	Remed Plan:	Not reported
Remed Action:	1/3/65		
Monitoring:	Not reported		
Close Date:	01/27/1989		
Release Date:	Not reported		
Cleanup Fund Id :	Not reported		
Discover Date :	01/27/1988		
Enforcement Dt :	Not reported		
Enf Type:	Not reported		
Enter Date :	/ /		
Funding:	Not reported		
Staff Initials:	AFR		
How Discovered:	Not reported		
How Stopped:	Not reported		
Interim :	Not reported		
Leak Cause:	Not reported		
Leak Source:	Not reported		
MTBE Date :	/ /		
Max MTBE GW :	0 Parts per Billion		
MTBE Tested:	Site NOT Tested for MTBE.Includes Unknown and Not Analyzed.		
Priority:	Low priority. Priority ranking can change over time.		
Local Case # :	H02755-001		
Beneficial:	Not reported		
Staff :	UNK		
GW Qualifier :	Not reported		
Max MTBE Soil :	Not reported		

MARDEN SUSCO INC. (Continued) **S104745544**

Soil Qualifier : Not reported
Hydr Basin #: Not reported
Operator : Not reported
Oversight Prgm: Local Oversight Program UST
Oversight Prgm : LOP
Review Date : Not reported
Stop Date : / /
Work Suspended :Not reported
Responsible PartyNot reported
RP Address: Not reported
Global Id: T0607300137
Org Name: Not reported
Contact Person: Not reported
MTBE Conc: 0
Mtbe Fuel: 1
Water System Name: Not reported
Well Name: Not reported
Distance To Lust: 0
Waste Discharge Global ID: Not reported
Waste Disch Assigned Name: Not reported

CORTESE:
Reg Id: 9UT1149
Region: CORTESE
Reg By: Leaking Underground Storage Tanks

HMMD:
Facility ID: H02755
Inactive Indicator: Active
SIC: 5084
Owner: SCOTT GROENIGER
Mailing Address: SAN MARCOS
CA
92069, 3808
Corporate Code: 18
Census Tract #: 20009
Inspection Date: 05/30/2000 0:00:00
Inspector Name: MONNIER
Facility Contact: JOHN MEYERS
Property Owner: Not reported
PO Address: SAN MARCOS
CA
92069
Tank Owner: W C GROENIGER
TO Address: SAN MARCOS
CA
92069
Last Update: 03/03/2002 0:00:00
Last Delinquent Letter: Not reported
Last Letter Type: Not reported
Violation Notice Issued: Not reported
Map Code/Business Plan on File: Not reported
Business Plan Acceptance Date: 06/12/95
Reinspection Date Y2K Compatible: May 2002

Business Code: 1 WASTE ITEM OR 1 DISC
Permit Expiration: 05/31
2nd Name: Not reported

Fire Dept District: SAN MARCOS FPD
EPA ID: CAL000117909
Reinspection Date: 05/02
Gas Station: Not reported
Delinquent Flag: Not Delinquent

HMMD DISCLOSURE INVENTORY:
Chemical Name: PROPANE
Item Number: D002
Stored at 1 Time: 575.00

MARDEN SUSCO INC. (Continued) **S104745544**

Measurement Units 0000006000 Storage Method: Not reported
Carcinogen: Yes Annual Qty String: 0000000575
Quantity Stored At One Time: 74-98-6
Annual Quantity String: 6000.00
Material Safety Data Sheet: A
1st Hazard Category: Not reported
2nd Hazard Category: FIRE HAZARD

HMMD UNDERGROUND TANKS:
Tank Number: T001 Tank ID Number: 3001
Capacity (Gal): 1000.00 Tank Exempt: No
Waste or Product: Product Tank Contents: REGULAR UNLEADED

Tank Number: T002 Tank ID Number: 3002
Capacity (Gal): 1000.00 Tank Exempt: No
Waste or Product: Product Tank Contents: DIESEL

HMMD WASTE STREAMS:
Inspection Date: Not reported Waste Item #: Not reported
Waste Code: Not reported Waste Name: Not reported
Qnty at Inspection: Not reported Annual Quantity: Not reported
Measurement Unit: Not reported
Treatment Method: Not reported Storage Method: Not reported
Waste Description: Not reported Haz Waste Hauler: Not reported
Carcinogen: No Annual Qty String: Not reported
Quantity String: Not reported

HMMD VIOLATIONS:
Inspection Date: 05/30/2000 0:00:00 Occurrences: 01
Waste Code: Not reported
Type of Violation: GENERAL VIOLATION
Violation Description: HAZARDOUS MATERIALS HANDLER HAS NOT ESTABLISHED/IMPLEMENTED A BUSINESS PLAN HSC 25503.5

Inspection Date: 05/30/2000 0:00:00 Occurrences: 01
Waste Code: Not reported
Type of Violation: GENERAL VIOLATION
Violation Description: PERSONNEL TRAINING RECORDS NOT AVAILABLE TO SHOW THAT PERSONNEL HAVE RECEIVED INITIAL AND ANNUAL REFRESHER TRAINING. CCR 2732(B)

HMMD ENVIRONMENTAL ASSESSMENT INFORMATION:
Case Status Date: 01/27/1989 0:00:00
Case Type: TANK, RELEASE
Case Status: CLOSED
Release Occurrence Number: 001
Historical Name: MARDEN SUSCO
Date Release Began: 01/27/1988 0:00:00
Lead Agency: DEH

The CA HMMD database may contain additional details for this site.
Please click here or contact your EDR Account Executive for more information.

78
SSE
1/2-1
5153 ft.

FIRST NATIONAL BANK
885 SAN MARCOS BLVD
SAN MARCOS, CA 92069

Cortese **S104753084**
San Diego Co. HMMD **N/A**

Relative:
Lower

Actual:
541 ft.

CORTESE:
Reg Id: 9UT2319
Region: CORTESE
Reg By: Leaking Underground Storage Tanks

HMMD:

Facility ID:	H32266		
Inactive Indicator:	Active	Business Code:	Not reported
SIC:	Not reported	Permit Expiration:	00/00
Owner:	FIRST NATIONAL BANK/N COUNTY	2nd Name:	Not reported
Mailing Address:	SAN MARCOS		
	CA		
	92069		
Corporate Code:	18	Fire Dept District:	SAN MARCOS FPD
Census Tract #:	20009	EPA ID:	Not reported
Inspection Date:	Not reported	Reinspection Date:	Not reported
Inspector Name:	Not reported	Gas Station:	Not reported
Facility Contact:	PAT CAHALAN	Delinquent Flag:	Not Delinquent
Property Owner:	Not reported		
PO Address:	Not reported		
Tank Owner:	Not reported		
TO Address:	Not reported		
Last Update:	04/24/1998 0:00:00		
Last Delinquent Letter:	Not reported		
Last Letter Type:	Not reported		
Violation Notice Issued:	Not reported		
Map Code/Business Plan on File:	Not reported		
Business Plan Acceptance Date:	Not reported		
Reinspection Date Y2K Compatible:	Not reported		

HMMD DISCLOSURE INVENTORY:

Chemical Name:	Not reported		
Item Number:	Not reported		
Stored at 1 Time:	Not reported		
Measurement Units:	Not reported	Storage Method:	Not reported
Carcinogen:	No	Annual Qty String:	Not reported
Quantity Stored At One Time:	Not reported		
Annual Quantity String:	Not reported		
Material Safety Data Sheet:	Not reported		
1st Hazard Category:	Not reported		
2nd Hazard Category:	Not reported		

HMMD UNDERGROUND TANKS:

Tank Number:	T001	Tank ID Number:	AT2708
Capacity (Gal):	1000.00	Tank Exempt:	No
Waste or Product:	Product	Tank Contents:	REGULAR UNLEADED

HMMD WASTE STREAMS:

Inspection Date:	Not reported	Waste Item #:	Not reported
Waste Code:	Not reported	Waste Name:	Not reported
Qnty at Inspection:	Not reported	Annual Quantity:	Not reported
Measurement Unit:	Not reported		
Treatment Method:	Not reported	Storage Method:	Not reported
Waste Description:	Not reported	Haz Waste Hauler:	Not reported
Carcinogen:	No	Annual Qty String:	Not reported
Quantity String:	Not reported		

FIRST NATIONAL BANK (Continued) **S104753084**

HMMD VIOLATIONS:
Inspection Date: Not reported
Waste Code: Not reported
Type of Violation: Not reported
Violation Description:
Occurrences: Not reported

HMMD ENVIRONMENTAL ASSESSMENT INFORMATION:
Case Status Date: 05/10/1994 0:00:00
Case Type: TANK, RELEASE
Case Status: CLOSED
Release Occurrence Number: 001
Historical Name: FIRST NATIONAL BANK OF N.C.
Date Release Began: 10/15/1992 0:00:00
Lead Agency: DEH

The CA HMMD database may contain additional details for this site.
Please click here or contact your EDR Account Executive for more information.

79
SSE
1/2-1
5154 ft.

CRIBBAGE LANE & SAN MARCOS BL. **Notify 65** **S100178376**
SAN MARCOS, CA **N/A**

Relative:
Lower

Actual:
540 ft.

NOTIFY 65:
Date Reported: Not reported Staff Initials: Not reported
Board File Number: Not reported
Facility Type: Not reported
Discharge Date: Not reported
Incident Description: Not Reported

80
SW
1/2-1
5193 ft.

ARMORED TRANSPORT **LUST** **S105033892**
1444 ALPINE PL **HAZNET** **N/A**
SAN MARCOS, CA 92069 **Cortese**
San Diego Co. HMMD

Relative:
Lower

Actual:
534 ft.

HAZNET:
Gepaid: CAC000882072
TSD EPA ID: CAD980883177
Gen County: San Diego
Tsd County: Kern
Tons: 2.9190
Waste Category: Waste oil and mixed oil
Disposal Method: Recycler
Contact: ARMORED TRANSPORT
Telephone: (000) 000-0000
Mailing Address: 3021 GILROY ST
LOS ANGELES, CA 90039
County San Diego

CORTESE:
Reg Id: 9UT1783
Region: CORTESE
Reg By: Leaking Underground Storage Tanks

HMMD:
Facility ID: H04297
Inactive Indicator: Active
SIC: 7381
Owner: ARMORED TRANSPORT OF CALIF INC
Business Code: Not reported
Permit Expiration: 00/00
2nd Name: ATTN: LARRY CONAR, BR. MGR.

ARMORED TRANSPORT (Continued) **S105033892**

Mailing Address: SAN MARCOS
CA
92069
Corporate Code: 18
Census Tract #: 20009
Inspection Date: 01/18/1995 0:00:00
Inspector Name: MANN
Facility Contact: JOHN SCOTT
Property Owner: Not reported
PO Address: SAN MARCOS
CA
92069
Tank Owner: ARMORED TRANSPORT OF CALIF INC
TO Address: SAN MARCOS
CA
92069
Last Update: 10/02/1998 0:00:00
Last Delinquent Letter: Not reported
Last Letter Type: Not reported
Violation Notice Issued: Not reported
Map Code/Business Plan on File: Not reported
Business Plan Acceptance Date: 09/24/93
Reinspection Date Y2K Compatible: Jan 1996
Fire Dept District: SAN MARCOS FPD
EPA ID: Not reported
Reinspection Date: 01/96
Gas Station: Not reported
Delinquent Flag: Not Delinquent

HMMD DISCLOSURE INVENTORY:
Chemical Name: Not reported
Item Number: Not reported
Stored at 1 Time: Not reported
Measurement Units: Not reported
Carcinogen: No
Quantity Stored At One Time: Not reported
Annual Quantity String: Not reported
Material Safety Data Sheet: Not reported
1st Hazard Category: Not reported
2nd Hazard Category: Not reported
Storage Method: Not reported
Annual Qty String: Not reported

HMMD UNDERGROUND TANKS:
Tank Number: T001
Capacity (Gal): 10000.00
Waste or Product: Product
Tank ID Number: 01
Tank Exempt: No
Tank Contents: DIESEL

Tank Number: T002
Capacity (Gal): 10000.00
Waste or Product: Product
Tank ID Number: 02
Tank Exempt: No
Tank Contents: REGULAR UNLEADED

Tank Number: T003
Capacity (Gal): 2000.00
Waste or Product: Product
Tank ID Number: 03
Tank Exempt: No
Tank Contents: DIESEL

HMMD WASTE STREAMS:
Inspection Date: Not reported
Waste Code: Not reported
Qnty at Inspection: Not reported
Measurement Unit: Not reported
Treatment Method: Not reported
Waste Description: Not reported
Carcinogen: No
Quantity String: Not reported
Waste Item #: Not reported
Waste Name: Not reported
Annual Quantity: Not reported
Storage Method: Not reported
Haz Waste Hauler: Not reported
Annual Qty String: Not reported

ARMORED TRANSPORT (Continued) **S105033892**

HMMD VIOLATIONS:
Inspection Date: 07/26/1993 0:00:00 Occurrences: 01
Waste Code: Not reported
Type of Violation: GENERAL VIOLATION
Violation Description: OPERATOR OF THE UNDERGROUND STORAGE TANK HAS NOT ENTERED INTO A WRITTEN CONTRACT WITH TANK OWNER AND NOTIFIED THE HMMD
HSC 25293(B)

Inspection Date: 07/26/1993 0:00:00 Occurrences: 01
Waste Code: Not reported
Type of Violation: GENERAL VIOLATION
Violation Description: DOCUMENTATION SHOWING EVIDENCE OF FINANCIAL RESPONSIBILITY IS NOT AVAILABLE.
HSC 25292.2

Inspection Date: 07/26/1993 0:00:00 Occurrences: 01
Waste Code: Not reported
Type of Violation: GENERAL VIOLATION
Violation Description: INVENTORY RECONCILIATION METHOD IS NOT PROPERLY IMPLEMENTED.
CCR 2646

Inspection Date: 07/26/1993 0:00:00 Occurrences: 01
Waste Code: Not reported
Type of Violation: GENERAL VIOLATION
Violation Description: GAUGING STICK IS UNREADABLE, WARPED, AND/OR HAS INCORRECT MEASUREMENT INCREMENTS.
CCR 2646(H)

Inspection Date: 01/18/1995 0:00:00 Occurrences: 01
Waste Code: Not reported
Type of Violation: GENERAL VIOLATION
Violation Description: BUSINESS PLAN DOES NOT INCLUDE AN ADEQUATE EMPLOYEE TRAINING PROGRAM WITH EMERGENCY NOTIFICATION,MITIGATION&EVACUATION PROCEDURES.HSC25504(C)

Inspection Date: 07/26/1993 0:00:00 Occurrences: 01
Waste Code: Not reported
Type of Violation: GENERAL VIOLATION
Violation Description: BUSINESS PLAN WAS NOT AMENDED WITHIN 30 DAYS FOR A 100% QUANTITY IN- CREASE,NEW DISCLOSABLE MATERIALS OR A CHANGE IN BUSINESS INFO.HSC 25505

HMMD ENVIRONMENTAL ASSESSMENT INFORMATION:
Case Status Date: 04/04/1991 0:00:00
Case Type: TANK, RELEASE
Case Status: CLOSED
Release Occurrence Number: 001
Historical Name: ARMORED TRANSPORT OF CAL INC
Date Release Began: 10/19/1988 0:00:00
Lead Agency: DEH

The CA HMMD database may contain additional details for this site.
Please click here or contact your EDR Account Executive for more information.

ARMORED TRANSPORT (Continued) **S105033892**

81
SSE
1/2-1
5204 ft.

SAN MARCOS COUNTY WATER D **Cortese** **S104745782**
788 SAN MARCOS **San Diego Co. HMMD** **N/A**
SAN MARCOS, CA 92069

Relative:
Lower

Actual:
547 ft.

CORTESE:
Reg Id: 9UT817
Region: CORTESE
Reg By: Leaking Underground Storage Tanks

HMMD:
Facility ID: H03763
Inactive Indicator: Inactive
SIC: 4941
Owner: VALLECITOS WATER DISTRICT
Mailing Address: SAN MARCOS
CA
92069, 4222
Corporate Code: 18
Census Tract #: 20009
Inspection Date: 04/06/1998 0:00:00
Inspector Name: FRIEDMAN
Facility Contact: GENE MADISON
Property Owner: SAN MARCOS WATER DISTRICT
PO Address: SAN MARCOS
CA
92069
Tank Owner: SAN MARCOS WATER DISTRICT
TO Address: SAN MARCOS
CA
92069
Last Update: 06/29/1998 0:00:00
Last Delinquent Letter: 06/04/1996 0:00:00
Last Letter Type: 30
Violation Notice Issued: Not reported
Map Code/Business Plan on File: Not reported
Business Plan Acceptance Date: 06/24/96
Reinspection Date Y2K Compatible: Jun 1999
Business Code: PUBLIC UTILITIES
Permit Expiration: 04/30
2nd Name: Not reported
Fire Dept District: SAN MARCOS FPD
EPA ID: CAD982020141
Reinspection Date: 06/99
Gas Station: Not reported
Delinquent Flag: Not Delinquent

HMMD DISCLOSURE INVENTORY:
Chemical Name: Not reported
Item Number: Not reported
Stored at 1 Time: Not reported
Measurement Units: Not reported
Carcinogen: No
Quantity Stored At One Time: Not reported
Annual Quantity String: Not reported
Material Safety Data Sheet: Not reported
1st Hazard Category: Not reported
2nd Hazard Category: Not reported
Storage Method: Not reported
Annual Qty String: Not reported

HMMD UNDERGROUND TANKS:
Tank Number: T001
Capacity (Gal): 1000.00
Waste or Product: Product
Tank ID Number: AT0982-1
Tank Exempt: No
Tank Contents: DIESEL

Tank Number: T002
Capacity (Gal): 1000.00
Waste or Product: Product
Tank ID Number: AT0982-2
Tank Exempt: No
Tank Contents: REGULAR UNLEADED

SAN MARCOS COUNTY WATER D (Continued) **S104745782**

HMMD WASTE STREAMS:

Inspection Date: 04/06/1998 0:00:00
Waste Code: 221.00
Qnty at Inspection: 280.00
Measurement Unit: GAL
Treatment Method: RECYCLE
Waste Description: WASTE OIL
Carcinogen: No
Quantity String: 0000000280

Waste Item #: W001
Waste Name: WASTE OIL & MIXED OIL
Annual Quantity: 1060.00
Storage Method: ABVGR TNK,STEEL 10-1000 G
Haz Waste Hauler: GOLDEN STATE ENVIRONMENTA
Annual Qty String: 0000001060

Inspection Date: 04/06/1998 0:00:00
Waste Code: 888.00
Qnty at Inspection: 800.00
Measurement Unit: LBS
Treatment Method: FILTERS/METAL RECLAI
Waste Description: EFR FILTERS
Carcinogen: No
Quantity String: 0000000800

Waste Item #: W002
Waste Name: USED OIL FILTERS
Annual Quantity: 800.00
Storage Method: METAL DRUMS,55 GALLONS
Haz Waste Hauler: UNREGISTERED HAZ WST HAUL
Annual Qty String: 0000000800

Inspection Date: 04/06/1998 0:00:00
Waste Code: 444.00
Qnty at Inspection: 100.00
Measurement Unit: LBS
Treatment Method: BATTERIES RECYCLED
Waste Description: Not reported
Carcinogen: No
Quantity String: 0000000100

Waste Item #: W003
Waste Name: USED BATTERIES
Annual Quantity: 600.00
Storage Method: FIBER/PLSTIC BOXES,CRTNS,CASES
Haz Waste Hauler: UNREGISTERED HAZ WST HAUL
Annual Qty String: 0000000600

Inspection Date: 04/06/1998 0:00:00
Waste Code: 214.00
Qnty at Inspection: 25.00
Measurement Unit: GAL
Treatment Method: RECYCLE
Waste Description: PARTS CLNR-1 UNIT
Carcinogen: No
Quantity String: 0000000025

Waste Item #: W005
Waste Name: UNSPEC SOLVENT MIXTURE
Annual Quantity: 25.00
Storage Method: PROCESSING EQUIPMENT
Haz Waste Hauler: UNKNOWN HAZ WST HAULER
Annual Qty String: 0000000025

HMMD VIOLATIONS:

Inspection Date: 01/14/1997 0:00:00
Waste Code: Not reported
Type of Violation: GENERAL VIOLATION
Violation Description: HAZARDOUS WASTE CONTAINERS ARE MISSING LABELS, ACCUMULATION DATE AND/OR ARE IMPROPERLY LABELED CCR 66262.34

Occurrences: 02

Inspection Date: 01/14/1997 0:00:00
Waste Code: Not reported
Type of Violation: GENERAL VIOLATION
Violation Description: PERSONNEL TRAINING RECORDS ARE INADEQUATE TO DOCUMENT COMPLIANCE WITH REQUIREMENTS FOR CURRENT AND FORMER EMPLOYEES CCR 66265.16

Occurrences: 01

Inspection Date: 01/14/1997 0:00:00
Waste Code: Not reported
Type of Violation: GENERAL VIOLATION
Violation Description: GENERATOR OF WASTE OIL HAS IMPROPERLY CONTAMINATED THE WASTE OIL WITH OTHER HAZARDOUS WASTES HSC

Occurrences: 01

SAN MARCOS COUNTY WATER D (Continued) **S104745782**

25250.7

Inspection Date: 12/07/1995 0:00:00 Occurrences: 02
Waste Code: Not reported
Type of Violation: GENERAL VIOLATION
Violation Description: USED OIL FILTERS NOT PROPERLY DRAINED, STORED, OR LABELED PRIOR TO TRANSPORT FOR THE PURPOSE OF METAL RECLAMATION. CCR 66266.130

HMMD ENVIRONMENTAL ASSESSMENT INFORMATION:
Case Status Date: 09/12/1988 0:00:00
Case Type: TANK, RELEASE
Case Status: CLOSED
Release Occurrence Number: 001
Historical Name: SAN MARCOS WATER DISTRICT
Date Release Began: 10/02/1987 0:00:00
Lead Agency: DEH

The CA HMMD database may contain additional details for this site.
Please click here or contact your EDR Account Executive for more information.

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82 SW 1/2-1 5254 ft. **BORGIA ENERPRISES** **Cortese** **S104746109**
1650 LINDA VISTA DR W **San Diego Co. HMMD** **N/A**
SAN MARCOS, CA 92069

Relative: Lower

Actual: 553 ft.

CORTESE:
Reg Id: 9UT1641
Region: CORTESE
Reg By: Leaking Underground Storage Tanks

HMMD:
Facility ID: H05119
Inactive Indicator: Active
SIC: 1623
Owner: SCOTT HIGLEY
Mailing Address: SAN MARCOS
CA
92069, 3818
Corporate Code: 18
Census Tract #: 20009
Inspection Date: 04/05/2001 0:00:00
Inspector Name: MONNIER
Facility Contact: JACK HUGHES
Property Owner: Not reported
PO Address: Not reported
Tank Owner: Not reported
TO Address: Not reported
Last Update: 03/03/2002 0:00:00
Last Delinquent Letter: Not reported
Last Letter Type: Not reported
Violation Notice Issued: Not reported
Map Code/Business Plan on File: Not reported
Business Plan Acceptance Date: 05/11/01
Reinspection Date Y2K Compatible: Jun 2002
Business Code: MACHINE SHOPS
Permit Expiration: 05/31
2nd Name: Not reported
Fire Dept District: SAN MARCOS FPD
EPA ID: CAL912474806
Reinspection Date: 06/02
Gas Station: Not reported
Delinquent Flag: Not Delinquent

HMMD DISCLOSURE INVENTORY:
Chemical Name: ACETYLENE COMPRESSED GAS CUBIC FT
Item Number: D001
Stored at 1 Time: 1132.00

BORGIA ENERPRISES (Continued) **S104746109**

Measurement Units: 0000013500 Storage Method: Not reported
Carcinogen: Yes Annual Qty String: 0000001132
Quantity Stored At One Time: 74-86-2
Annual Quantity String: 13500.00
Material Safety Data Sheet: C
1st Hazard Category: Not reported
2nd Hazard Category: FIRE HAZARD

Chemical Name: OXYGEN COMPRESSED GAS 10 CYLINDERS
Item Number: D002
Stored at 1 Time: 3520.00
Measurement Units: 0000025000 Storage Method: Not reported
Carcinogen: Yes Annual Qty String: 0000003520
Quantity Stored At One Time: 7782-44-7
Annual Quantity String: 25000.00
Material Safety Data Sheet: C
1st Hazard Category: Not reported
2nd Hazard Category: FIRE HAZARD

Chemical Name: ARGON COMPRESSED GAS:
Item Number: D003
Stored at 1 Time: 672.00
Measurement Units: 0000000672 Storage Method: Not reported
Carcinogen: Yes Annual Qty String: 0000000672
Quantity Stored At One Time: 7440-37-1
Annual Quantity String: 672.00
Material Safety Data Sheet: C
1st Hazard Category: Not reported
2nd Hazard Category: SUDDN RLSE OF PRES

Chemical Name: CARBON DIOXIDE
Item Number: D004
Stored at 1 Time: 1800.00
Measurement Units: 0000005000 Storage Method: Not reported
Carcinogen: Yes Annual Qty String: 0000001800
Quantity Stored At One Time: 124-38-9
Annual Quantity String: 5000.00
Material Safety Data Sheet: C
1st Hazard Category: Not reported
2nd Hazard Category: SUDDN RLSE OF PRES

HMMD UNDERGROUND TANKS:
Tank Number: Not reported Tank ID Number: Not reported
Capacity (Gal): Not reported Tank Exempt: Not reported
Waste or Product: Not reported Tank Contents: Not reported

HMMD WASTE STREAMS:
Inspection Date: Not reported Waste Item #: Not reported
Waste Code: Not reported Waste Name: Not reported
Qnty at Inspection: Not reported Annual Quantity: Not reported
Measurement Unit: Not reported
Treatment Method: Not reported Storage Method: Not reported
Waste Description: Not reported Haz Waste Hauler: Not reported
Carcinogen: No Annual Qty String: Not reported
Quantity String: Not reported

HMMD VIOLATIONS:
Inspection Date: 04/05/2001 0:00:00 Occurrences: 01
Waste Code: Not reported

BORGIA ENERPRISES (Continued) **S104746109**

Type of Violation: GENERAL VIOLATION
Violation Description: GENERATOR OF A WASTE HAS NOT DETERMINED IF THAT WASTE IS A HAZARDOUS WASTE AS DEFINED BY LAW
CCR 66262.11

Inspection Date: 01/19/2000 0:00:00 Occurrences: 01
Waste Code: Not reported
Type of Violation: GENERAL VIOLATION
Violation Description: PERSONNEL TRAINING RECORDS ARE INADEQUATE TO DOCUMENT COMPLIANCE WITH REQUIREMENTS FOR CURRENT AND FORMER EMPLOYEES
CCR 66265.16

HMMD ENVIRONMENTAL ASSESSMENT INFORMATION:
Case Status Date: Not reported
Case Type: Not reported
Case Status: Not reported
Release Occurrence Number: Not reported
Historical Name: Not reported
Date Release Began: Not reported
Lead Agency: Not reported

The CA HMMD database may contain additional details for this site.
Please click here or contact your EDR Account Executive for more information.

MAP FINDINGS - EDR PROPRIETARY HISTORICAL DATABASES

YEAR	NAME	ADDRESS	CITY	ST	DIR.	DIST.	ELEV.	TYPE
1975	MELTON S ARCO SERVICE	0130 BALBOA AVE	SAN DIEGO	CA	WSW	1/8-1/4	Higher	Service Stations

Coal Gas Site Search: No site was found in a search of Real Property Scan's ENVIROHAZ database.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
SAN MARCOS	S105692549	CREST BEVERAGE COMPANY	1152 ARMORLITE DR	92069	LUST
SAN MARCOS	S105155593	OLD SAN MARCOS LF	400 BLK. RANCHO SANTE FE RD.		SWF/LF
SAN MARCOS	S105092731	TOVY'S AUTOBODY & PAINT	1404 DESCANSO AVE UNIT B	92069	HAZNET
SAN MARCOS	S105694198	SKS, SAN MARCOS	875 W GRAND AV	92069	LUST
SAN MARCOS	S101481993	TORREY CHEMICAL CO.	217 LAS POSAS ROAD	92069	REF
SAN MARCOS	S103949374	ALL AUTO SERVICES	132 N LAS POSAS RD STE E	92069	HAZNET
SAN MARCOS	S103978489	MOTO RAD CYCLE PAINT	110 LAS POSAS ROAD #B	92069	HAZNET
SAN MARCOS	1003879087	TORREY CHEMICAL CO	217 LAS POSAS RD	92069	CERC-NFRAP
SAN MARCOS	S105691011	COCA COLA	LAS POSAS/ARMORLITE	92069	LUST
SAN MARCOS	S105692656	SOILD WASTE SERVICES INC.	224 S LAS POSAS RD	92069	LUST
SAN MARCOS	S105693724	MASHBURN SANITATION	224 S LAS POSAS RD	92069	LUST
SAN MARCOS	S105694455	MASHBURN WASTE	224 S LAS POSAS RD	92069	LUST
SAN MARCOS	S105694499	MASHBURN SANITAION CO	224 S LAS POSAS RD	92069	LUST
SAN MARCOS	S103975081	LM MACHINING CENTER	820 LOS VALICETOS #F	92069	HAZNET
SAN MARCOS	S105082795	EST INC	970 LOS VALLECITOS BLVD STE 10	92069	HAZNET
SAN MARCOS	S105084045	GOULD BUILDING CONTRACTORS INC	810 LOS VALLECITOS STE E	92069	HAZNET
SAN MARCOS	S103630912	PEACOCK CLEANERS	1450 MISSION RD STE S	92069	HAZNET, CLEANERS
SAN MARCOS	S103665549	7-ELEVEN STORE 18977	578 MISSION	92069	HAZNET
SAN MARCOS	S104583681	MOBIL OIL CORPORATION S/S #HLE	1290 WEST MISSION ROAD /	92069	HAZNET
SAN MARCOS	S105690396	CALIFORNIA IMPLEMENT COMPANY	555 E MISSION RD	92069	LUST
SAN MARCOS	S105690474	LUKA'S GASOLINE	256 W MISSION RD	92069	LUST
SAN MARCOS	S105691491	LUKA'S FOREIGN CAR SERVICE	256 W MISSION RD	92069	LUST
SAN MARCOS	S105692296	FOREIGN CAR SERVICE	256 W MISSION RD	92069	LUST
SAN MARCOS	S105693990	TELEDYNE AERO-CAL METAL FAB.	528 E MISSION RD	92069	LUST
SAN MARCOS	S105691626	COUNTY OF SD-DPW SAN MARCOS	1579 OSAGE ST	92069	LUST
SAN MARCOS	S105692048	COUNTY OF SD-SAN MARCOS RS	1579 OSAGE ST	92069	LUST
SAN MARCOS	S103629598	K B MOTOR SPORTS	139 N PACIFIC ST STE A	92069	HAZNET
SAN MARCOS	S103652488	NEWLIFE AUTO BODY	320 S PACIFIC ST C / D	92069	HAZNET
SAN MARCOS	S105722217	ALOHA AUTOMOTIVE	120 N PACIFIC STE D4	92069	HAZNET
SAN MARCOS	S105725366	TRANSMISSION DEPOT	120 N PACIFIC ST UNIT F1	92069	HAZNET
SAN MARCOS	S105725836	DAMBACH PRECISION	546 S PACIFIC ST STE C 101	92069	HAZNET
SAN MARCOS	S105691398	FRITO LAY, INC	235 S PACIFIC ST	92069	LUST
SAN MARCOS	1003879575	OLD WEST WOOD FINISHING	972 RANCH SUITE B	92069	CERC-NFRAP
SAN MARCOS	S104494708	CIRCLE K STORES DC 36 #2969	202 RANCHO SANTE FE RD S	92069	LUST
SAN MARCOS	S105691174	CHEVRON #9-3496	110 S RANCHO SANTA FE RD	92069	LUST
SAN MARCOS	S105691479	ARCO	125 N RANCHO SANTA FE RD	92069	LUST
SAN MARCOS	S105692952	SHELL SERVICE STATION	112 N RANCHO SANTA FE RD	92069	LUST
SAN MARCOS	S105693009	ARCO 6200	125 N RANCHO SANTA FE RD	92069	LUST
SAN MARCOS	S105693660	ARCO PRODUCTS COMPANY	125 N RANCHO SANTA FE RD	92069	LUST
SAN MARCOS	S105694230	CRM AUTOMOTIVE SERVICES	821 RANCHO SANTA FE RD	92069	LUST
SAN MARCOS	S105694192	EZ SERVE FACILITY #100944	2966 S SANTA FE AV	92069	LUST
SAN MARCOS	S105694012	SIX TO SIX EQUIPMENT RENTALS	175 S VIA VERA CRUZ	92069	LUST

EPA Waste Codes Addendum

Code	Description
D001	IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.
D002	A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.
D006	CADMIUM
D007	CHROMIUM
D008	LEAD
D009	MERCURY
D018	BENZENE
D035	METHYL ETHYL KETONE
D039	TETRACHLOROETHYLENE
D040	TRICHLOROETHYLENE
F002	THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2-TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE LISTED IN F001, F004, OR F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
F003	THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NON-HALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS, AND, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
F005	THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE,

EPA Waste Codes Addendum

Code	Description
	CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
U007	ACRYLAMIDE
U007	2-PROPENAMIDE

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

ROD: Records Of Decision
Source: EPA
Telephone: 703-416-0223
Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 07/09/03
Database Release Frequency: Annually
Date of Last EDR Contact: 07/07/03
Date of Next Scheduled EDR Contact: 10/06/03

DELISTED NPL: National Priority List Deletions
Source: EPA
Telephone: N/A
The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 07/22/03
Database Release Frequency: Quarterly
Date of Last EDR Contact: 08/04/03
Date of Next Scheduled EDR Contact: 11/03/03

FINDS: Facility Index System/Facility Identification Initiative Program Summary Report
Source: EPA
Telephone: N/A
Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 07/25/03
Database Release Frequency: Quarterly
Date of Last EDR Contact: 07/02/03
Date of Next Scheduled EDR Contact: 10/06/03

HMIRS: Hazardous Materials Information Reporting System
Source: U.S. Department of Transportation
Telephone: 202-366-4555
Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 03/31/03
Database Release Frequency: Annually
Date of Last EDR Contact: 07/23/03
Date of Next Scheduled EDR Contact: 10/20/03

MLTS: Material Licensing Tracking System
Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/23/03
Database Release Frequency: Quarterly
Date of Last EDR Contact: 07/02/03
Date of Next Scheduled EDR Contact: 10/06/03

MINES: Mines Master Index File
Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959

Date of Government Version: 06/07/03
Database Release Frequency: Semi-Annually
Date of Last EDR Contact: 06/30/03
Date of Next Scheduled EDR Contact: 09/29/03

NPL LIENS: Federal Superfund Liens
Source: EPA
Telephone: 202-564-4267
Federal Superfund Liens. Under the authority granted the USEPA by the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner receives notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Governme Version: 10/15/91
Database Release requency: No Update Planned

Date of Last EDR Contact: 08/25/03
Date of Next Scheduled EDR Contact: 11/24/03

PADS: PCB Activity Da base System
Source: EPA
Telephone: 202-564- 87
PCB Activity Databas PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are uired to notify the EPA of such activities.

Date of Governme Version: 06/30/03
Database Release requency: Annually

Date of Last EDR Contact: 08/13/03
Date of Next Scheduled EDR Contact: 11/10/03

DOD: Department of De nse Sites
Source: USGS
Telephone: 703-648 20
This data set consists f federally owned or administered lands, administered by the Department of Defense, that have any area equ to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Governme Version: 04/01/03
Database Release requency: Semi-Annually

Date of Last EDR Contact: 08/15/03
Date of Next Scheduled EDR Contact: 11/10/03

US BROWNFIELDS: A isting of Brownfields Sites
Source: Environmen Protection Agency
Telephone: 202-566- 77
Included in the listing brownfields properties addresses by Cooperative Agreement Recipients and brownfields properties addresse by Targeted Brownfields Assessments. Targeted Brownfields Assessments-EPA's Targeted Brownfields Assessments (TBA program is designed to help states, tribes, and municipalities--especially those without EPA Brownfields Asses ent Demonstration Pilots--minimize the uncertainties of contamination often associated with brownfields. Unde the TBA program, EPA provides funding and/or technical assistance for environmental assessments at brownfields site throughout the country. Targeted Brownfields Assessments supplement and work with other efforts under EPA's Brow elds Initiative to promote cleanup and redevelopment of brownfields. Cooperative Agreement Recipients-States, olitical subdivisions, territories, and Indian tribes become BCRLF cooperative agreement recipients when they enter in BCRLF cooperative agreements with the U.S. EPA. EPA selects BCRLF cooperative agreement recipients based on a propos and application process. BCRLF cooperative agreement recipients must use EPA funds provided through BCRLF co erative agreement for specified brownfields-related cleanup activities.

Date of Governme Version: 07/15/03
Database Release requency: Semi-Annually

Date of Last EDR Contact: 09/15/03
Date of Next Scheduled EDR Contact: 12/15/03

RAATS: RCRA Admini tive Action Tracking System
Source: EPA
Telephone: 202-564- 04
RCRA Administration ction Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major olators and includes administrative and civil actions brought by the EPA. For administration actions after Septe ber 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for h ical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossibl continue to update the information contained in the database.

Date of Governme Version: 04/17/95
Database Release equency: No Update Planned

Date of Last EDR Contact: 09/08/03
Date of Next Scheduled EDR Contact: 12/08/03

TRIS: Toxic Chemical R ase Inventory System
Source: EPA
Telephone: 202-260- 31
Toxic Release Invento System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable antities under SARA Title III Section 313.

Date of Governme Version: 12/31/01
Database Releas equency: Annually

Date of Last EDR Contact: 06/27/03
Date of Next Scheduled EDR Contact: 09/22/03

TSCA: Toxic Substances Control Act
Source: EPA
Telephone: 202-260-5521
Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/98
Database Release Frequency: Every 4 Years
Date of Last EDR Contact: 09/02/03
Date of Next Scheduled EDR Contact: 12/08/03

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
Source: EPA
Telephone: 202-564-2501

Date of Government Version: 04/15/03
Database Release Frequency: Quarterly
Date of Last EDR Contact: 06/23/03
Date of Next Scheduled EDR Contact: 09/22/03

SSTS: Section 7 Tracking Systems
Source: EPA
Telephone: 202-564-8008
Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/00
Database Release Frequency: Annually
Date of Last EDR Contact: 07/24/03
Date of Next Scheduled EDR Contact: 10/20/03

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-564-2501
FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/15/03
Database Release Frequency: Quarterly
Date of Last EDR Contact: 06/23/03
Date of Next Scheduled EDR Contact: 09/22/03

STATE OF CALIFORNIA ASTM STANDARD RECORDS

AWP: Annual Workplan Sites
Source: California Environmental Protection Agency
Telephone: 916-323-3400
Known Hazardous Waste Sites. California DTSC's Annual Workplan (AWP), formerly BEP, identifies known hazardous substance sites targeted for cleanup.

Date of Government Version: 08/31/03
Date Made Active in EDR: 09/17/03
Database Release Frequency: Annually
Date of Data Arrival at EDR: 09/02/03
Elapsed ASTM days: 15
Date of Last EDR Contact: 09/02/03

CAL-SITES: Calsites Database
Source: Department of Toxic Substance Control
Telephone: 916-323-3400
The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database.

Date of Government Version: 08/31/03
Date Made Active in EDR: 09/17/03
Database Release Frequency: Quarterly
Date of Data Arrival at EDR: 09/02/03
Elapsed ASTM days: 15
Date of Last EDR Contact: 09/02/03

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CHMIRS: California Hazardous Material Incident Report System
Source: Office of Emergency Services
Telephone: 916-845-8400
California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 12/31/02
Date Made Active at EDR: 08/07/03
Database Release Frequency: Varies
Date of Data Arrival at EDR: 07/11/03
Elapsed ASTM days: 27
Date of Last EDR Contact: 08/25/03

CORTESE: "Cortese" Hazardous Waste & Substances Sites List
Source: CAL EPA/Office of Emergency Information
Telephone: 916-323-3400
The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

Date of Government Version: 04/01/01
Date Made Active at EDR: 07/26/01
Database Release Frequency: No Update Planned
Date of Data Arrival at EDR: 05/29/01
Elapsed ASTM days: 58
Date of Last EDR Contact: 07/28/03

NOTIFY 65: Proposition 65 Records
Source: State Water Resources Control Board
Telephone: 916-445-3846
Proposition 65 Notification Records. NOTIFY 65 contains facility notifications about any release which could impact drinking water and thereby expose the public to a potential health risk.

Date of Government Version: 10/21/93
Date Made Active at EDR: 11/19/93
Database Release Frequency: No Update Planned
Date of Data Arrival at EDR: 11/01/93
Elapsed ASTM days: 18
Date of Last EDR Contact: 07/23/03

TOXIC PITS: Toxic Pits Cleanup Act Sites
Source: State Water Resources Control Board
Telephone: 916-227-4364
Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/95
Date Made Active at EDR: 09/26/95
Database Release Frequency: No Update Planned
Date of Data Arrival at EDR: 08/30/95
Elapsed ASTM days: 27
Date of Last EDR Contact: 08/04/03

SWF/LF (SWIS): Solid Waste Information System
Source: Integrated Waste Management Board
Telephone: 916-341-6320
Active, Closed and Inactive Landfills. SWF/LF records typically contain an inventory of solid waste disposal facilities or landfills. These may be active or inactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 06/13/03
Date Made Active at EDR: 07/07/03
Database Release Frequency: Quarterly
Date of Data Arrival at EDR: 06/16/03
Elapsed ASTM days: 21
Date of Last EDR Contact: 09/15/03

WMUDS/SWAT: Waste Management Unit Database
Source: State Water Resources Control Board
Telephone: 916-227-4448
Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

Date of Government Version: 04/01/00
Date Made Active at EDR: 05/10/00
Database Release Frequency: Quarterly
Date of Data Arrival at EDR: 04/10/00
Elapsed ASTM days: 30
Date of Last EDR Contact: 09/12/03

LUST: Leaking Underground Storage Tank Information System
Source: State Water Resources Control Board
Telephone: 916-341-5740
Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state.

Date of Government Version: 04/02/03
Date Made Active at EDR: 04/25/03
Database Release Frequency: Quarterly
Date of Data Arrival at EDR: 04/16/03
Elapsed ASTM days: 9
Date of Last EDR Contact: 07/08/03

CA BOND EXP. PLAN: Bond Expenditure Plan
Source: Department of Health Services
Telephone: 916-255-2118
Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/89
Date Made Active at EDR: 08/02/94
Database Release Frequency: No Update Planned
Date of Data Arrival at EDR: 07/27/94
Elapsed ASTM days: 6
Date of Last EDR Contact: 05/31/94

CA UST:

UST: Active UST Facilities
Source: SWRCB
Telephone: 916-341-5700
Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 04/02/03
Date Made Active at EDR: 04/30/03
Database Release Frequency: Semi-Annually
Date of Data Arrival at EDR: 04/16/03
Elapsed ASTM days: 14
Date of Last EDR Contact: 07/08/03

VCP: Voluntary Cleanup Program Properties
Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 08/31/03
Date Made Active at EDR: 09/17/03
Database Release Frequency: Quarterly
Date of Data Arrival at EDR: 09/02/03
Elapsed ASTM days: 15
Date of Last EDR Contact: 09/02/03

INDIAN UST: Underground Storage Tanks on Indian Land
Source: EPA Region 9
Telephone: 415-972-3368

Date of Government Version: N/A
Date Made Active at EDR: N/A
Database Release Frequency: Varies
Date of Data Arrival at EDR: N/A
Elapsed ASTM days: 0
Date of Last EDR Contact: N/A

CA FID UST: Facility Inventory Database
Source: California Environmental Protection Agency
Telephone: 916-445-6532
The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/94
Date Made Active at EDR: 09/29/95
Database Release Frequency: No Update Planned

Date of Data Arrival at EDR: 09/05/95
Elapsed ASTM days: 24
Date of Last EDR Contact: 12/28/98

HIST UST: Hazardous Substance Storage Container Database
Source: State Water Resources Control Board
Telephone: 916-341-5700
The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/90
Date Made Active at EDR: 02/12/91
Database Release Frequency: No Update Planned

Date of Data Arrival at EDR: 01/25/91
Elapsed ASTM days: 18
Date of Last EDR Contact: 07/26/01

STATE OF CALIFORNIA ASTM SUPPLEMENTAL RECORDS

AST: Aboveground Petroleum Storage Tank Facilities
Source: State Water Resources Control Board
Telephone: 916-341-5712
Registered Aboveground Storage Tanks.

Date of Government Version: 07/01/03
Database Release Frequency: Quarterly

Date of Last EDR Contact: 08/04/03
Date of Next Scheduled EDR Contact: 11/03/03

CLEANERS: Cleaner Facilities
Source: Department of Toxic Substance Control
Telephone: 916-225-0873
A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

Date of Government Version: 03/11/03
Database Release Frequency: Annually

Date of Last EDR Contact: 07/02/03
Date of Next Scheduled EDR Contact: 10/06/03

CA WDS: Waste Discharge System
Source: State Water Resources Control Board
Telephone: 916-657-157
Sites which have been issued waste discharge requirements.

Date of Government Version: 06/23/03
Database Release Frequency: Quarterly

Date of Last EDR Contact: 06/23/03
Date of Next Scheduled EDR Contact: 09/22/03

DEED: List of Deed Restrictions
Source: Department of Toxic Substances Control
Telephone: 916-323-3400
The use of recorded land use restrictions is one of the methods the DTSC uses to protect the public from unsafe exposures to hazardous substances and wastes.

Date of Government Version: 07/04/03
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 07/07/03
Date of Next Scheduled EDR Contact: 10/06/03

NFA: No Further Action Determination
Source: Department of Toxic Substances Control
Telephone: 916-323-3400
This category contains properties at which DTSC has made a clear determination that the property does not pose a problem to the environment or to public health.

Date of Government Version: 08/31/03
Database Release Frequency: Quarterly

Date of Last EDR Contact: 09/02/03
Date of Next Scheduled EDR Contact: 12/01/03

EMI: Emissions Inventory Data
Source: California Air Resources Board
Telephone: 916-322-2990
Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/01
Database Release Frequency: Varies
Date of Last EDR Contact: 08/13/03
Date of Next Scheduled EDR Contact: 10/20/03

REF: Unconfirmed Properties Referred to Another Agency
Source: Department of Toxic Substances Control
Telephone: 916-323-3400
This category contains properties where contamination has not been confirmed and which were determined as not requiring direct DTSC Site Mitigation Program action or oversight. Accordingly, these sites have been referred to another state or local regulatory agency.

Date of Government Version: 08/31/03
Database Release Frequency: Quarterly
Date of Last EDR Contact: 09/02/03
Date of Next Scheduled EDR Contact: 12/01/03

SCH: School Property Evaluation Program
Source: Department of Toxic Substances Control
Telephone: 916-323-3400
This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 08/31/03
Database Release Frequency: Quarterly
Date of Last EDR Contact: 09/02/03
Date of Next Scheduled EDR Contact: 12/01/03

NFE: Properties Needing Further Evaluation
Source: Department of Toxic Substances Control
Telephone: 916-323-3400
This category contains properties that are suspected of being contaminated. These are unconfirmed contaminated properties that need to be assessed using the PEA process. PEA In Progress indicates properties where DTSC is currently conducting a PEA. PEA Required indicates properties where DTSC has determined a PEA is required, but not currently underway.

Date of Government Version: 08/31/03
Database Release Frequency: Quarterly
Date of Last EDR Contact: 09/02/03
Date of Next Scheduled EDR Contact: 12/01/03

HAZNET: Hazardous Waste Information System
Source: California Environmental Protection Agency
Telephone: 916-255-1136
Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method.

Date of Government Version: 12/31/01
Database Release Frequency: Annually
Date of Last EDR Contact: 08/12/03
Date of Next Scheduled EDR Contact: 11/10/03

LOCAL RECORDS

ALAMEDA COUNTY:

Local Oversight Program Listing of UGT Cleanup Sites
Source: Alameda County Environmental Health Services
Telephone: 510-567-6700

Date of Government Version: 07/03/03
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 07/07/03
Date of Next Scheduled EDR Contact: 10/27/03

Underground Tanks
Source: Alameda County Environmental Health Services
Telephone: 510-567-6700

Date of Government Version: 07/03/03
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 07/07/03
Date of Next Scheduled EDR Contact: 10/27/03

CONTRA COSTA COUNTY:

Site List
Source: Contra Costa Health Services Department
Telephone: 925-646-2286
List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 09/04/03
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 09/02/03
Date of Next Scheduled EDR Contact: 12/01/03

FRESNO COUNTY:

CUPA Resources List
Source: Dept. of Community Health
Telephone: 559-445-3271
Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 07/15/03
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 07/21/03
Date of Next Scheduled EDR Contact: 11/10/03

KERN COUNTY:

Underground Storage Tank Sites & Tank Listing
Source: Kern County Environment Health Services Department
Telephone: 661-862-8700
Kern County Sites and Tanks Listing.

Date of Government Version: 07/25/03
Database Release Frequency: Quarterly

Date of Last EDR Contact: 09/08/03
Date of Next Scheduled EDR Contact: 12/08/03

LOS ANGELES COUNTY:

List of Solid Waste Facilities
Source: La County Department of Public Works
Telephone: 818-458-5185

Date of Government Version: 06/03/03
Database Release Frequency: Varies

Date of Last EDR Contact: 08/18/03
Date of Next Scheduled EDR Contact: 11/17/03

City of El Segundo Underground Storage Tank
Source: City of El Segundo Fire Department
Telephone: 310-524-2236

Date of Government Version: 03/01/03
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 08/18/03
Date of Next Scheduled EDR Contact: 11/17/03

City of Long Beach Underground Storage Tank
Source: City of Long Beach Fire Department
Telephone: 562-570-2543

Date of Government Version: 05/30/02
Database Release Frequency: Annually

Date of Last EDR Contact: 08/29/03
Date of Next Scheduled EDR Contact: 11/24/03

City of Torrance Underground Storage Tank
Source: City of Torrance Fire Department
Telephone: 310-618-2973

Date of Government Version: 09/03/03
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 08/18/03
Date of Next Scheduled EDR Contact: 11/17/03

City of Los Angeles Landfills
Source: Engineering & Construction Division
Telephone: 213-473-7869

Date of Government Version: 03/01/02
Database Release Frequency: Varies

Date of Last EDR Contact: 09/15/03
Date of Next Scheduled EDR Contact: 12/15/03

HMS: Street Number List
Source: Department of Public Works
Telephone: 626-458-3517
Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 04/03/03
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 08/18/03
Date of Next Scheduled EDR Contact: 11/17/03

Site Mitigation List
Source: Community Health Services
Telephone: 323-890-7806
Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 01/07/03
Database Release Frequency: Annually

Date of Last EDR Contact: 08/18/03
Date of Next Scheduled EDR Contact: 11/17/03

San Gabriel Valley Areas of Concern
Source: EPA Region 9
Telephone: 415-972-3178
San Gabriel Valley area where VOC contamination is at or above the MCL as designated by region 9 EPA office.

Date of Government Version: 12/31/98
Database Release Frequency: No Update Planned

Date of Last EDR Contact: 07/06/99
Date of Next Scheduled EDR Contact: N/A

MARIN COUNTY:

Underground Storage Tank Sites
Source: Public Works Department Waste Management
Telephone: 415-499-6647
Currently permitted USTs in Marin County.

Date of Government Version: 03/04/03
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 08/04/03
Date of Next Scheduled EDR Contact: 11/03/03

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

NAPA COUNTY:

Sites With Reported Contamination
Source: Napa County Department of Environmental Management
Telephone: 707-253-4269

Date of Government Version: 03/31/03
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 06/30/03
Date of Next Scheduled EDR Contact: 09/29/03

Closed and Operating Underground Storage Tank Sites
Source: Napa County Department of Environmental Management
Telephone: 707-253-4269

Date of Government Version: 03/31/03
Database Release Frequency: Annually

Date of Last EDR Contact: 06/30/03
Date of Next Scheduled EDR Contact: 09/29/03

ORANGE COUNTY:

List of Underground Storage Tank Cleanups
Source: Health Care Agency
Telephone: 714-834-3446
Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 07/01/03
Database Release Frequency: Quarterly

Date of Last EDR Contact: 09/11/03
Date of Next Scheduled EDR Contact: 12/08/03

List of Underground Storage Tank Facilities
Source: Health Care Agency
Telephone: 714-834-3446
Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 07/01/03
Database Release Frequency: Quarterly

Date of Last EDR Contact: 09/11/03
Date of Next Scheduled EDR Contact: 12/08/03

List of Industrial Site Cleanups
Source: Health Care Agency
Telephone: 714-834-3446
Petroleum and non-petroleum spills.

Date of Government Version: 10/24/00
Database Release Frequency: Annually

Date of Last EDR Contact: 09/11/03
Date of Next Scheduled EDR Contact: 12/08/03

PLACER COUNTY:

Master List of Facilities
Source: Placer County Health and Human Services
Telephone: 530-889-7312
List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 07/17/03
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 06/23/03
Date of Next Scheduled EDR Contact: 09/22/03

RIVERSIDE COUNTY:

Listing of Underground Tank Cleanup Sites
Source: Department of Public Health
Telephone: 909-358-5055
Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 06/03/03
Database Release Frequency: Quarterly

Date of Last EDR Contact: 07/23/03
Date of Next Scheduled EDR Contact: 10/20/03

Underground Storage Tank Tank List
Source: Health Services Agency
Telephone: 909-[illegible]-5055

Date of Government Version: 05/30/03
Database Release Frequency: Quarterly

Date of Last EDR Contact: 07/23/03
Date of Next Scheduled EDR Contact: 10/20/03

SACRAMENTO COUNTY:

CS - Contaminated Sites
Source: Sacramento County Environmental Management
Telephone: 916-[illegible]-8406

Date of Government Version: 04/02/03
Database Release Frequency: Quarterly

Date of Last EDR Contact: 08/04/03
Date of Next Scheduled EDR Contact: 11/03/03

ML - Regulatory Compliance Master List
Source: Sacramento County Environmental Management
Telephone: 916-[illegible]-8406
Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste gene[illegible].

Date of Government Version: 04/03/03
Database Release Frequency: Quarterly

Date of Last EDR Contact: 08/04/03
Date of Next Scheduled EDR Contact: 11/03/03

SAN BERNARDINO COUNTY:

Hazardous Mate[illegible]ermits
Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 9[illegible]-3041
This listing inc[illegible] underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous [illegible]enerators, and waste oil generators/handlers.

Date of Government Version: 06/01/03
Database Release Frequency: Quarterly

Date of Last EDR Contact: 09/09/03
Date of Next Scheduled EDR Contact: 12/08/03

SAN DIEGO COUNTY:

Solid Waste Fa[illegible]
Source: Dep[illegible]t of Health Services
Telephone: [illegible]
San Diego Co[illegible] Waste Facilities.

Date of Government Version: 08/01/00
Database Release Frequency: Varies

Date of Last EDR Contact: 08/25/03
Date of Next Scheduled EDR Contact: 11/24/03

Hazardous Materi[illegible] Management Division Database
Source: Haza[illegible] Materials Management Division
Telephone: 6[illegible]8-2268
The database[illegible]es: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit [illegible]permit, and the business status. HE17 - In addition to providing the same information provided i[illegible] HE17 provides inspection dates, violations received by the establishment, hazardous waste gen[illegible] quantity, method of storage, treatment/disposal of waste and the hauler, and information on underg[illegible]nks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Die[illegible]ty (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.

Date of G[illegible] nent Version: 03/31/02 — Date of Last EDR Contact: 07/08/03
Database [illegible] se Frequency: Quarterly — Date of Next Scheduled EDR Contact: 10/06/03

SAN FRANCIS[illegible] OUNTY:

Local Oversite [illegible] ities
Source: Dep[illegible] ent Of Public Health San Francisco County
Telephone: 4[illegible] 52-3920

Date of Gr[illegible] ment Version: 06/20/03 — Date of Last EDR Contact: 09/08/03
Database [illegible] se Frequency: Quarterly — Date of Next Scheduled EDR Contact: 12/08/03

Underground S[illegible] ge Tank Information
Source: Dep[illegible] nt of Public Health
Telephone: 4[illegible] 52-3920

Date of Gr[illegible] nent Version: 06/20/03 — Date of Last EDR Contact: 09/08/03
Database [illegible] se Frequency: Quarterly — Date of Next Scheduled EDR Contact: 12/08/03

SAN MATEO C[illegible] TY:

Fuel Leak List
Source: San[illegible] o County Environmental Health Services Division
Telephone: [illegible] 3-1921

Date of Gr[illegible] ment Version: 07/21/03 — Date of Last EDR Contact: 07/28/03
Database [illegible] se Frequency: Semi-Annually — Date of Next Scheduled EDR Contact: 10/27/03

Business Inven[illegible]
Source: San[illegible] o County Environmental Health Services Division
Telephone: [illegible] 3-1921
List includes [illegible] dous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of G[illegible] nent Version: 06/16/03 — Date of Last EDR Contact: 07/08/03
Database [illegible] se Frequency: Annually — Date of Next Scheduled EDR Contact: 10/13/03

SANTA CLARA[illegible] NTY:

Fuel Leak Site [illegible] ity Report
Source: San[illegible] a Valley Water District
Telephone: 4[illegible] 5-2600

Date of Gr[illegible] ent Version: 07/02/03 — Date of Last EDR Contact: 06/30/03
Database [illegible] Frequency: Semi-Annually — Date of Next Scheduled EDR Contact: 09/29/03

Hazardous Ma[illegible] Facilities
Source: City[illegible] Jose Fire Department
Telephone: 4[illegible] 77-4659

Date of Gr[illegible] nent Version: 12/11/02 — Date of Last EDR Contact: 09/08/03
Database [illegible] Frequency: Annually — Date of Next Scheduled EDR Contact: 12/08/03

SOLANO COU[illegible]

Leaking Under[illegible] d Storage Tanks
Source: Sol[illegible] y Department of Environmental Management
Telephone: [illegible] 470

Date of G nt Version: 12/20/02 — Date of Last EDR Contact: 09/15/03
Database Frequency: Quarterly — Date of Next Scheduled EDR Contact: 12/15/03

Underground S Tanks
Source: Sol ty Department of Environmental Management
Telephone: 770
Date of G Ve ion: 12/18/02 — Date of Last EDR Contact: 09/15/03
Database Frequency: Quarterly — Date of Next Scheduled EDR Contact: 12/15/03

SONOMA COU

Leaking Under Storage Tank Sites
Source: De Health Services
Telephone: 565
Date of G Version: 07/28/03 — Date of Last EDR Contact: 07/28/03
Database Frequency: Quarterly — Date of Next Scheduled EDR Contact: 10/27/03

SUTTER COUI

Underground S Tanks
Source: Su Department of Agriculture
Telephone: 500
Date of G t Version: 07/01/01 — Date of Last EDR Contact: 07/07/03
Database Frequency: Semi-Annually — Date of Next Scheduled EDR Contact: 10/06/03

VENTURA CO

Inventory of Il ndoned and Inactive Sites
Source: En l Health Division
Telephone: 81
Ventura Cou ry of Closed, Illegal Abandoned, and Inactive Sites.
Date of C Ve n: 09/01/02 — Date of Last EDR Contact: 08/26/03
Databas Frequency: Annually — Date of Next Scheduled EDR Contact: 11/24/03

Listing of Und t Tank Cleanup Sites
Source: En al Health Division
Telephone: 813
Ventura Cou ground Storage Tank Cleanup Sites (LUST).
Date of C Ve sion: 05/22/03 — Date of Last EDR Contact: 09/15/03
Databas Frequency: Quarterly — Date of Next Scheduled EDR Contact: 12/15/03

Underground ed List
Source: Env l Health Division
Telephone: 813
Ventura Co ting Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.
Date of C t Version: 07/30/03 — Date of Last EDR Contact: 07/08/03
Databas Frequency: Quarterly — Date of Next Scheduled EDR Contact: 10/13/03

Business Pla s ste Producers, and Operating Underground Tanks
Source: Ve y Environmental Health Division
Telephone: 81
The BWT lis address whether the Environmental Health Division has Business Plan (B), Waste
Producer r Underground Tank (T) information.

Date of G: t Version: 05/21/03 — Date of Last EDR Contact: 09/15/03
Databas: Frequency: Quarterly — Date of Next Scheduled EDR Contact: 12/15/03

YOLO COUNT

Underground ank Comprehensive Facility Report
Source: Yo: Department of Health
Telephone: 646

Date of G: t Version: 06/19/03 — Date of Last EDR Contact: 06/19/03
Databas: Frequency: Annually — Date of Next Scheduled EDR Contact: 10/20/03

California R Water **Quality Control Board (RWQCB) LUST Records**

LUST REG 1: Investigation
Source: Ca: ter Quality Control Board North Coast (1)
Telephone: 22
Del Norte, H: Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information,
please re: tate Water Resources Control Board's LUST database.

Date of C: 02/01/01 — Date of Last EDR Contact: 08/25/03
Databas: y: No Update Planned — Date of Next Scheduled EDR Contact: 11/24/03

LUST REG 2: List
Source: Ca: Water Quality Control Board San Francisco Bay Region (2)
Telephone:

Date of C: 03/28/03 — Date of Last EDR Contact: 07/10/03
Databas: y: Quarterly — Date of Next Scheduled EDR Contact: 10/13/03

LUST REG 3: nd Storage Tank Database
Source: Ca: ter Quality Control Board Central Coast Region (3)
Telephone:

Date of G: ion: 05/19/03 — Date of Last EDR Contact: 08/18/03
Databas: : Quarterly — Date of Next Scheduled EDR Contact: 11/17/03

LUST REG 4: ge Tank Leak List
Source: Ca: ter Quality Control Board Los Angeles Region (4)
Telephone: 0
Los Angele: For more current information, please refer to the State Water Resources Control
Board's

Date of C: 08/09/01 — Date of Last EDR Contact: 06/30/03
Databas: y: No Update Planned — Date of Next Scheduled EDR Contact: 09/29/03

LUST REG 5: nd Storage Tank Database
Source: Ca: ter Quality Control Board Central Valley Region (5)
Telephone:

Date of C: 07/01/03 — Date of Last EDR Contact: 07/07/03
Databas: : Quarterly — Date of Next Scheduled EDR Contact: 10/06/03

LUST REG 6L und Storage Tank Case Listing
Source: Ca: ter Quality Control Board Lahontan Region (6)
Telephone:
For more c: ease refer to the State Water Resources Control Board's LUST database.

Date of C: 06/09/03 — Date of Last EDR Contact: 09/08/03
Databas: y: No Update Planned — Date of Next Scheduled EDR Contact: 12/08/03

LUST REG 6V und Storage Tank Case Listing
Source: Ca ter Quality Control Board Victorville Branch Office (6)
Telephone:

Date of C: 05/29/03 — Date of Last EDR Contact: 07/02/03
Databas: /: Quarterly — Date of Next Scheduled EDR Contact: 10/06/03

LUST REG 7: nd Storage Tank Case Listing
Source: Ca ter Quality Control Board Colorado River Basin Region (7)
Telephone:

Date of C: 07/02/02 — Date of Last EDR Contact: 06/30/03
Databas: : Semi-Annually — Date of Next Scheduled EDR Contact: 09/29/03

LUST REG 8: nd Storage Tanks
Source: Ca ter Quality Control Board Santa Ana Region (8)
Telephone:
California R ty Control Board Santa Ana Region (8). For more current information, please refer to the St Control Board's LUST database.

Date of Co: 06/11/03 — Date of Last EDR Contact: 08/11/03
Databas y: No Update Planned — Date of Next Scheduled EDR Contact: 11/10/03

LUST REG 9: d Storage Tank Report
Source: Cal er Quality Control Board San Diego Region (9)
Telephone:
Orange, Riv unties. For more current information, please refer to the State Water Resources Control B se.

Date of C: 03/01/01 — Date of Last EDR Contact: 07/23/03
Databas y: No Update Planned — Date of Next Scheduled EDR Contact: 10/20/03

California I Quality Control Board (RWQCB) SLIC Records

SLIC REG 1: / stigations
Source: C er Quality Control Board, North Coast Region (1)
Telephone:

Date of C: 04/03/03 — Date of Last EDR Contact: 08/25/03
Databas: Semi-Annually — Date of Next Scheduled EDR Contact: 11/24/03

SLIC REG 2: nation & Cleanup Cost Recovery Listing
Source: Re Control Board San Francisco Bay Region (2)
Telephone:
Any contami ts groundwater or has the potential to impact groundwater.

Date of: 03/28/03 — Date of Last EDR Contact: 07/10/03
Databas: /: Quarterly — Date of Next Scheduled EDR Contact: 10/13/03

SLIC REG 3: ation & Cleanup Cost Recovery Listing
Source: C er Quality Control Board Central Coast Region (3)
Telephone:
Any contar ts groundwater or has the potential to impact groundwater.

Date of G: 05/19/03 — Date of Last EDR Contact: 08/18/03
Database: Semi-Annually — Date of Next Scheduled EDR Contact: 11/17/03

SLIC REG 4: tigation & Cleanup Cost Recovery Listing
Source: R Control Board Los Angeles Region (4)
Telephone:
Any contam: icts groundwater or has the potential to impact groundwater.
Date of (: 07/01/03 Date of Last EDR Contact: 07/28/03
Databas cy: Quarterly Date of Next Scheduled EDR Contact: 10/27/03

SLIC REG 5: tigation & Cleanup Cost Recovery Listing
Source: R y Control Board Central Valley Region (5)
Telephone:
Unregulate roundwater or have the potential to impact groundwater.
Date of C : 07/02/03 Date of Last EDR Contact: 07/07/03
Databas y: Semi-Annually Date of Next Scheduled EDR Contact: 10/06/03

SLIC REG 6t
Source: C /ater Quality Control Board, Lahontan Region
Telephone:
Date of : 06/09/03 Date of Last EDR Contact: 09/08/03
Databas cy: Varies Date of Next Scheduled EDR Contact: 12/08/03

SLIC REG 6V: estigation & Cleanup Cost Recovery Listing
Source: R y Control Board, Victorville Branch
Telephone
Date of n: 05/08/03 Date of Last EDR Contact: 07/02/03
Databa cy: Semi-Annually Date of Next Scheduled EDR Contact: 10/06/03

SLIC REG 7:
Source: C uality Control Board, Colorado River Basin Region
Telephone
Date of : 05/29/03 Date of Last EDR Contact: 09/08/03
Databa y: Varies Date of Next Scheduled EDR Contact: 11/24/03

SLIC REG 8: stigation & Cleanup Cost Recovery Listing
Source: C ter Quality Control Board Santa Ana Region (8)
Telephone:
Date of n: 04/01/03 Date of Last EDR Contact: 07/07/03
Databa cy: Semi-Annually Date of Next Scheduled EDR Contact: 10/06/03

SLIC REG 9: tigation & Cleanup Cost Recovery Listing
Source: Ca ter Quality Control Board San Diego Region (9)
Telephone
Date of : 03/03/03 Date of Last EDR Contact: 09/02/03
Databa cy: Annually Date of Next Scheduled EDR Contact: 12/01/03

EDR PROP AL DATABASES

EDR Historica **Dry Cleaners:** EDR has searched select national collections of business directories and has collected listing eaner and gas station/filling station/service station sites that were available to EDR researc as limited to those categories of sources that might, in EDR's opinion, include dry cleaning and gas statio ce station establishments. The categories reviewed included, but were not limited to: *gas, gas sta filling station, auto, automobile repair, auto service station, service station, dry cleaner, clea mat, cleaning/laundry, wash & dry, etc.*

This informat st and complement environmental professionals in their conduct of environmental site assessment be a substitute for a full historical investigation as defined in ASTM E1527. The information p etary database may or may not be complete; i.e., the absence of a dry cleaner or gas station/filling s site does not necessarily mean that such a site did not exist in the area covered by this repor

(A note on "c s not possible for EDR to differentiate between establishments that use PERC on-site as a cleaning s nction simply as drop-off and pick-up locations or that are traditional wet cleaning/laundry facilities. Th or environmental professionals to incorporate professional judgment in the evaluation of each site.)

GOVER... ...CORDS SEARCHED / DATA CURRENCY TRACKING

Former Man... ...Gas) Sites: The existence and location of Coal Gas sites is provided exclusively to EDR by Real ...Copyright 1993 Real Property Scan, Inc. For a technical description of the types of hazards wi... ...such sites, contact your EDR customer service representative.

The informa... other than F... Scan does r... of the amou... opinion.

Disclaimer Provided by Real Property Scan, Inc.

...eport has predominantly been obtained from publicly available sources produced by entities ...While reasonable steps have been taken to insure the accuracy of this report, Real Property ...uracy of this report. Any liability on the part of Real Property Scan is strictly limited to a refund ...de for the actual existence of toxins at any site. This report does not constitute a legal

BROWNFIE...

VCP: Volunt... ...Properties
Source: D... ...ostances Control
Telephon...
Contains I... ...es with either confirmed or unconfirmed releases and the project proponents have re... ...e investigation and/or cleanup activities and have agreed to provide coverage for DTSC's...

Date of... ...: 08/31/03 — Date of Last EDR Contact: 09/02/03
Databa... ...y: Quarterly — Date of Next Scheduled EDR Contact: 12/01/03

US BROWN... ...Brownfields Sites
Source: E... ...n Agency
Telephon...
Included i... ...elds properties addresses by Cooperative Agreement Recipients and brownfields propert... ...ed Brownfields Assessments. Targeted Brownfields Assessments-EPA's Targeted Brownfields Assess... ...s designed to help states, tribes, and municipalities--especially those without EPA Brownfi... ...monstration Pilots--minimize the uncertainties of contamination often associated with brownfi... ...program, EPA provides funding and/or technical assistance for environmental assessments at brow... ...t the country. Targeted Brownfields Assessments supplement and work with other efforts under E... ...tive to promote cleanup and redevelopment of brownfields. Cooperative Agreement Recipie... ...divisions, territories, and Indian tribes become BCRLF cooperative agreement recipients when th... ...operative agreements with the U.S. EPA. EPA selects BCRLF cooperative agreement recipients based ... ...cation process. BCRLF cooperative agreement recipients must use EPA funds provided through... ...reement for specified brownfields-related cleanup activities.

Date of... ...A — Date of Last EDR Contact: N/A
Databa... ...Semi-Annually — Date of Next Scheduled EDR Contact: N/A

OTHER DAT...

Depending o... ...overed by this report, the data provided in these specialty databases may or may not be complete. F... ...e of wetlands information data in a specific report does not mean that all wetlands in the area covered ... ...ed. Moreover, the absence of any reported wetlands information does not necessarily mean that w... ...e area covered by the report.

Oil/Gas Pip... ...tained by EDR from the USGS in 1994. It is referred to by USGS as GeoData Digital Line Graphs from 1:100,0... ...xtracted from the transportation category including some oil, but primarily gas pipelines.

Electric Pow... ...Data
Source: P...
Telephon...
This map ...yrighted by PennWell Corporation. This information is provided on a best ...ll Corporation does not guarantee its accuracy nor warrant its fitness for ... Such information has been reprinted with the permission of PennWell.

Sensitive Re dividuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environme sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive rec ined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing l ls who are sensitive receptors are likely to be located.

AHA Hos
Source ociation, Inc.
Teleph
The dat of hospitals based on the American Hospital Association's annual survey of hospitals.
Medical C ervices Listing
Source & Medicaid Services
Teleph
A listin are provider number, produced by Centers of Medicare & Medicaid Services, a feder . Department of Health and Human Services.
Nursing I
Source ealth
Teleph
Inform edicaid certified nursing homes in the United States.
Public Sc
Source ucation Statistics
Teleph
The N ion Statistics' primary database on elementary and se in the United States. It is a comprehensive, annual, national statistical databa y and secondary schools and school districts, which contains data that are compa
Private S
Source ication Statistics
Teleph
The N ion Statistics' primary database on private school locations in the United States.
Daycare lities
Source ervices
Telepl

Flood Zone le in select counties across the country, was obtained by EDR in 1999 from the Federal Emergency MA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: Natio This data, available in select counties across the country, was obtained by EDR in 2002 from e Service.

STREET A TION

© 2003 Geo , Inc., Rel. 07/2002. This product contains proprietary and confidential property of Geographic Data Techn se, including copying for other than testing and standard backup procedures, of this product is expressly p

®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPI

VACAN
MISSIO — 3 ROAD
SAN M

TARGET PROPE

Latitude (	33.149300 - 33° 8' 57.5"
Longitu	117.189201 - 117° 11' 21.1"
Univers	r: Zone 11
UTM X (	482355.2
UTM Y	3667662.8
Elevatic	583 ft. above sea level

EDR's GeoChe — Source Addendum has been developed to assist the environmental professional with the collectic — source information in accordance with ASTM 1527-00, Section 7.2.3. Section 7.2.3 re — USGS 7.5 Minute Topographic Map (or equivalent, such as the USGS Digital Elevation Mode — requires that one or more additional physical setting sources be sought when (1) condi — fied in which hazardous substances or petroleum products are likely to migrate to or — d (2) more information than is provided in the current USGS 7.5 Minute Topographic M — enerally obtained, pursuant to local good commercial or customary practice, to assess the i — recognized environmental conditions in connection with the property. Such additional phys — enerally include information about the topographic, hydrologic, hydrogeologic, and geologic ch — , and wells in the area.

Assessment of — inant migration generally has two principle investigative components:

1. Groundwate
2. Groundwate

Groundwater fl — npacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and — water flow velocity is generally impacted by the nature of the geologic strata. EDR's GeoCh — ource Addendum is provided to assist the environmental professional in forming an opi — of potential contaminant migration.

® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER

Groundwater fl
using site-spec
sources of infor
collected on ne

FORMATION

cular site is best determined by a qualified environmental professional
ata is not reasonably ascertainable, it may be necessary to rely on other
ce topographic information, hydrologic information, hydrogeologic data
egional groundwater flow information (from deep aquifers).

TOPOGRAPHIC

Surface topogr
assist the envi
should contam

e of the direction of surficial groundwater flow. This information can be used to
in forming an opinion about the impact of nearby contaminated properties or,
jet property, what downgradient sites might be impacted.

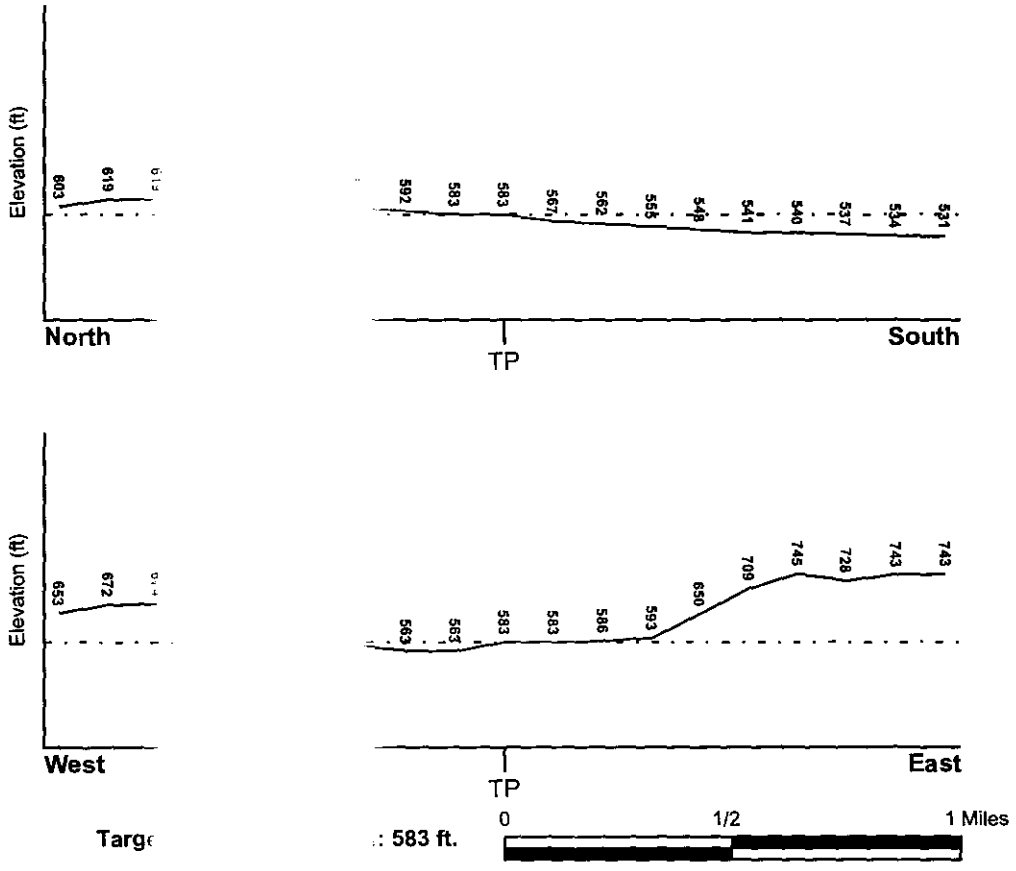
TARGET PROP

USGS
General
Source:

2433117-B2 SAN MARCOS, CA
t: General SW
USGS 7.5 min quad index

SURROUNDING

ATION PROFILES



Targ

: 583 ft.

Source: Topogr
on a relative (n
should be field

ined from the USGS 7.5' Digital Elevation Model and should be evaluated
Relative elevation information between sites of close proximity

® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC IN

Surface water c
the environment
contamination e

c barrier to groundwater flow. Such hydrologic information can be used to assist
ming an opinion about the impact of nearby contaminated properties or, should
perty, what downgradient sites might be impacted.

Refer to the Phy
and bodies of v

Map following this summary for hydrologic information (major waterways

FEMA FLOOD Z

	FEMA Flood Electronic Data
Target Prop
SAN DIEGO,	Not Available
Flood Plain I	ty: Not Reported
Additional Pa	Not Reported

NATIONAL WET

	NWI Electronic Data Coverage
NWI Quad at
SAN MARC	YES - refer to the Overview Map and Detail Map

HYDROGEOLOC

Hydrogeologic
of groundwater
environmental
contamination

y installation of wells on a specific site can often be an indicator
mediate area. Such hydrogeologic information can be used to assist the
an opinion about the impact of nearby contaminated properties or, should
perty, what downgradient sites might be impacted.

Site-Spe	***Data*:**
Sear	1.25 miles
Stat	Not found

AQUIFLOW®

Search R

EDR has deve
flow at specific
authorities at s
hydrogeologic

Information System to provide data on the general direction of groundwater
wed reports submitted by environmental professionals to regulatory
racted the date of the report, groundwater flow direction as determined
ater table.

M/	ATION M TP	GENERAL DIRECTION GROUNDWATER FLOW
1	- 1/2 Mile SE	S
2	- 1/2 Mile SSW	Not Reported
3	- 1 Mile WNW	SSE
A	- 1 Mile SSE	Not Reported
B	- 1 Mile SW	NE
B	- 1 Mile SW	E
A	- 1 Mile SSE	Not Reported

Fo

n, refer to Physical Setting Source Map Findings.

* ©1996 Site-specific hy
a Comprehensive En

rts, Inc., Bainbridge Island, WA. All rights reserved. All of the information and opinions presented are those of the cited EPA report(s), which were completed under
Liability Information System (CERCLIS) investigation.

® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATE **)RMATION**

Groundwater f. for a particular site is best determined by a qualified environmental professional using site spec rata data. If such data are not reasonably ascertainable, it may be necessary to rely on other , including geologic age identification, rock stratigraphic unit and soil characteristics by properties and regional soil information. In general, contaminant plumes move more qui velly types of soils than silty-clayey types of soils.

GEOLOGIC INF **L AREA OF TARGET PROPERTY**

Geologic infor ie environmental professional in forming an opinion about the relative speed at which conta e occurring.

ROCK STRATI **GEOLOGIC AGE IDENTIFICATION**

Era:	Category: Eugeosynclinal Deposits
System:	assic and Upper Triassic
Series:	sozoic
Code:	*oded above as Era, System & Series)*

Geologic Age Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conter 00 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS D. - 11 (1994).

DOMINANT SO **NERAL AREA OF TARGET PROPERTY**

The U.S. Depa (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) collecting, storing, maintaining and distributing soil survey information for privately ow States. A soil map in a soil survey is a representation of soil patterns in a landscape O are compiled by generalizing more detailed (SSURGO) soil survey maps. The following oil Conservation Service STATSGO data.

Soil Compone	EXCHEQUER
Soil Surface T	silt loam
Hydrologic Gr	Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.
Soil Drainage	Somewhat excessive. Soils have high hydraulic conductivity and low water holding capacity. Depth to water table is more than 6 feet.
Hydric Status:	requirements for a hydric soil.
Corrosion Pot	MODERATE
Depth to Bedr	> 4 inches
Depth to Bedr	> 20 inches

- PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information

Layer	Up	Texture Class	Classification: AASHTO Group	Classification: Unified Soil	Permeability Rate (in/hr)	Soil Reaction (pH)
1	0 i	t loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 2.00 Min: 0.60	Max: 6.50 Min: 5.60
2	10 i	weathered drock	Not reported	Not reported	Max: 0.00 Min: 0.00	Max: 0.00 Min: 0.00

OTHER SOIL T

Based on Soil C TATSGO data, the following additional subordinant soil types may appear within th et property.

Soil Surface Te m
drock
loam

Surficial Soil T m
bedrock
y loam

Shallow Soil T y loam

Deeper Soil T y loam

ADDITIONAL E SOURCES

According to A 7.2.2, "one or more additional state or local sources of environmental records may b on of the environmental professional, to enhance and supplement federal and state sour r in determining which local or additional state records, if any, should be ther they are reasonably ascertainable, (2) whether they are sufficiently useful, accurat of the objective of the records review (see 7.1.1), and (3) whether they are obtained, p ommercial or customary practice." One of the record sources listed in Section 7.2.2 is water v well information can be used to assist the environmental professional in assessing sour oundwater flow direction, and in forming an opinion about the impact of contaminant n ng water wells.

- PHYSICAL SETTING SOURCE SUMMARY

WELL SEARCH DI 'N

DATABASE 'TANCE (miles)

Federal USGS
Federal FRDS F S within 1 mile
State Databa

FEDERAL USGS W

MAP ID	LOCATION FROM TP
No Wells Found	

FEDERAL FRD **Y SYSTEM INFORMATION**

MAP ID	LOCATION FROM TP
No PWS System	

Note: PWS Syste the same as well location.

STATE DATAB N

MAP ID	LOCATION FROM TP
No Wells Found	

SETTING SOURCE MAP - 1054100.3s



- County Boundary
- Major Roads
- Contour Lines
- Earthquake Fault Lines
- Earthquake epicenter, Ri
- Water Wells
- Public Water Supply We
- Cluster of Multiple Icons

- Groundwater Flow Direction
- (G I) Indeterminate Groundwater Flow at Location
- (G V) Groundwater Flow Varies at Location
- (HD) Closest Hydrogeological Data
- Oil, gas or related wells

TARGET PROPERTY:		CUSTOMER:	Krazan & Associates, Inc.
ADDRESS:	osas Road	CONTACT:	Richard Opp
CITY/STATE/ZIP:	69	INQUIRY #:	1054100.3s
LAT/LONG:		DATE:	September 25, 2003 6:43 pm

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PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation			Database	EDR ID Number
1 **SE** **1/4 - 1/2 Mile** **Lower**	S C S De Av Da	Not Reported S 6.5 15 Not Reported 08/31/1993	**AQUIFLOW**	**34135**
2 **SSW** **1/4 - 1/2 Mile** **Lower**	S C S I / D	Not Reported Not Reported Not Reported Not Reported 12 05/29/1987	**AQUIFLOW**	**38459**
3 **WNW** **1/2 - 1 Mile** **Higher**	S G S I / I	Not Reported SSE Not Reported Not Reported 30 10/15/1993	**AQUIFLOW**	**38806**
A4 **SSE** **1/2 - 1 Mile** **Lower**	S C S I / I	9UT1516 Not Reported 10 16 Not Reported 02/15/1990	**AQUIFLOW**	**34181**
B5 **SW** **1/2 - 1 Mile** **Lower**	S C S I / I	Not Reported NE 7.5 15 Not Reported 07/1990	**AQUIFLOW**	**38309**
B6 **SW** **1/2 - 1 Mile** **Lower**	S C S I / I	9UT0892 E Not Reported Not Reported 22.5 01/11/1989	**AQUIFLOW**	**34147**
A7 **SSE** **1/2 - 1 Mile** **Lower**	S C S I / I	9UT0782 Not Reported Not Reported Not Reported >30 10/09/1987	**AQUIFLOW**	**37970**

PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation			Database	EDR ID Number
8 **SW** **1/2 - 1 Mile** **Lower**	S C S D A D	Not Reported Not Reported Not Reported Not Reported 15 10/07/1988	**AQUIFLOW**	**38286**

- PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON IN

Federal E: .N DIEGO County: 3

Note: 7 evel > 4 pCi/L.
: 7 evel >= 2 pCi/L and <= 4 pCi/L.
: 2 ievel < 2 pCi/L.

Federal Ar for Zip Code: 92069

Number o:

Area	ge Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Ar	pCi/L	100%	0%	0%
Living Ar	ported	Not Reported	Not Reported	Not Reported
Basemen:	eported	Not Reported	Not Reported	Not Reported

ETTING SOURCE RECORDS SEARCHED

TOPOGRAPH

USGS 7.5' Di (DEM)
Source: U rvey
EDR acqui l Elevation Model in 2002. 7.5-Minute DEMs correspond to the USGS
1:24,000- a graphic quadrangle maps.

HYDROLOGI

Flood Zone le in select counties across the country, was obtained by EDR in 1999 from the Federal
Emergency M EMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: Natior is data, available in select counties across the country, was obtained by EDR
in 2002 from Service.

HYDROGEOL

AQUIFLOW[R]
Source: E of groundwater flow information
EDR has Information System (AIS) to provide data on the general direction of groundwater
flow at viewed reports submitted to regulatory authorities at select sites and has
extract ydrogeologically determined groundwater flow direction and depth to water table
informa

GEOLOGIC

Geologic Ag ic Unit
Source: P. and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital
represent and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: abase
Source: L Natural Resources Conservation Services
The U.S. D s (USDA) Soil Conservation Service (SCS) leads the national Cooperative
Soil Survey ble for collecting, storing, maintaining and distributing soil survey
informatic ls in the United States. A soil map in a soil survey is a representation of
soil patter aps for STATSGO are compiled by generalizing more detailed (SSURGO) soil
survey m

ADDITIONA ORD SOURCES

FEDERAL W

PWS: Public
Source: er
Telephon
Public W. Federal Reporting Data System. A PWS is any water system which provides water to at
least 2 s annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: tion and Enforcement Data
Source: E
Telephon
Violation a ublic Water Systems from the Safe Drinking Water Information System (SDWIS) after
Augus 95, the data came from the Federal Reporting Data System (FRDS).

USGS Wate Water Inventory System (NWIS)
This databa mation on sites where the USGS collects or has collected data on surface
water and/o ater data includes information on wells, springs, and other sources of groundwater.

TTING SOURCE RECORDS SEARCHED

STATE REC

California Dr **abase**
Source: D es
Telephon
The datab er compliance and special studies monitoring for the state of California
since 19),000 individual analyses along with well and water system information.

California Oi **for District 2, 3, 5 and 6**
Source: D
Telephon

RADON

Area Radon
Source: U
Telephon
The Natio en developed by the U.S. Environmental Protection Agency
(USEPA) a PA/State Residential Radon Survey and the National Residential Radon Survey.
The study 92. Where necessary data has been supplemented by information collected at
private sou nd research institutions.

EPA Radon
Source: E
Telephon
Sections 3 PA to list and identify areas of U.S. with the potential for elevated indoor
radon leve

OTHER

Airport Land d public use landing facilities
Source: F on, 800-457-6656

Epicenters: rs, Richter 5 or greater
Source: L tional Oceanic and Atmospheric Administration

California E The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines,
prepared in 1 ological Survey. Additional information (also from 1975) regarding activity at specific fault
lines comes f / Fault Activity Map prepared by the California Division of Mines and Geology.

Appendix B

Questionnaire for
Phase I Environmental Site Assessment

Project No. 114-03128

Instructions: a) Complete all items in detail.
b) Completed form due by October 10, 2003
c) Form must be signed by respondent.

Return to: Richard P. Opp
Krazan & Associates, Inc.
4221 Brickell Street
Ontario, CA 91761

A) Special Instructions:
1) Provide copies of all previous environmental reports prepared for site.
2) Include any environmental Regulatory Agency correspondence regarding the site.
3) Provide Material Safety Data Sheets (MSDS) for any/all chemicals handled on site.

B) Respondent Information:

Name: WORLD PREMIER INVESTMENTS
Company:
Address: 3 IMPERIAL PROMENADE
City: SOUTH COAST METRO State: CA Zip: 92707
Telephone: 714-662-6900 ext 32 Fax: 714-662-7788

Relationship to Property: Owner _____ Property Manager _____ Other ✓

Personal knowledge about subject property: _____ Years

C) Property Relationships:

Property Owner: TENG SHAN WU
Name:
Company: CENTURY INVESTMENT
Address: 6 FOXBORO
City/State/Zip: IRVINE, CA 926V4

Buyer: WPI - LAS POSAS/MISSION, LLC
Name: ANDREW SUN
Company:
Address: 3 IMPERIAL PROMENADE
City/State/Zip: SOUTH COAST METRO, CA 92707

Property Manager:
Name:
Company:
Address:
City/State/Zip:

Tenant:
Name:
Company:
Address:
City/State/Zip:

D) Name(s) and Telephone Number(s) of additional Person(s) most familiar with the site:

1) ANDREW SUN (714) 662-6900 ext. 11
2) ( )
3) ( )

E) Site Information:

APN: 219-121-10; 219-121-11; 219-121-12
Site Address: TBD
City, County:
City/State/Zip: SAN MARCOS, CA

Acreage: 9.38 AC (2.0 FUTURE)
Zoning:
Tract No:
Most Recent Use: UNDEVELOPED

F) Structures on Site:

Number of Existing Structures NONE Age of Structures _____ Type of Construction _____
Number & Nature of Former Structures _____
Dates of Demolition _____

G) General Questions (answer the questions below for both the past and present property use). If yes, explain below.

		Yes	No
1.	Any Environmental Health Department or Fire Department Permits?	☐	☑
2.	Any on-site treatment and/or discharge of wastes?	☐	☑
3.	Any air discharge or water discharge permits?	☐	☑
4.	Any hazardous materials management plans (HMMPs)?	☐	☑
5.	Any previous investigations or inspections?	☐	☑
6.	Any on-site leach fields, sumps, or disposal ponds?	☐	☑
7.	Any on-site dry wells?	☐	☑
8.	Any use, storage, or disposal of hazardous or potentially hazardous materials on-site?	☐	☑
9.	Any use or storage of solvents, fuels, paints, pesticides, oils, agricultural chemicals, etc?	☐	☑
10.	Any asbestos containing building materials on-site?	☐	☑
11.	Any existing or former aboveground storage tanks (ASTs)?	☐	☑
12.	Any existing or former underground storage tanks (USTs)?	☐	☑
13.	Any testing for underground storage tanks and/or product lines?	☐	☑
14.	Any hazardous materials spills on-site?	☐	☑
15.	Any buried materials of any kind on-site?	☐	☑
16.	Any easements?	☑	☐
17.	Any electrical transformers on site (pole, pad-mounted, or subsurface)?	☑	☐
18.	Any monitoring, domestic, or irrigation wells on-site (in use or abandoned)?	☐	☑
19.	Any chemicals used on property such as pesticides?	☐	☑
20.	Any items of environmental concern?	☐	☑
21.	Any correspondence with regulators?	☐	☑

KRAZAN VERIFY

*EXPLAIN: _____

H) Known Site History including Ownership, Business Names, Leases, Operations, and Land Uses (Provide telephone numbers of operators if possible). Please complete in detail.

_____ to Present

_____ to _____

_____ to _____

Add additional sheets as required

To the best of my knowledge, the above is correct. _____ - UPI _____ 10/13/03

Signature of Respondent Date

APPENDIX D

HISTORICAL RECORDS DOCUMENTATION

W Mission Rd & N Las Posas Rd

W Mission Rd & N Las Posas Rd

San Marcos, CA 92069

Inquiry Number: 6526060.8

June 07, 2021

The EDR Aerial Photo Decade Package

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Aerial Photo Decade Package

06/07/21

Site Name:

W Mission Rd & N Las Posas F
W Mission Rd & N Las Posas F
San Marcos, CA 92069
EDR Inquiry # 6526060.8

Client Name:

Hillmann Environmental Co.
1745 W Orangewood Avenue
Orange, CA 92868-0000
Contact: Gabby Cyrulik

Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

Search Results:

Year	*Scale*	*Details*	*Source*
2016	1"=500'	Flight Year: 2016	USDA/NAIP
2012	1"=500'	Flight Year: 2012	USDA/NAIP
2009	1"=500'	Flight Year: 2009	USDA/NAIP
2005	1"=500'	Flight Year: 2005	USDA/NAIP
1990	1"=500'	Flight Date: September 06, 1990	USDA
1989	1"=500'	Flight Date: August 15, 1989	USDA
1985	1"=500'	Flight Date: September 13, 1985	USDA
1979	1"=500'	Flight Date: January 27, 1979	EDR Proprietary Landiscor
1970	1"=500'	Flight Date: March 06, 1970	EDR Proprietary Landiscor
1967	1"=500'	Flight Date: May 07, 1967	USGS
1964	1"=500'	Flight Date: April 09, 1964	USDA
1953	1"=500'	Flight Date: April 14, 1953	USDA
1946	1"=500'	Flight Date: December 30, 1946	USGS
1939	1"=500'	Flight Date: April 16, 1939	USDA
1928	1"=500'	Flight Date: November 01, 1928	EDR Proprietary Landiscor

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INQUIRY #: 6526060.8
YEAR: 2016
= 500'
N
EDR


INQUIRY #: 6526060.8
YEAR: 2012
= 500'
N
EDR



INQUIRY #: 6526060.8

YEAR: 2009

= 500'

N

EDR


INQUIRY #: 6526060.8
YEAR: 2005
= 500'
N
EDR



INQUIRY #: 6526060.8

YEAR: 1990

= 500'

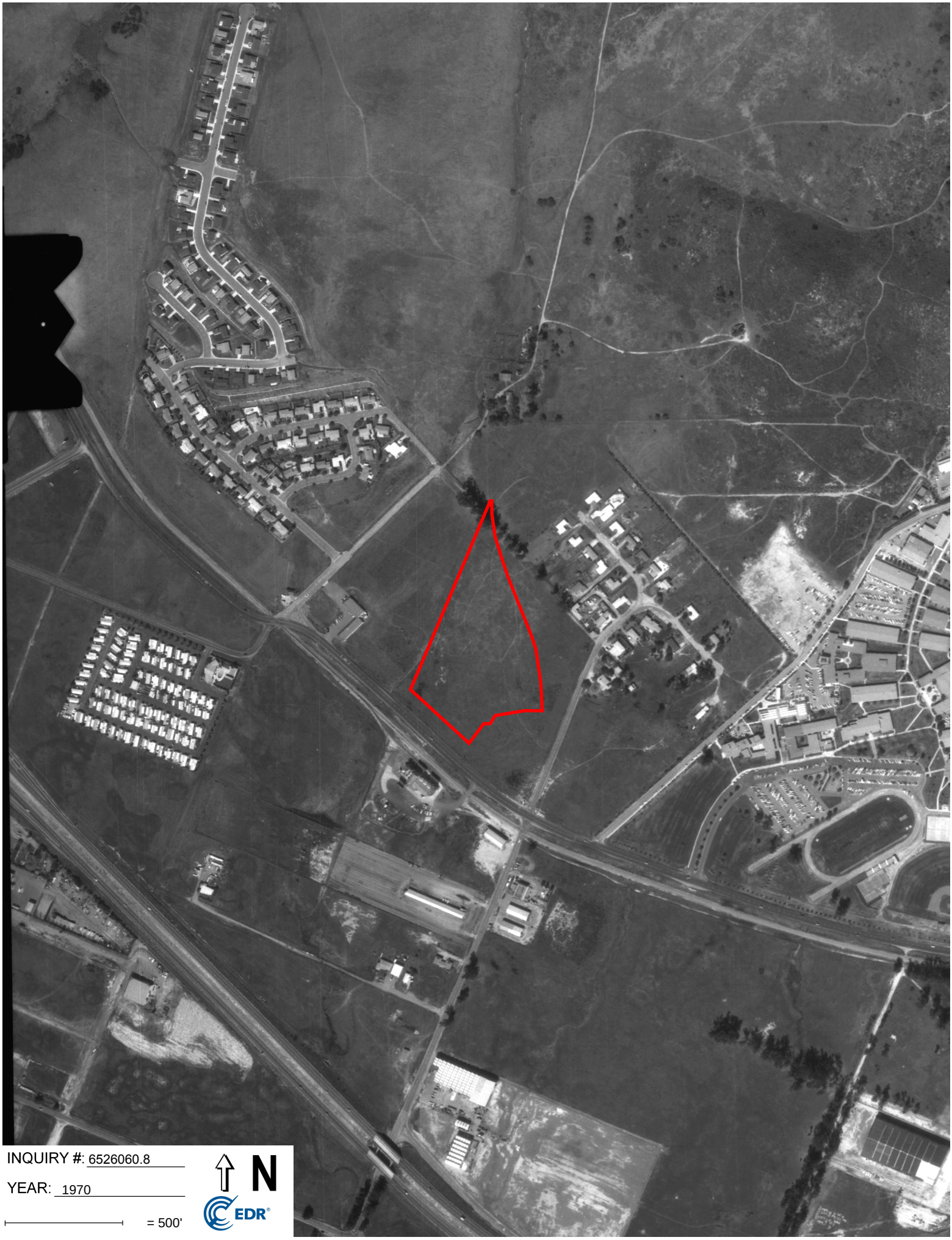
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EDR


INQUIRY #: 6526060.8
YEAR: 1989
= 500'
N
EDR


INQUIRY #: 6526060.8
YEAR: 1985
= 500'
N
EDR


INQUIRY #: 6526060.8
YEAR: 1979
= 500'
N
EDR



INQUIRY #: 6526060.8

YEAR: 1970

= 500'

N

EDR


INQUIRY #: 6526060.8
YEAR: 1967
= 500'
N
EDR



INQUIRY #: 6526060.8

YEAR: 1964

= 500'

N

EDR



INQUIRY #: 6526060.8

YEAR: 1953

= 500'

N

EDR


INQUIRY #: 6526060.8
YEAR: 1946
= 500'
N
EDR



INQUIRY #: 6526060.8

YEAR: 1939

= 500'

N

EDR



INQUIRY #: 6526060.8

YEAR: 1928

= 500'

N

EDR

W Mission Rd & N Las Posas Rd

W Mission Rd & N Las Posas Rd

San Marcos, CA 92069

Inquiry Number: 6526060.4

June 07, 2021

EDR Historical Topo Map Report

with QuadMatch™

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Historical Topo Map Report

06/07/21

Site Name:	Client Name:
W Mission Rd & N Las Posas F	Hillmann Environmental Co.
W Mission Rd & N Las Posas F	1745 W Orangewood Avenue
San Marcos, CA 92069	Orange, CA 92868-0000
EDR Inquiry # 6526060.4	Contact: Gabby Cyrulik

EDR Topographic Map Library has been searched by EDR and maps covering the target property location as provided by Hillmann Environmental Co. were identified for the years listed below. EDR's Historical Topo Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDRs Historical Topo Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the late 1800s.

Search Results:		*Coordinates:*	
P.O.#	W Mission Rd & N Las Posas F	**Latitude:**	33.150441 33° 9' 2" North
Project:	C3-8450	**Longitude:**	-117.189618 -117° 11' 23" West
		UTM Zone:	Zone 11 North
		UTM X Meters:	482316.79
		UTM Y Meters:	3667981.05
		Elevation:	574.36' above sea level

Maps Provided:

2012	1893
1996	
1983	
1968	
1949	
1948	
1947	
1901	

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Topo Sheet Key

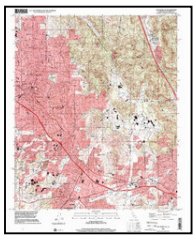
This EDR Topo Map Report is based upon the following USGS topographic map sheets.

2012 Source Sheets



San Marcos
2012
7.5-minute, 24000

1996 Source Sheets



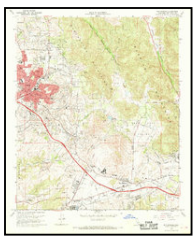
San Marcos
1996
7.5-minute, 24000
Aerial Photo Revised 1996

1983 Source Sheets



San Marcos
1983
7.5-minute, 24000
Aerial Photo Revised 1980

1968 Source Sheets



San Marcos
1968
7.5-minute, 24000
Aerial Photo Revised 1967

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1949 Source Sheets



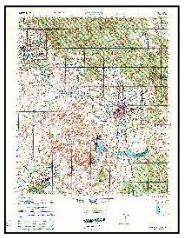
San Marcos
1949
7.5-minute, 24000
Aerial Photo Revised 1946

1948 Source Sheets



San Marcos
1948
7.5-minute, 24000
Aerial Photo Revised 1946

1947 Source Sheets



ESCONDIDO
1947
15-minute, 50000

1901 Source Sheets



Escondido
1901
15-minute, 62500

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

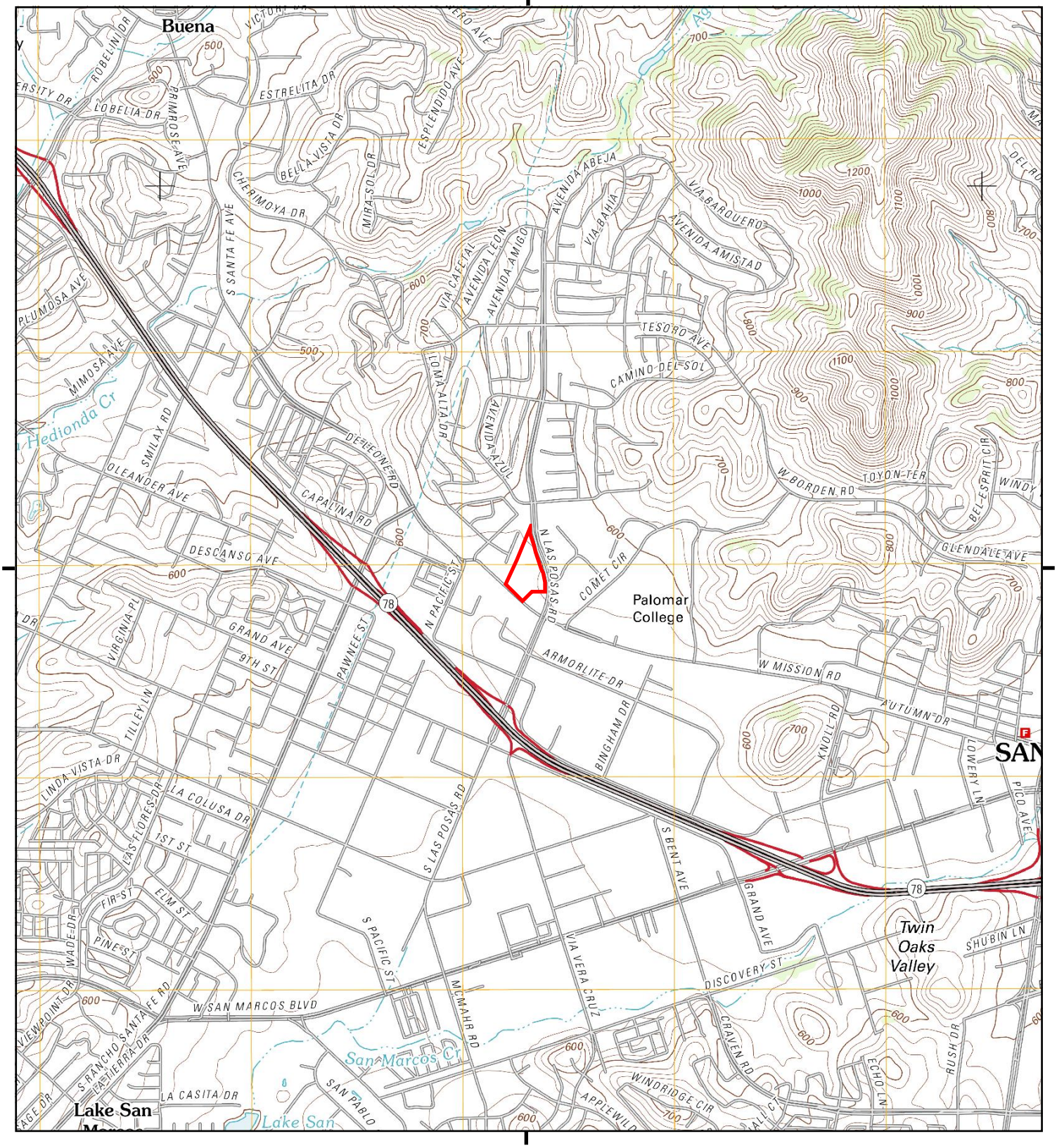
1893 Source Sheets



Escondido
1893
15-minute, 62500

Historical Topo Map

2012



This report includes information from the following map sheet(s).

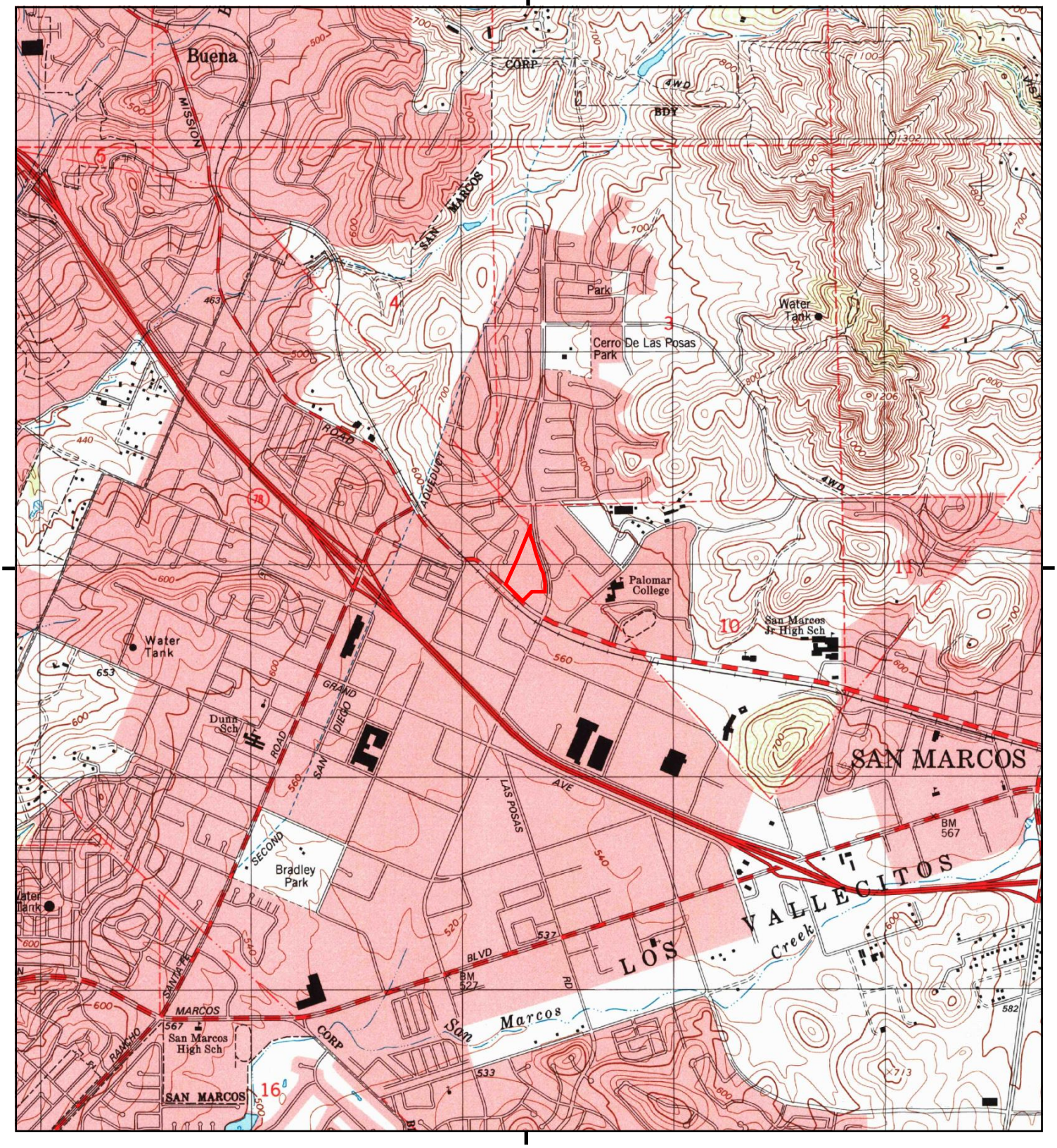
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, San Marcos, 2012, 7.5-minute

SITE NAME: W Mission Rd & N Las Posas Rd
ADDRESS: W Mission Rd & N Las Posas Rd
San Marcos, CA 92069
CLIENT: Hillmann Environmental Co.

N



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

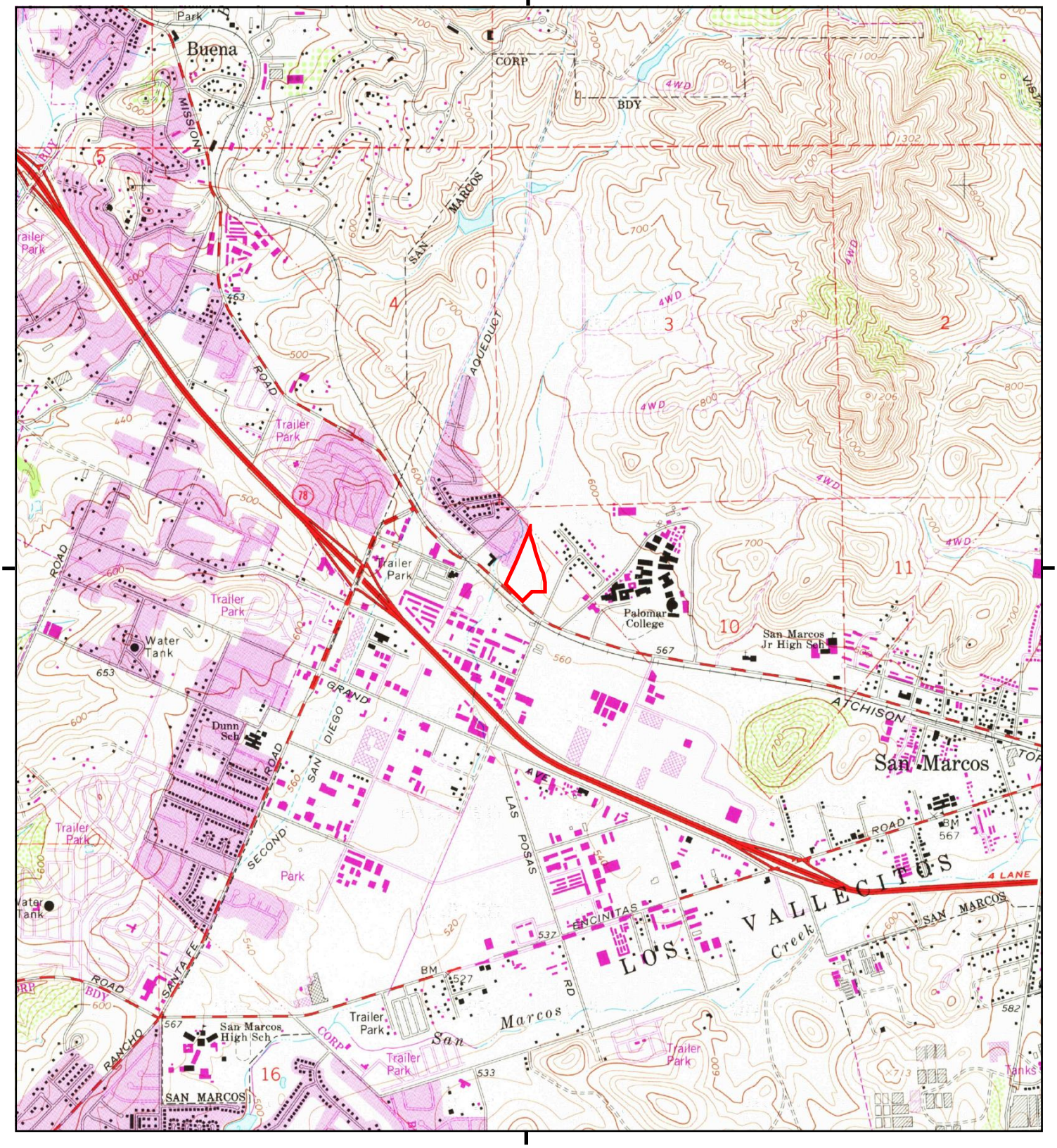
TP, San Marcos, 1996, 7.5-minute

SITE NAME: W Mission Rd & N Las Posas Rd
ADDRESS: W Mission Rd & N Las Posas Rd
San Marcos, CA 92069
CLIENT: Hillmann Environmental Co.

N

Historical Topo Map

1983



This report includes information from the following map sheet(s).

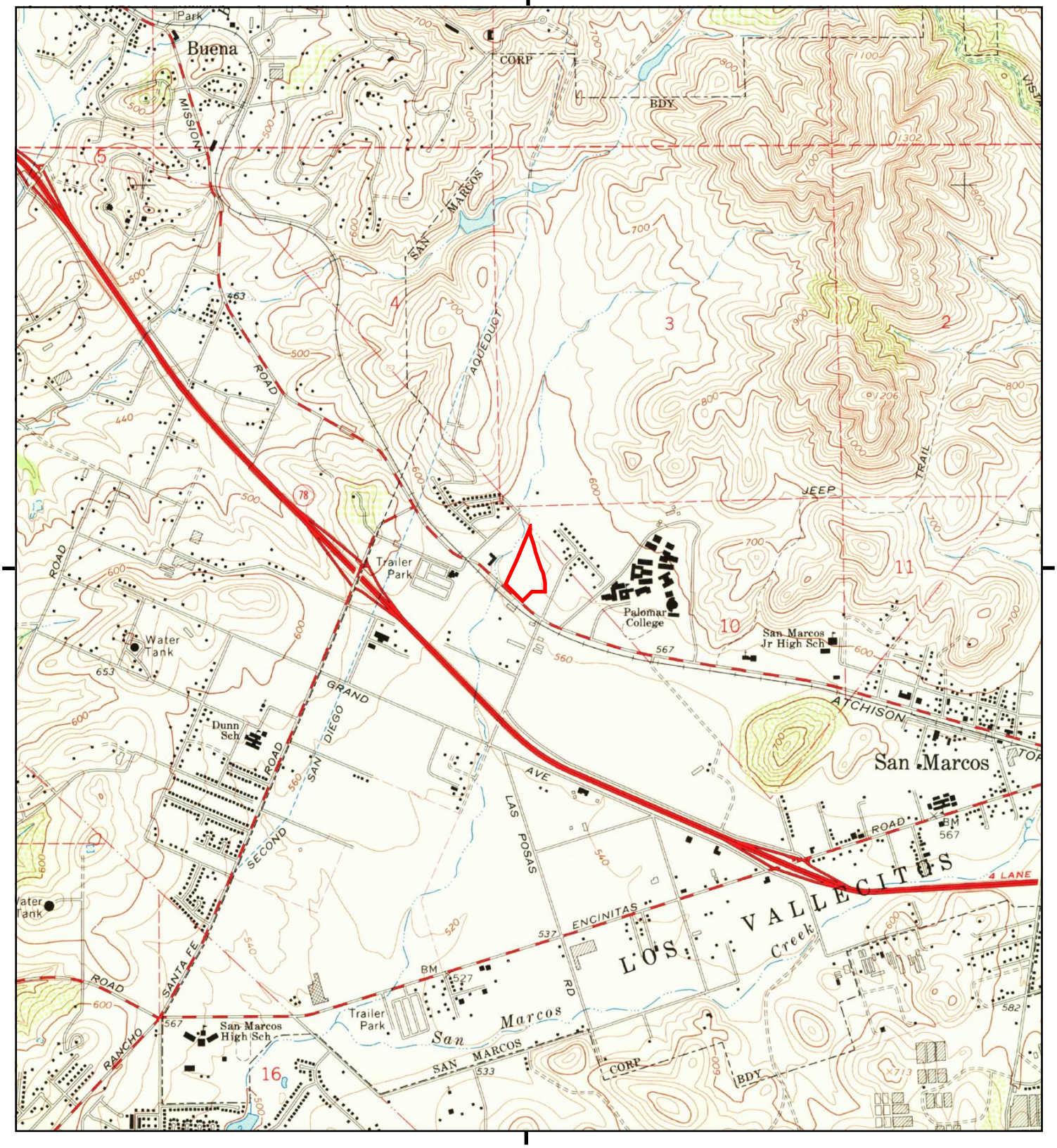
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, San Marcos, 1983, 7.5-minute

SITE NAME: W Mission Rd & N Las Posas Rd
ADDRESS: W Mission Rd & N Las Posas Rd
San Marcos, CA 92069
CLIENT: Hillmann Environmental Co.

N



This report includes information from the following map sheet(s).

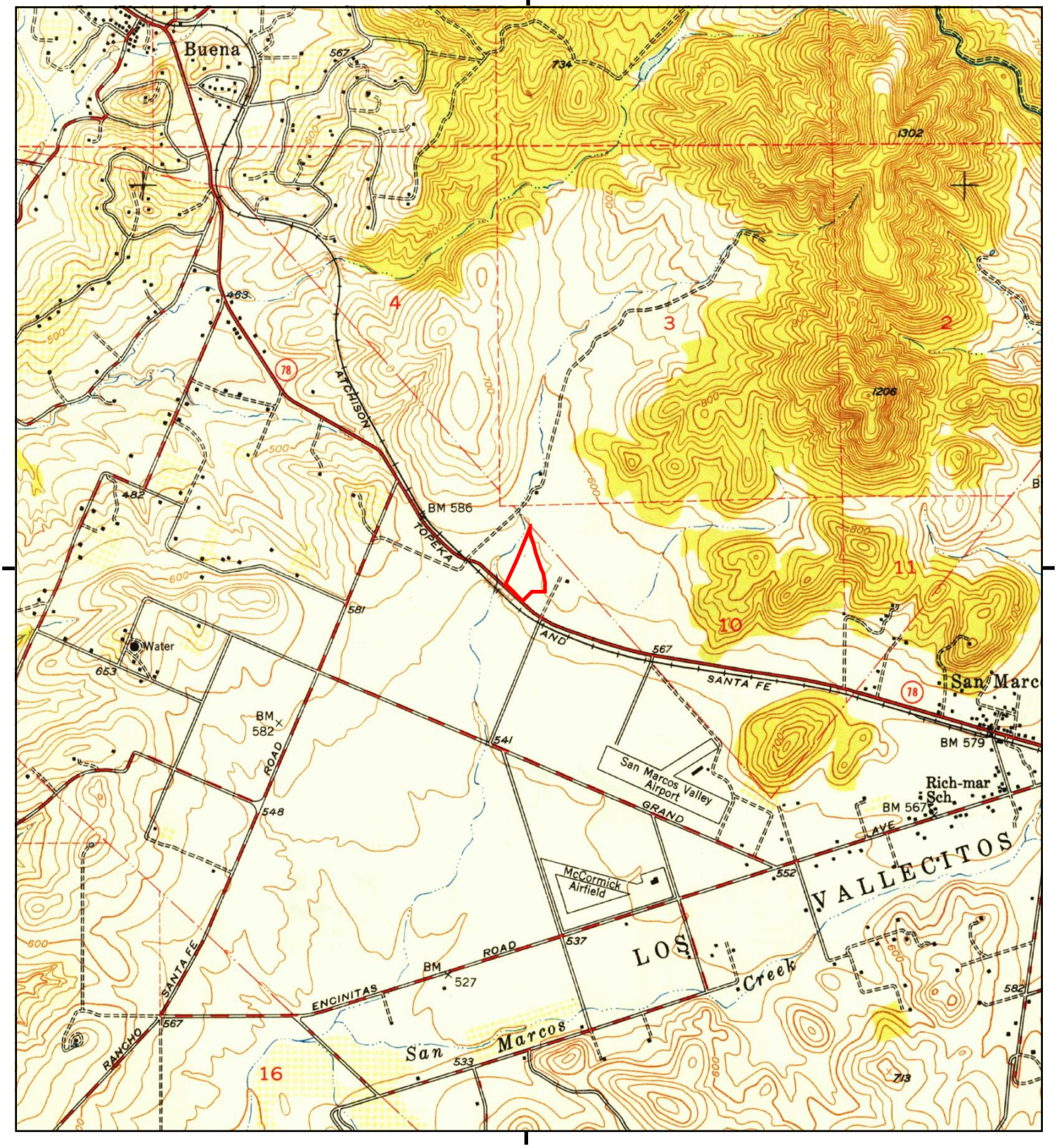
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, San Marcos, 1968, 7.5-minute

SITE NAME: W Mission Rd & N Las Posas Rd
ADDRESS: W Mission Rd & N Las Posas Rd
San Marcos, CA 92069
CLIENT: Hillmann Environmental Co.

N



This report includes information from the following map sheet(s).

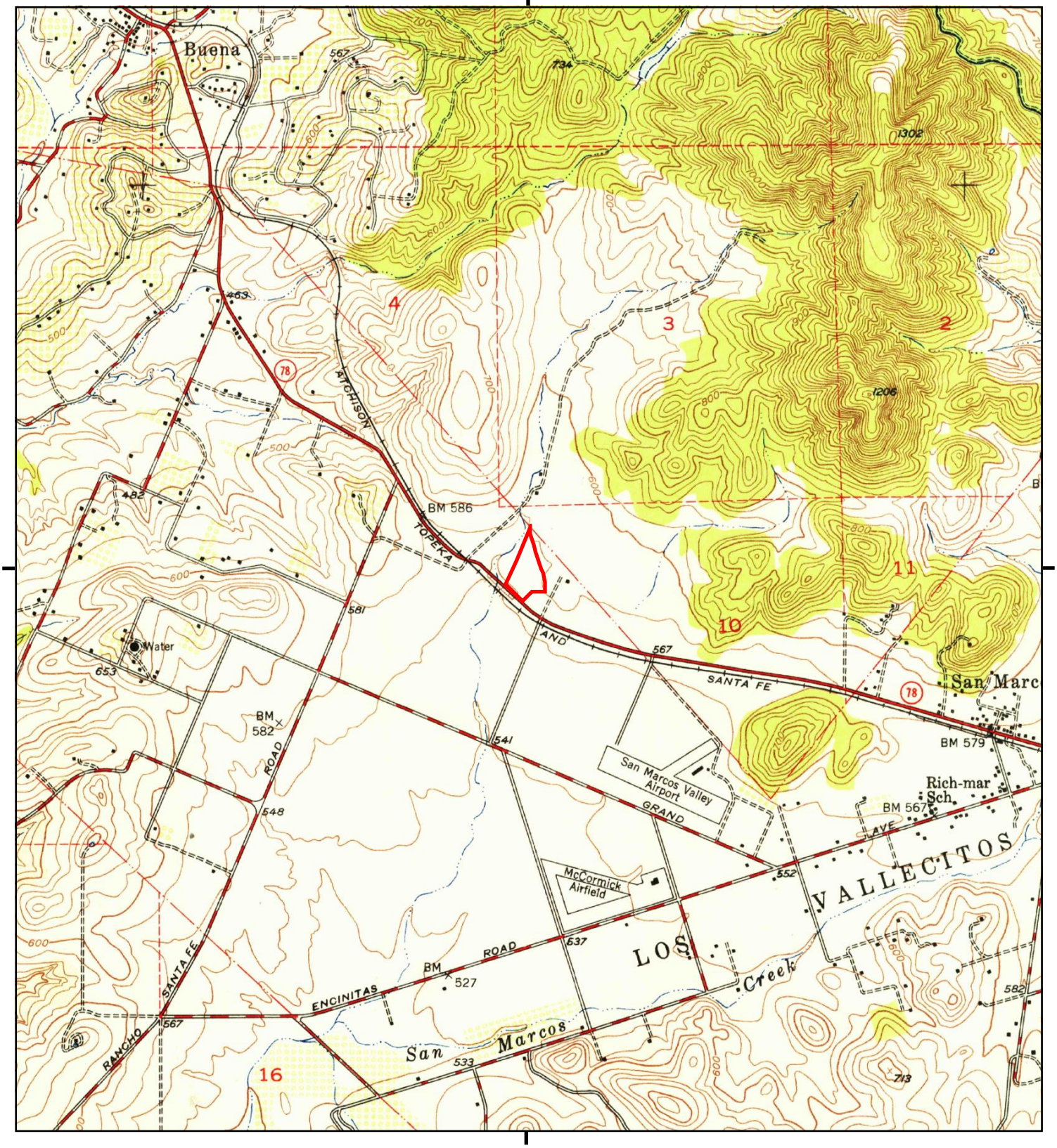
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, San Marcos, 1949, 7.5-minute

SITE NAME: W Mission Rd & N Las Posas Rd
ADDRESS: W Mission Rd & N Las Posas Rd
San Marcos, CA 92069
CLIENT: Hillmann Environmental Co.

N



This report includes information from the following map sheet(s).

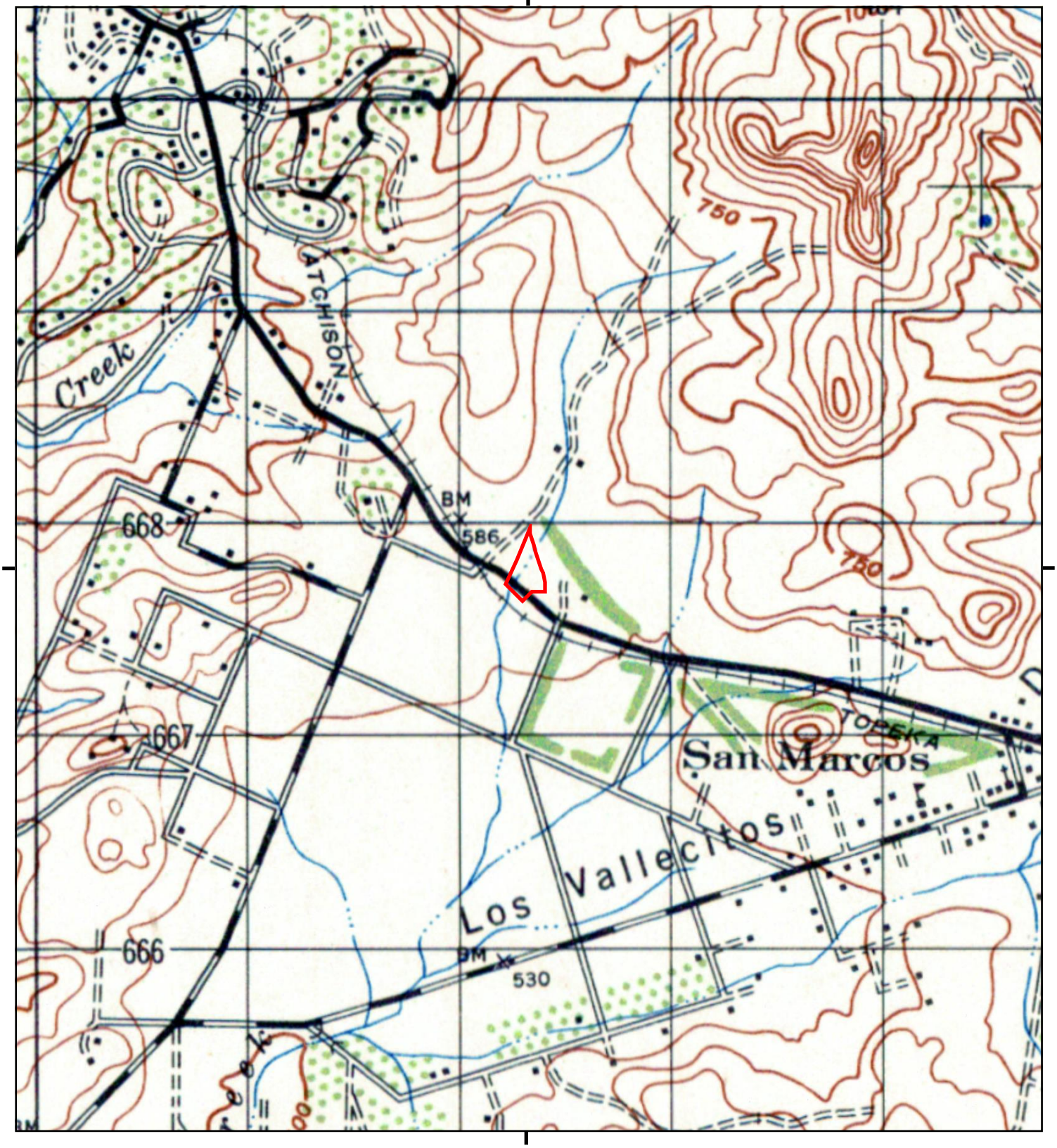
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, San Marcos, 1948, 7.5-minute

SITE NAME: W Mission Rd & N Las Posas Rd
ADDRESS: W Mission Rd & N Las Posas Rd
San Marcos, CA 92069
CLIENT: Hillmann Environmental Co.

N



This report includes information from the following map sheet(s).

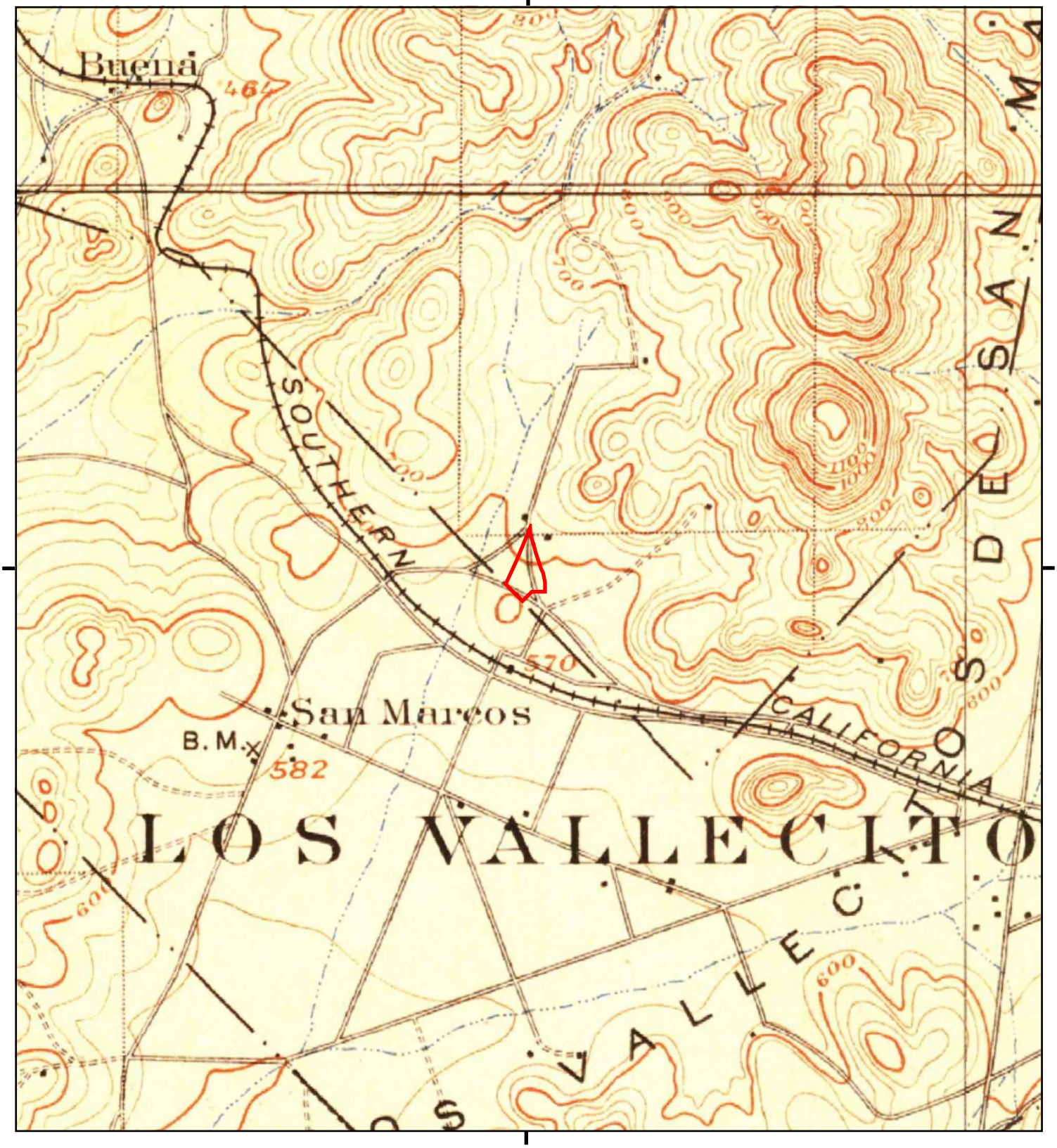
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, ESCONDIDO, 1947, 15-minute

SITE NAME: W Mission Rd & N Las Posas Rd
ADDRESS: W Mission Rd & N Las Posas Rd
San Marcos, CA 92069
CLIENT: Hillmann Environmental Co.

N



This report includes information from the following map sheet(s).

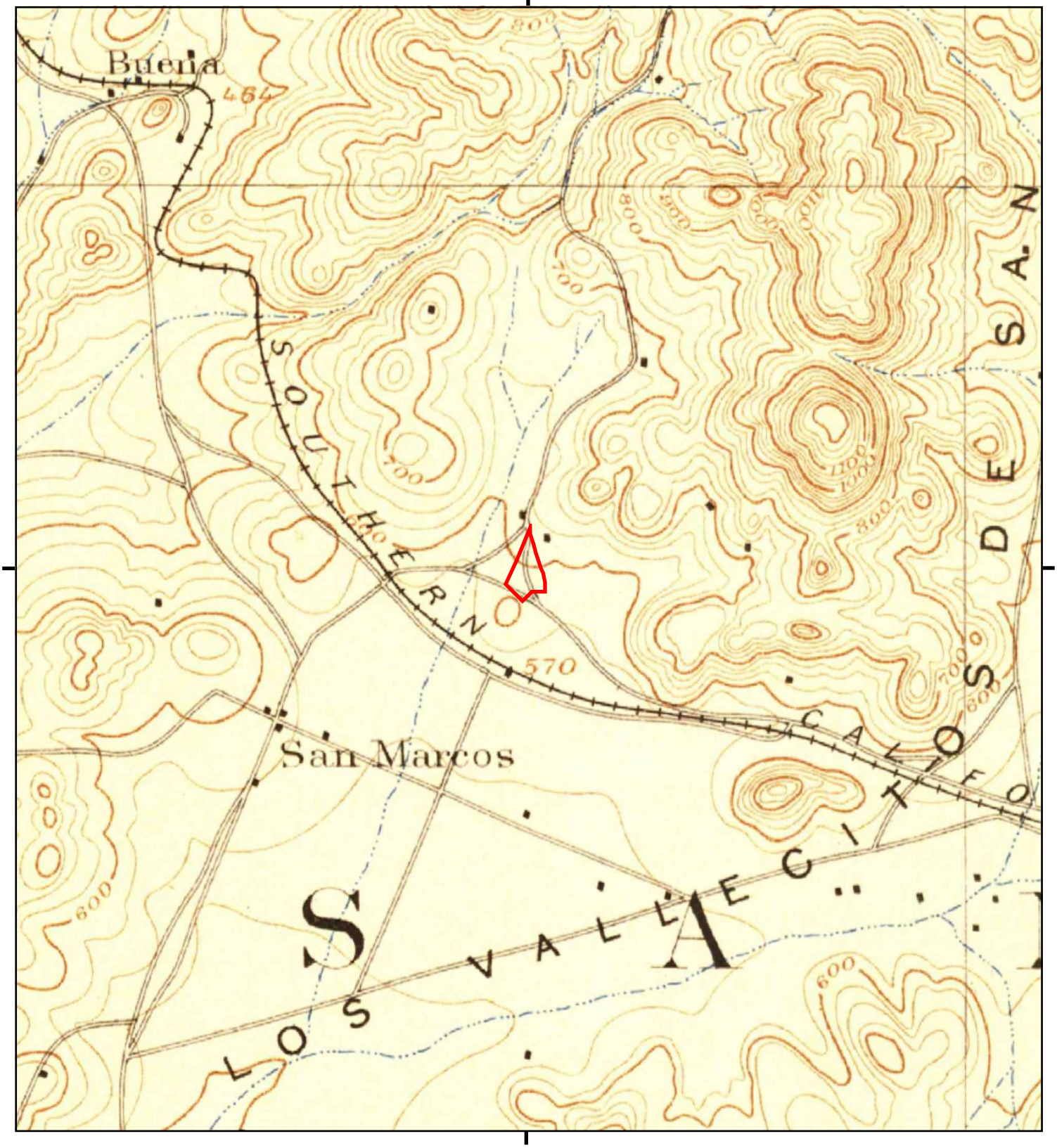
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Escondido, 1901, 15-minute

SITE NAME: W Mission Rd & N Las Posas Rd
ADDRESS: W Mission Rd & N Las Posas Rd
San Marcos, CA 92069
CLIENT: Hillmann Environmental Co.

N



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Escondido, 1893, 15-minute

SITE NAME: W Mission Rd & N Las Posas Rd
ADDRESS: W Mission Rd & N Las Posas Rd
San Marcos, CA 92069
CLIENT: Hillmann Environmental Co.

N

W Mission Rd & N Las Posas Rd

W Mission Rd & N Las Posas Rd

San Marcos, CA 92069

Inquiry Number: 6526060.3

June 07, 2021

Certified Sanborn® Map Report

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

06/07/21

Site Name:	Client Name:
W Mission Rd & N Las Posas F	Hillmann Environmental Co.
W Mission Rd & N Las Posas F	1745 W Orangewood Avenue
San Marcos, CA 92069	Orange, CA 92868-0000
EDR Inquiry # 6526060.3	Contact: Gabby Cyrulik

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Certified Sanborn Results:

Certification # 3FC0-4E69-8D7B

PO # W Mission Rd & N Las Posas Rd

Project C3-8450

UNMAPPED PROPERTY

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Sanborn® Library search results

Certification #: 3FC0-4E69-8D7B

The Sanborn Library includes more than 1.2 million fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- ☑ Library of Congress
- ☑ University Publications of America
- ☑ EDR Private Collection

The Sanborn Library LLC Since 1866™

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W Mission Rd & N Las Posas Rd
W Mission Rd & N Las Posas Rd
San Marcos, CA 92069

Inquiry Number: 6526060.5
June 10, 2021

The EDR-City Directory Image Report

Environmental Data Resources Inc

6 Armstrong Road
Shelton, CT 06484
800.352.0050
www.edrnet.com

TABLE OF CONTENTS

SECTION

Executive Summary

Findings

City Directory Images

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EXECUTIVE SUMMARY

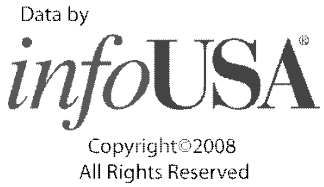
DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Report is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Report includes a search of available city directory data at 5 year intervals.

RECORD SOURCES

EDR's Digital Archive combines historical directory listings from sources such as Cole Information and Dun & Bradstreet. These standard sources of property information complement and enhance each other to provide a more comprehensive report.

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RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. A check mark indicates where information was identified in the source and provided in this report.

Year	Target Street	Cross Street	Source
2017	☑	☐	EDR Digital Archive
2014	☑	☐	EDR Digital Archive
2010	☑	☐	EDR Digital Archive
2005	☑	☐	EDR Digital Archive
2000	☑	☐	EDR Digital Archive
1995	☑	☐	EDR Digital Archive
1992	☑	☐	EDR Digital Archive
1986	☑	☐	Haines Criss-Cross Directory
1982	☑	☐	Haines Criss-Cross Directory
1979	☑	☐	Haines Criss-Cross Directory
1975	☑	☐	Haines Criss-Cross Directory
1971	☑	☐	Haines Criss-Cross Directory

FINDINGS

TARGET PROPERTY STREET

W Mission Rd & N Las Posas Rd
San Marcos, CA 92069

Year	*CD Image*	*Source*

N LAS POSAS RD

2017	pg A1	EDR Digital Archive
2014	pg A3	EDR Digital Archive
2010	pg A5	EDR Digital Archive
2005	pg A7	EDR Digital Archive
2000	pg A9	EDR Digital Archive
1995	pg A11	EDR Digital Archive
1992	pg A13	EDR Digital Archive
1986	pg A15	Haines Criss-Cross Directory
1982	pg A17	Haines Criss-Cross Directory
1982	pg A18	Haines Criss-Cross Directory
1979	pg A20	Haines Criss-Cross Directory
1975	pg A22	Haines Criss-Cross Directory
1971	pg A24	Haines Criss-Cross Directory

W MISSION RD

2017	pg A2	EDR Digital Archive
2014	pg A4	EDR Digital Archive
2010	pg A6	EDR Digital Archive
2005	pg A8	EDR Digital Archive
2000	pg A10	EDR Digital Archive
1995	pg A12	EDR Digital Archive
1992	pg A14	EDR Digital Archive
1986	pg A16	Haines Criss-Cross Directory
1982	pg A19	Haines Criss-Cross Directory
1979	pg A21	Haines Criss-Cross Directory
1975	pg A23	Haines Criss-Cross Directory
1971	pg A25	Haines Criss-Cross Directory

FINDINGS

CROSS STREETS

No Cross Streets Identified

City Directory Images

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

N LAS POSAS RD 2017

128	TILTON REALTY
132	GRANIX
	VENTURE QUEST INTERNATIONAL INC
217	GEORGES BURGERS
225	EQUITY REAL ESTATE
	ROSS PATENT LAW OFFICE

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

W MISSION RD 2017

800	ANBRADE LORENA
	SAN MARCOS UNITED METHODIST CHURCH
1140	PALOMAR COLLEGE
	SO ILLINOIS UNIVERSITY
1290	CHEVRON
1450	PEACOCK CLEANERS
	SORRENTOS PIZZA
1531	7ELEVEN
	ATM
	BIRDMAN MEDIA
	CHAMPA & THAI MASSAGE
	QUALITY GARAGE DOOR SOLUTIONS LLC
	STATION PIZZA DELI
	STUDIO GLAMOUR BEAUTY SALON
1551	AMERICAN SMOKE SHOP
	BLACK FILIGREE TATTOO
	ESPARZA, JUAN G
	FX PAGING & CELLULAR
	I 316 INSURANCE SERVICES LLC
	MARISCO LOS PINOS
	PAULINO OLGUIN INCOME TAX SERVICE

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

N LAS POSAS RD 2014

128	TILTON REALTY
132	GRANIX
	VENTURE QUEST INTERNATIONAL INC
217	GEORGE BURGERS
	GEORGES BURGERS
225	EQUITY REAL ESTATE
	ROSS PATENT LAW OFFICE
	SMITH ANN M EQUITY REAL ESTATE
	VIKING ELECTRICAL CONTRACTORS

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

W MISSION RD 2014

800	APPLIED SCHOLASTICS ACADEMY NORTH CO
	SAN MARCOS UNITED METHODIST CHURCH
	UNITED METHODIST CHURCH
	VICTORY KOREAN UNITED METHODIST CHUR
1140	CALIFORNIA ENGLISH SCHOOL
	PALOMAR COLLEGE
	SO ILLINOIS UNIVERSITY
1290	CHEVRON
	CHEVRON STATION SAN MARCOS
1450	HAPPY CHANG
	OFFCAMPUS BOOKS
	PEACOCK CLEANERS
	PRECISION SAN MARCOS GARAGE DOOR
	SORRENTOS PIZZA
1531	7ELEVEN
	BIRDMAN MEDIA
	CARDTRONICS
	KENNEY, JOHN
	QUALITY GARAGE DOOR SOLUTIONS
	STATION PIZZA DELI
	STUDIO GLAMOUR BEAUTY SALON
1551	AMERICAN SMOKE SHOP
	ARLINS VIDEO
	FX PAGING & CELLULAR
	MARISCO LOS PINOS
	PANADERIA ESTRELLA
	PAULINO OLGUIN INCOME TAX SERVICE

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

N LAS POSAS RD 2010

120	SAN MARCOS CAMPER REPAIR
128	TILTON REALTY
132	AMERICAN GRANITE RESOURCES
	GRANIX
	VENTURE QUEST INTL INC
184	BEMUS LANDSCAPE INC
217	GEORGES BURGERS
225	FOUR SEASONS GARDENING SVC
	MARYS CLEANING
	REALTY EXECUTIVES

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

W MISSION RD 2010

800	SAN MARCOS UNITED METHODIST
	VISTA KOREAN UNITED MTHDST CHR
1140	BOEHM GALLERY
	CALIFORNIA ENGLISH SCHOOL
	HOWARD BRUBECK THEATRE
	PALOMAR COLLEGE
	PUPLAVA FINANCIAL SVC
	SATURN ELECTRIC
	SOUTH ILLINOIS UNIVERSITY
1290	DON HARMS INC
	LAWYER A1 REFERRAL NETWORK
1450	BELAYR INTERNATIONAL INC
	HAPPY CHANG
	KIM, CHUNG C
	MAGIC TOUCH BEAUTY SALON
	NOAH VIDEO
	PEACOCK CLEANERS
	SORRENTOS PIZZA
	WEST GIN BAKERY
1531	7ELEVEN
	ARCELIA BEAUTY SALON
	CARDTRONICS
	GOLDEN DONUT
	STATION PIZZA DELI
	WALTER RD TRUCKING INC
1551	ALL IN ONE HOMES
	AMERICAN SMOKE SHOP
	AMERICAS JANITORIAL SVC
	ARLINS VIDEO
	F X PAGING & CELLULAR
	MARISCO LOS PINOS
	PANADERIA ESTRELLA
	PAULINO OLGUIN INCOME TAX SVC
	PILAR PARTY SUPPLIES & GIFTS
	SAN MARCOS INSURANCE SVC INC

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

N LAS POSAS RD 2005

128	TILTON REALTY
132	3D STONE INC
	D & H HOME INTERIOR
144	VALUE RUGS INC
184	BEMUS LANDSCAPE INC
211	HUTTON, C
217	GEORGE BURGERS

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

W MISSION RD 2005

800	SAN MARCOS UNITED METHODIST CHURCH
	UNITED METHODIST PRESCHOOL & DAY CAR
1140	CALIFORNIA LONGWOOD INSITTT
	NATIONAL COUNCIL FOR CONTINUING EDU
	NCCET
	PALOMAR COLLEGE
	PALOMAR COLLEGE / SAN MARCUS CAMPUS
	THE TELESCOPE
1290	DON HARMS INC
	THE KITCHEN & BATH CO
	THE KITCHEN & BATH CO OF SAN D
1450	BANGKOK GARDEN
	KIM, YOUNG
	MAGIC TOUCH BEAUTY SALON
	NOAH VIDEO
	OFF CAMPUS BOOKS
	PEACOCK CLEANERS
	SORRENTOS PIZZA
	WEST GIN BAKERY
1531	7 ELEVEN
	GOLDEN DONUTS
	LYNNS PONY EXPRESS POSTAL SERVICE
	PILAR PARTY SUPPLIES & GIFTS
	PILARS PARTY SUPPLIES & GIFTS
	ROCCOS PIZZA DELI
1551	CHIN YUNG EXPRESS
	FX PAGING & CELLULAR
	GEMS, N
	GOLDEN DRAGON CHINESE RESTAURANT
	MI FIESTA SEAFOOD RESTAURANT
	MONTE SINAI RESTAURANT Y PNDR
	OLGUIN PAULINO INCOME TAX SERVICE
	PUFF N STUFF SMOKE SHOP USA
	TES COFFEE RESTAURANT & CHINESE FOOD

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

N LAS POSAS RD 2000

102	SAN MARCOS ELECTRIC SUPPLY
110	MOTO RAD CYCLE PAINT
	PATERSON MOTORSPORTS
	TEAM PATERSON
116	TERRYS DATSUN SPECIALIST
	TERRYS NISSAN SPECIALIST
120	CCC POOL SERVICES INCORPORATED
	SAN MARCOS CAMPER REPAIR
122	GEORGE BURGERS SAN MARCOS
128	FOGOROS GIL
	INSTANT SIGNS
	TILTON REALTY
132	ALL AUTOMOTIVE SERVICES
	ASSOCIATED DIVING & WELDING
	NORTH COUNTY PAD RECYCLERS
148	SAN MARCOS AUTO BODY
184	NORTH COUNTY SUPPLY INCORPORATED
217	MARBLE & GRANITE EXPRESSIONS
225	FOUR SEASONS GARDENING SERVICE
365	VIDOSEVIC, JURAJ

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

W MISSION RD 2000

800	SAN MARCOS UNITED METHODIST CHURCH
	UNITED METHODIST PRESCHOOL & DAY CARE
1140	CALIFORNIA ENGLISH SCHOOL
	LITTLE CAESARS PIZZA
	PALOMAR COLLEGE SAN MARCOS CAMPUS
1290	SAN MARCOS MOBIL
1450	BANGKOK GARDEN
	MAGIC TOUCH BEAUTY SALON
	NOHA INTERNATIONAL BAKERY SERVICE COMPANY
	OFF CAMPUS BOOKS
	PEACOCK CLEANERS
	RADVAR HAMID
	ROYS T V
	SORRENTOS PIZZA
	WEST GIN BAKERY
	WINDOW STORE INCORPORATED THE
1531	GOLDEN DONUT NO 4
	LYNNS PONY EXPRESS POSTAL SERVICE
	MAKEN WAVES
	MAKEN WAVES BETHANY & DONNA
	ROCCOS PIZZA DELI
	WALTER R D TRUCKING INCORPORATED
1551	CHIN YUNG EXPRESS
	CHUNG HING 3
	FLYING DRAGON INCORPORATED
	FX PAGING & CELLULAR
	OFICINA OLGUIN
	SET APART PERFORMING ARTS
	STOGIES TOBACCO SHOP
	SU CASA REAL ESTATE
	TU FIESTA MEXICAN SEA FOOD
	VISTA CHRISTIAN CHURCH MISSION
	WALTS TV & VCR SERVICE
1605	SIERRA MADRE ACADEMY

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

N LAS POSAS RD 1995

102	PASCH ELECTRIC SUPPLY
110	TEAM PATERSON
116	TERRYS DATSUN SPECIALIST
	TERRYS FOREIGN AUTO
120	CUSTOM MACHINE
	SAN MARCOS CAMPER REPAIR
122	GEORGES BURGERS
127	AALPHA INTERNATIONAL
	SUNSTAR ENTERPRISES
128	INSTANT SIGNS
	TILTON REALTY
148	SAN MARCOS PAINT & AUTO BODY
184	NORTH COUNTY SUPPLY INC
200	AJM BUILDING PRODUCTS
207	ULTRA FLEX MOLDING
225	FOUR SEASONS GARDENING SVC
365	VIDOSEVIC, JURAJ

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

W MISSION RD 1995

800	UNITED METHODIST PRE SCHOOL
1010	U SAVE AUTO RENTAL
1140	CALIFORNIA ENGLISH SCHOOL
	PALOMAR COLLEGE
	PALOMAR COLLEGE BOX OFFICE
	PEPES MEXICAN CUISINE
1290	MOBIL OIL CORP
1450	DJADE VINE ORIENTAL CUISINE
	GENESIS TV
	JEWELRY REPAIR CTR
	MAGIC TOUCH BEAUTY SALON
	PALOMAR MARKET
	PEACOCK CLEANERS
	ROYS TV
	SORRENTOS PIZZA
	VALLEY VIDEO
	WEST GIN BAKERY
1531	501 TRADE CO
	GENIES LAMPS
	GOLDEN DONUT
	HAIRS THE PLACE
	R D WALTER TRUCKING INC
	ROCCOS PIZZA DELI
1551	BASEBALL CARDS CROSSROADS
	CREATIVE NAILS
	GOLDEN DRAGON RESTAURANT
	INSTITUTE TRADITIONAL KARATE
	MOVIE STORE
	STIX SKATEBOARD WAREHOUSE
	TU FIESTA MEXICAN FOOD

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

N LAS POSAS RD 1992

102	PASCH ELEC SPLY INC
110	TEAM PATERSON
	TEAM, P
116	TERRYS DATSUN SPCL
120	ALIVE PRODUCTS
	SANMARCOS CAMPR RPR
122	GEORGES BURGERS
127	SUNSTAR ENTERPRISES
128	INSTANT SIGNS
	TILTON REALTY
132	ALAR PRODUCTS
	STORAGE BARNS
148	SANMARCOS PAINT&BDY
184	NORTH CO SUPPLY INC
207	B F ADAMS CO
217	TORREY CHEMICAL CO
365	VIDOSEVIC, JURAJ

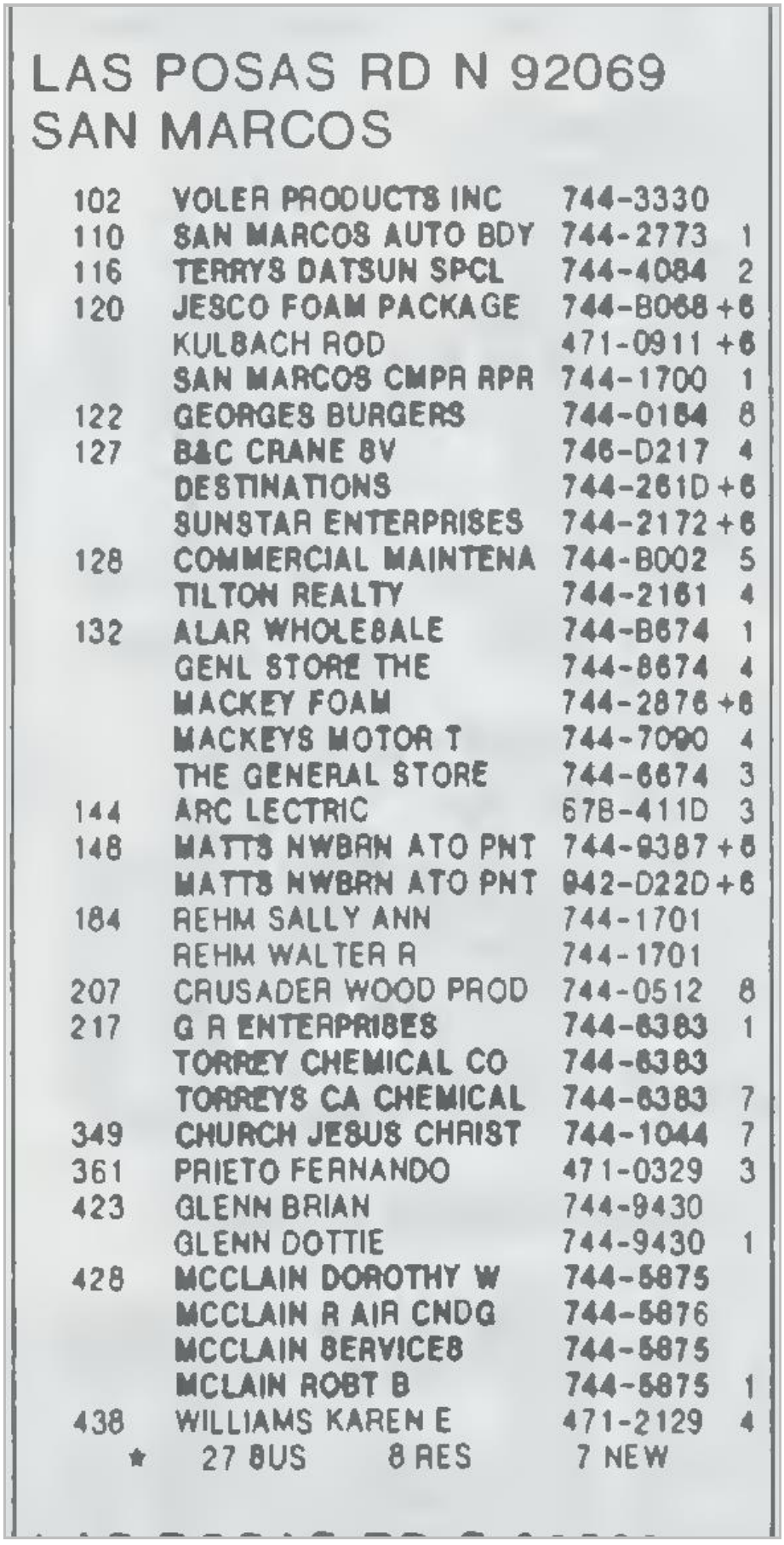
Target Street	Cross Street	Source
✓	-	EDR Digital Archive

W MISSION RD 1992

800	UNITD METH CH
1140	CA ENGLISH SCHOOL
	PALOMAR CLG ADMIN
	PALOMAR MED CT TRNS
	PEPES MEXICAN CSNE
	STATEWIDE NURSING
1329	PIONEER MILLS
1344	MASTROVICH CHAS DDS
1450	BALLES VIDEOS
	DJADE VNE ORNTL CSN
	GENESIS TV
	JUST FLICKS VIDEO
	MAGIC TOUCH BEAUTY
	PALOMAR MARKET
	ROYS TV
	SORRENTOS PIZZA
	WEST GIN BAKERY
1531	DONUT HOLE THE
	GENIES LAMPS THE
	HAIRS THE PLACE
	KARENS COMPANY
	ROCCOS PIZZA DELI
	SEVEN 11 FOOD 21142
	WALTER R D TRUCKING
1551	ALOHA PRINTING
	BASEBALL CRD CRSSRD
	GOLDEN DRAGON REST
	INTL OKINWN GJU RYU
	LA FAMILIA CLOTHING
	MI FIESTA
	POLISHED SET THE
	STIX SKATEBRD WRHS

Target Street	Cross Street	Source
✓	-	Haines Criss-Cross Directory

N LAS POSAS RD 1986



LAS POSAS RD N 92069
SAN MARCOS

102	VOLER PRODUCTS INC	744-3330	
110	SAN MARCOS AUTO BDY	744-2773	1
116	TERRYS DATSUN SPCL	744-4084	2
120	JESCO FOAM PACKAGE	744-B068	+6
	KULBACH ROD	471-0911	+6
	SAN MARCOS CMPR RPR	744-1700	1
122	GEORGES BURGERS	744-0184	8
127	B&C CRANE SV	746-D217	4
	DESTINATIONS	744-261D	+6
	SUNSTAR ENTERPRISES	744-2172	+6
128	COMMERCIAL MAINTENA	744-B002	5
	TILTON REALTY	744-2161	4
132	ALAR WHOLESALE	744-B674	1
	GENL STORE THE	744-8674	4
	MACKEY FOAM	744-2876	+6
	MACKEYS MOTOR T	744-7090	4
	THE GENERAL STORE	744-6674	3
144	ARC LECTRIC	678-411D	3
148	MATTS NWBRN ATO PNT	744-9387	+6
	MATTS NWBRN ATO PNT	942-D22D	+6
184	REHM SALLY ANN	744-1701	
	REHM WALTER R	744-1701	
207	CRUSADER WOOD PROD	744-0512	8
217	G R ENTERPRISES	744-6383	1
	TORREY CHEMICAL CO	744-6383	
	TORREYS CA CHEMICAL	744-6383	7
349	CHURCH JESUS CHRIST	744-1044	7
361	PRIETO FERNANDO	471-0329	3
423	GLENN BRIAN	744-9430	
	GLENN DOTTIE	744-9430	1
428	MCCLAIN DOROTHY W	744-5875	
	MCCLAIN R AIR CNDG	744-5876	
	MCCLAIN SERVICES	744-5875	
	MCLAIN ROBT B	744-5875	1
438	WILLIAMS KAREN E	471-2129	4

★ 27 BUS 8 RES 7 NEW

Target Street	Cross Street	Source
✓	-	Haines Criss-Cross Directory

W MISSION RD 1986

717	XXXX	00	
756	XXXX	00	
800	UNITD METH CH	744-0170	
	UNITD METH CH PRESC	744-3951	1
1140	PALOMAR CM CL AD&FC	744-1150	2
1329	PIONEER MILLS	744-5833	
1344	MAGTROVICH CNAS DDS	741-6650	9
1450.....	BUILDING		
	A TO Z SERVICE	727-6844	+6
	COPY SERVICE	727-9612	+6
	MAGIC TOUCH BEAUTY	727-9130	4
	MARCUS SADDLERY	727-7777	5
	PALOMAR MARKET	727-2223	5
	PEGASUS NORTH	727-1000	3
	RAINBOW YOGURT	727-5116	9
	SAN MARCOS FRGN ATO	727-4366	3
	SAN MARCOS OUTLOOK	727-0771	5
	SORRENTOS PIZZA	727-4091	0
1450.....			
1452	XXXX	00	
1454	XXXX	00	
1460	XXXX	00	
1531	BATTERY STORE THE	744-1793	+6
	GENIES LAMPS THE	744-5788	4
	GOLDEN DONUTS	744-9642	5
	HAIRS THE PLACE	744-0256	3
	ROCCOS PIZZA DELI	744-8012	+6
	SEVEN ELEVEN FOOD	744-5710	1
1551	A R C SHOPPE	471-2670	
	ALOHA PRINTING	471-1006	+6
	ARC SHOPPE	471-2670	5
	BATTAGLIAS OFC MACH	744-3413	4
	CHI THANH	471-0040	4
	DORSO JESS F DC	744-8811	0
	GENESIS TV	727-4858	3
	GOLDEN DRAGON RESTR	744-3432	1
	MI FIESTA MXCN REST	744-5816	1
	PALOMAR CHIROPRCTC	744-8811	1
	WHITE QUAIL THE	744-9588	+6
1564	XXXX	00	
1605	PALOMAR CMN CLG YTH	744-6110	3
★	60 BUS 34 RES	9 NEW	

Target Street	Cross Street	Source
✓	-	Haines Criss-Cross Directory

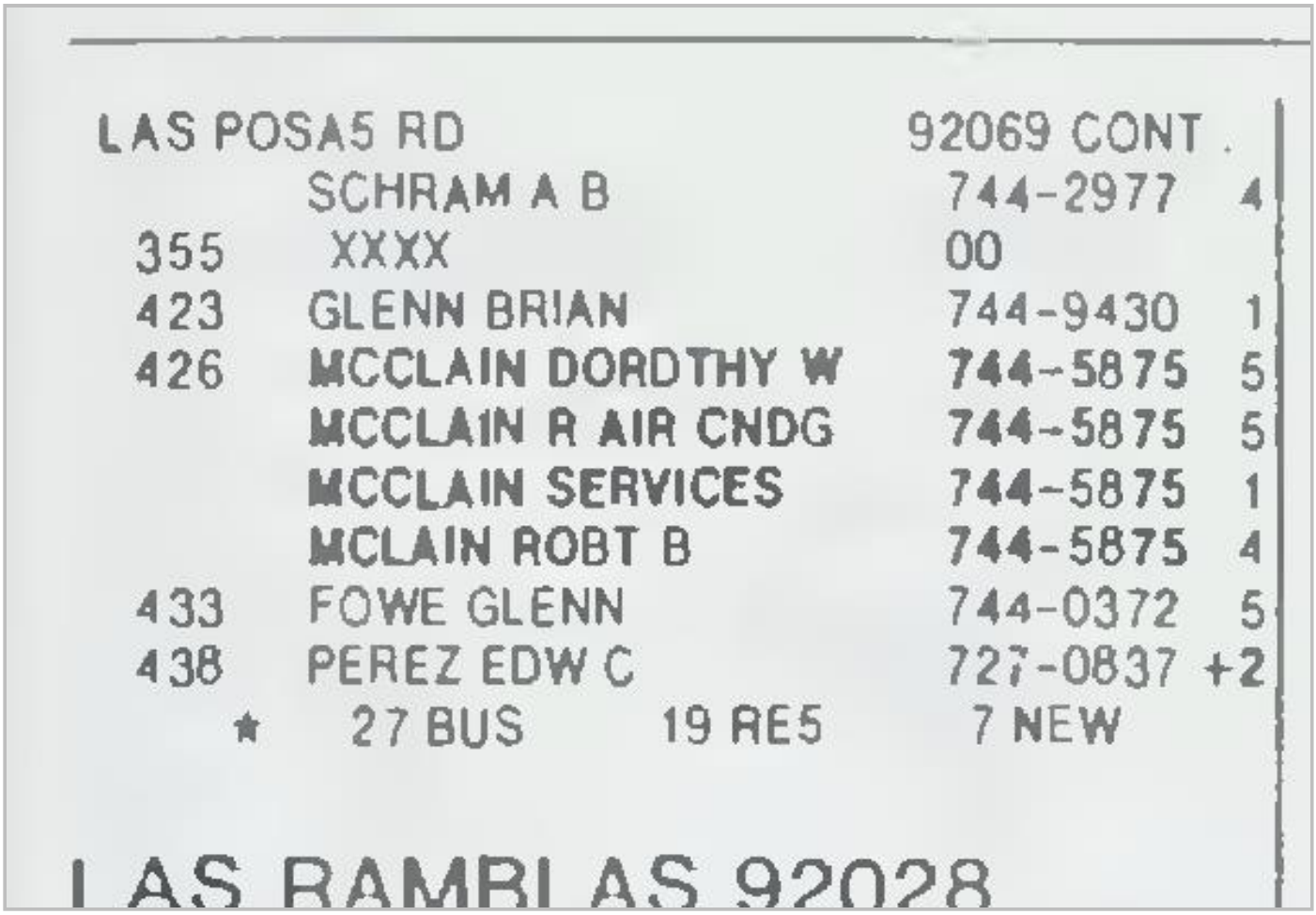
N LAS POSAS RD 1982

LAS POSAS RD 92069
SAN MARCOS

102	VOLER PRODUCTS INC	744-333D	
104	XXXX	00	
106	XXXX	00	
107	XXXX	00	
110	SAN MRCS AUTO BODY	744-2773	1
114	XXXX	00	
116	TERRYS DATSUN SPCL	744-4084	+2
120	SAN MRCS CAMPER RPR	744-1700	1
122	GEORGES BURGERS	744-0164	8
127	XXXX	00	
128A	TILTON REALTY	744-21B1	8
130	CONTRCTR LICENSE SC	744-6900	7
132	ALAR WHOLESALE	744-B674	1
	TECHNITION	744-7090	+2
A	MACKEY FOAM	744-2B76	9
138	XXXX	00	
144	ARC LECTRIC	727-7977	+2
148	ASSORTED PAPER CO	744-54BD	1
184	REHM SALLY ANN	744-1701	4
	REHM WALTER R	744-1701	4
186	XXXX	00	
200	SAN MRCS FIRE PLCS	743-B925	+2
	SAN MRCS FIRE PLCS	744-2B37	+2
	SAN MRCS INSULATION	722-1603	1
	SAN MRCS INSULATION	744-2837	1
207	CRUSADER WOOD PROD	744-0S12	8
210	XXXX	00	
212	XXXX	00	
217	G R ENTERPRISES	744-6383	1
	TORREY CHEMICAL CO	744-6383	1
	TORREYS CA CHEMICAL	744-6383	7
225	XXXX	00	
25D	FUNDAY R V GENERATR	744-B520	D
26D	I AM TEMPLE	744-1784	9
	MENEFY GRAEME	744-3722	9
349	CHURCH JESUS CHRIST	744-1044	7
351	HOLLOWAY JAS W	744-8999	+2

Target Street	Cross Street	Source
✓	-	Haines Criss-Cross Directory

N LAS POSAS RD 1982



LAS POSAS RD 92069 CONT.

	SCHRAM A B	744-2977 4
355	XXXX	00
423	GLENN BRIAN	744-9430 1
426	MCCLAIN DORDTHY W	744-5875 5
	MCCLAIN R AIR CNDG	744-5875 5
	MCCLAIN SERVICES	744-5875 1
	MCLAIN ROBT B	744-5875 4
433	FOWE GLENN	744-0372 5
438	PEREZ EDW C	727-0837 +2

* 27 BUS 19 RES 7 NEW

LAS RAMBLAS 92028

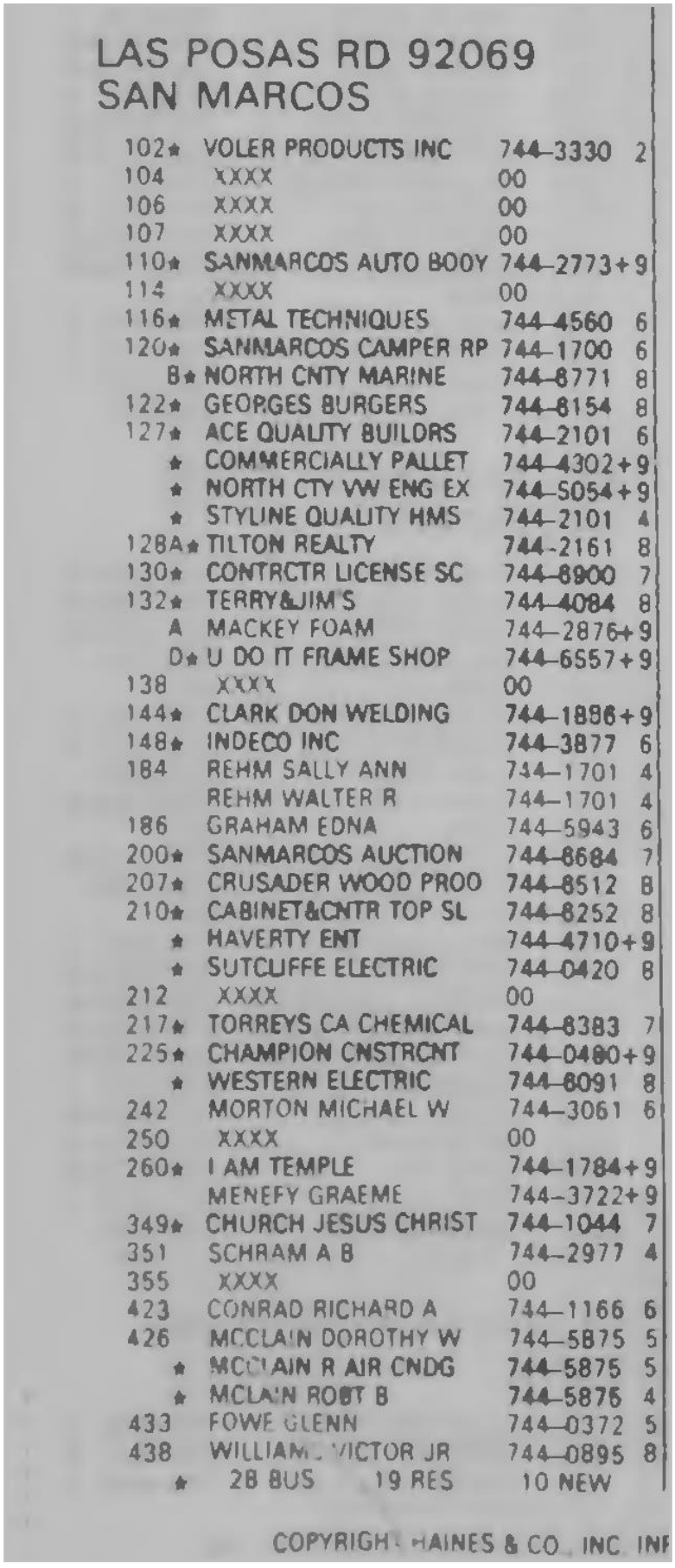
Target Street	Cross Street	Source
✓	-	Haines Criss-Cross Directory

W MISSION RD 1982

	SAN MRCS SC STUDENT	744-7290	1
717	XXXX	00	
756	XXXX	00	
800	UN METH CH PRE SC	744-3951	1
	UNITD METH CH	744-0170	
1140	PALOMAR CMNTY CLG	744-1150	+2
1329	PIONEER MILLS	744-5833	
1344	MASTROVICH CHAS DDS	741-6650	9
	VALLECITOS DNTL GRP	741-6650	0
1450	B A P OF SAN MARCOS	727-4366	1
	BAP OF SAN MARCOS	727-4366	1
	CERTIFIED TAX PLNNR	727-4434	9
	COPY SHOPPE THE	727-5623	0
	DARNALL PHOTOGRPHCS	727-5443	+2
	DEANS PHOTO SERV	727-5443	+2
	FOREIGN AUTO PARTS	727-4366	1
	JIM&CRISTINE SALON	744-37B2	1
	JOBS FOR PROGRESS	727-4700	0
	LELITE SALON	727-5565	1
	OPERATION SER	727-4700	7
	RAINBOW YOGURT	727-5116	9
	SAN MRCS AUTO PARTS	727-4366	1
	SORRENTOS PIZZA	727-4091	0
1452	XXXX	00	
1454	XXXX	00	
1460	XXXX	00	
1531	B B W LOCKSMITH	744-7511	+2
	BEAUTY CENTER	744-0256	0
	BROTHERS BOOT WORKS	727-36B2	0
	E R A HERITAGE RLTY	744-2601	1
	HERITAGE REALTY	744-2601	1
	JIMMYS ICE CREAM	744-B422	+2
	PALOMAR PASTRIES	744-9642	1
	SEVEN ELEVEN 21142	744-5710	1
	WALTER R D TRCKING	744-9181	0
1551.....	BUILDING		
	ANNA DAO MRKT	744-B770	0
	COUNTRY GRL JR F5HN	744-7370	1
	DISCOUNT BOOKS	744-72B3	1
	DORSO JESS F DC	744-8811	0
	GENIES LAMPS THE	744-5788	0
	GOLDEN DRAGON RESTR	744-3432	1
	L&H BOOK PEOPLE	744-7283	0
	M H C PRODUCTIONS	744-1451	+2
	MIFIESTA MXCN RE5T	744-5816	1
	MOBILE HMS COURIER	744-1451	+2
	PALOMAR CHIROPRCTC	744-8811	1
	SAN MRCS COURIER	744-1254	1
	SAN MRCS COURIER	744-1251	1
	WISE JACK D DC	744-8811	+2
1551			
1564	XXXX	00	
1605	XXXX	00	
★	67 BUS 34 RES	19 NEW	

Target Street	Cross Street	Source
✓	-	Haines Criss-Cross Directory

N LAS POSAS RD 1979



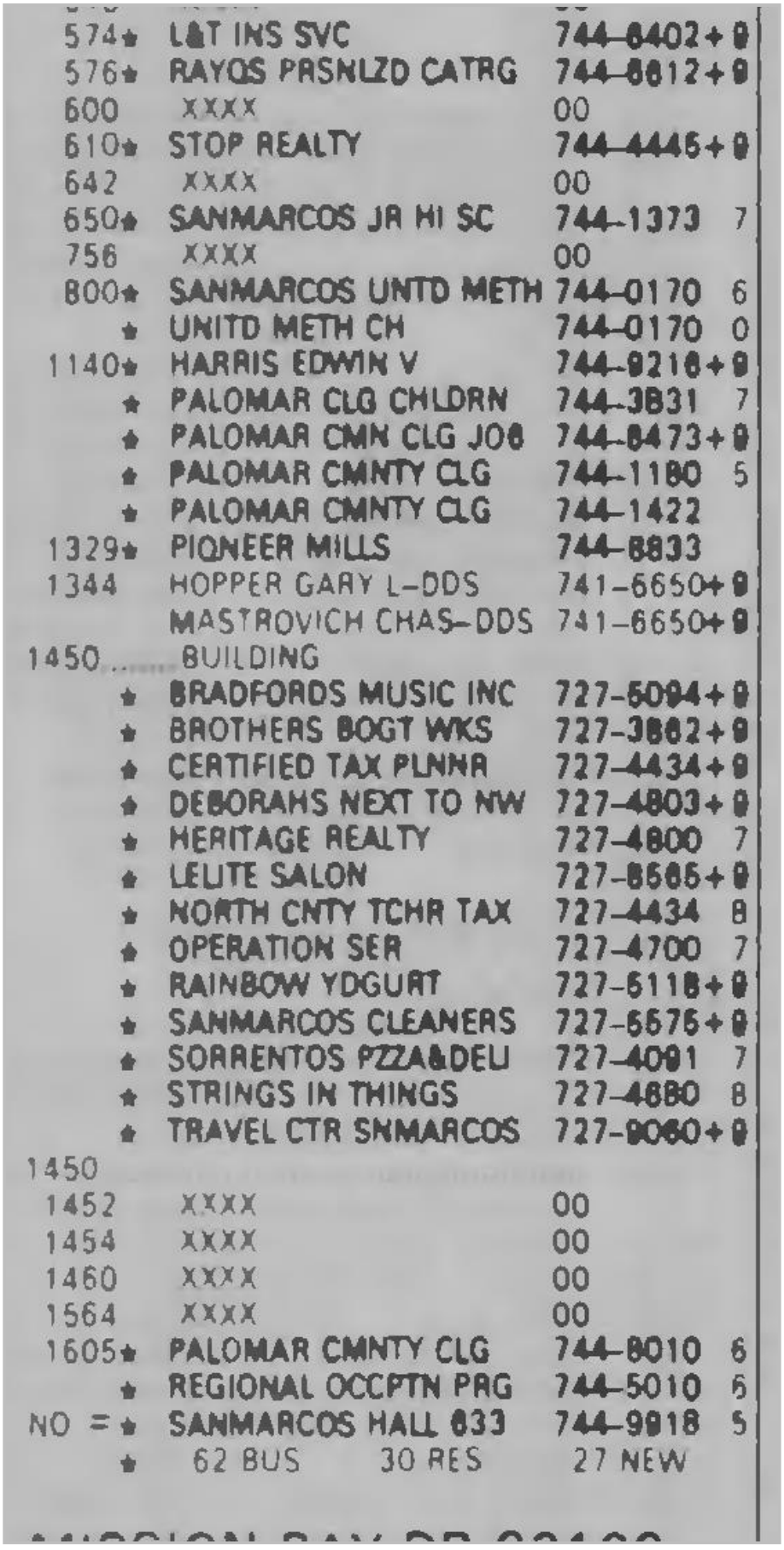
LAS POSAS RD 92069
SAN MARCOS

102★	VOLER PRODUCTS INC	744-3330	2
104	XXXX	00	
106	XXXX	00	
107	XXXX	00	
110★	SANMARCOS AUTO BODY	744-2773+9	
114	XXXX	00	
116★	METAL TECHNIQUES	744-4560	6
120★	SANMARCOS CAMPER RP	744-1700	6
B★	NORTH CNTY MARINE	744-8771	8
122★	GEORGES BURGERS	744-8154	8
127★	ACE QUALITY BUILDRS	744-2101	6
★	COMMERCIALLY PALLET	744-4302+9	
★	NORTH CTY VW ENG EX	744-5054+9	
★	STYLINE QUALITY HMS	744-2101	4
128A★	TILTON REALTY	744-2161	8
130★	CONTRCTR LICENSE SC	744-8900	7
132★	TERRY&JIM'S	744-4084	8
A	MACKEY FOAM	744-2876+9	
D★	U DO IT FRAME SHOP	744-6557+9	
138	XXXX	00	
144★	CLARK DON WELDING	744-1886+9	
148★	INDECO INC	744-3877	6
184	REHM SALLY ANN	744-1701	4
	REHM WALTER R	744-1701	4
186	GRAHAM EDNA	744-5943	6
200★	SANMARCOS AUCTION	744-8684	7
207★	CRUSADER WOOD PROD	744-8512	8
210★	CABINET&CNTR TOP SL	744-8252	8
★	HAVERTY ENT	744-4710+9	
★	SUTCLIFFE ELECTRIC	744-0420	8
212	XXXX	00	
217★	TORREYS CA CHEMICAL	744-8383	7
225★	CHAMPION CNSTRCNT	744-0480+9	
★	WESTERN ELECTRIC	744-8091	8
242	MORTON MICHAEL W	744-3061	6
250	XXXX	00	
260★	I AM TEMPLE	744-1784+9	
	MENEFY GRAEME	744-3722+9	
349★	CHURCH JESUS CHRIST	744-1044	7
351	SCHRAM A B	744-2977	4
355	XXXX	00	
423	CONRAD RICHARD A	744-1166	6
426	MCCLAIN DOROTHY W	744-5875	5
★	MCCLAIN R AIR CNDG	744-5875	5
★	MCLAIN ROBT B	744-5875	4
433	FOWE GLENN	744-0372	5
438	WILLIAMS VICTOR JR	744-0895	8
★	28 BUS 19 RES	10 NEW	

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Target Street	Cross Street	Source
✓	-	Haines Criss-Cross Directory

W MISSION RD 1979



574★	L&T INS SVC	744-8402+	9
576★	RAYOS PASNLZD CATRG	744-8812+	9
600	XXXX	00	
610★	STOP REALTY	744-4445+	9
642	XXXX	00	
650★	SANMARCOS JR HI SC	744-1373	7
756	XXXX	00	
800★	SANMARCOS UNTD METH	744-0170	6
★	UNITD METH CH	744-0170	0
1140★	HARRIS EDWIN V	744-9218+	9
★	PALOMAR CLG CHLDRN	744-3831	7
★	PALOMAR CMN CLG JOB	744-8473+	9
★	PALOMAR CMNTY CLG	744-1180	5
★	PALOMAR CMNTY CLG	744-1422	
1329★	PIONEER MILLS	744-8833	
1344	HOPPER GARY L-DDS	741-6650+	9
	MASTROVICH CHAS-DDS	741-6650+	9
1450	BUILDING		
★	BRADFORDS MUSIC INC	727-5094+	9
★	BROTHERS BOGT WKS	727-3862+	9
★	CERTIFIED TAX PLNNR	727-4434+	9
★	DEBORAHS NEXT TO NW	727-4803+	9
★	HERITAGE REALTY	727-4800	7
★	LELITE SALON	727-8585+	9
★	NORTH CNTY TCHR TAX	727-4434	8
★	OPERATION SER	727-4700	7
★	RAINBOW YOGURT	727-5118+	9
★	SANMARCOS CLEANERS	727-5575+	9
★	SORRENTOS PZZA&DELI	727-4091	7
★	STRINGS IN THINGS	727-4680	8
★	TRAVEL CTR SNMARCOS	727-9060+	9
1450			
1452	XXXX	00	
1454	XXXX	00	
1460	XXXX	00	
1564	XXXX	00	
1605★	PALOMAR CMNTY CLG	744-8010	6
★	REGIONAL OCCPTN PRG	744-5010	6
NO = ★	SANMARCOS HALL 833	744-9918	5
★	62 BUS 30 RES	27 NEW	

Target Street	Cross Street	Source
✓	-	Haines Criss-Cross Directory

N LAS POSAS RD 1975

LAS POSAS RD 92069 SAN MARCOS

102*VOLER PROOUCTS INC 744-333D 2
104*MARTIN W TL OSGN SV744-4437 4
*UNIFOAM TECHNIQUES 744-2911 4
*UNITEO INSLTN CONTR744-2911 4
106 XXXX DO
107*CRUSAOER WOOD PROO 744-D512+5
114*SNELLING CARL ELEC 745-4856+5
116*T J 8 FLOOR CDVERNG744-4484 4
120*SANMARCOS ATO PAINT744-2773+5
122*FACTORY THE 744-0164 4
127*STYLINE QUALITY HMS744-21D1 4
130*A O&O EQUIPMNT RNTL727-312D+5
*RUSSELL&RO8ERTS ASC744-3363+5
138*WESTRN TA8LE&SEATNG744-5700+5
144*SNELLING CARL ELEC 744-4145 4
184 REHM SALLY ANN 744-1701 4
REHM WALTER R 744-1701 4
207 XXXX OO
21D*FLOATATION SYST INC744-37CO 4
217*ECOLOVISION 744-1714+5
225 XXXX CO
242 GRIOER JACK 744-2153
250 MORTON MICHAEL W 744-3061 4
260 FETTEROLL ALFREO 744-3722 4
351 SCHRAM A 8 744-2977 4
426 MCCLAIN OOROTHY W 744-5875+5
*MCCLAIN R AIR CNOG 744-5875+5
*MCLAIN RO8T 8 744-5875 4
433 FOWE GLENN 744-0372+5
438 XXXX OO
* 18 8US 12 RES 10 NEW

Target Street	Cross Street	Source
✓	-	Haines Criss-Cross Directory

W MISSION RD 1975

```
 600*SAN MARCOS JR HI SC744-1373 0
 610*E P S INC        744-1265+5
 642*RAGGEDY ANN *SHEDRY743-9187+5
 756  XXXX            OO
 800*UNITED METHODIST CH744-0170 0
1140*PALOMAR COLLEGE  744-1150+5
    *PALOMAR JR CLG DIST744-1150 2
    *PALOMAR JR CLG DIST 744-3610 4
1329*PIONEER HILLS    744-5833
1450 BENESH GERALD DC 744-0118 D
1452  XXXX            DD
1454*T&J MARKETS      727-2641 4
1456*C HOLT PAINTING  744-2796+5
     HOLT CECIL       744-2796 4
    *JOES DRAPERY     744-2796 4
    *JOS DRAPERY SHOP 744-2796 4
1460*BOURGET WARD INC 727-7300 4
1564 THOMSON DON      727-3684+5
NO #*MERRIAM S G PRODUCE744-5823 1
NO #*SANMARCS GRANGE HLL744-9918+5
    *  51 BUS   21 RES   27 NEW
```

Target Street	Cross Street	Source
✓	-	Haines Criss-Cross Directory

N LAS POSAS RD 1971

LAS POSAS RD 92069 SAN MARCOS

127*	STYLINE KUSTOM HOME	744-3530+1
210*	AUCTION CITY	744-1230+1
217*	DIAL PLUMBING CO	744-3333+1
242	GRIOER JACK	744-2153
438	XXXX	OO

* 3 BUS 2 RES 3 NEW

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Target Street	Cross Street	Source
✓	-	Haines Criss-Cross Directory

W MISSION RD 1971

MISSION RD W 92069 SAN MARCOS

142 SHERRIFF FRANCES 744-1426
148 BUCKNER FOSTER M 744-3975+1
158*DOUBLET FRENCHY 744-0080 0
*FARMERS INC GROUP 744-0080
160*BLAKELY CO INC THE 744-1125+1
162*SAN MARCOS C OF C 744-1270+1
164*TRAVELERS INS AGNTS 744-1174+1
166*LINDSAY OF N COUNTY 744-3654+1
168 XXXX 00
204*SAN MARCOS GARAGE 744-0154
*WILLIAMS F E 744-0154
228 JOHNSON DORIS W 744-1509
236*SAN MARCOS FEED&SPL 744-0614
242*SN MARCOS COFFEE SH 744-0564
246 HALBIG LOUIS 744-1592
250 NEPHEW MARY K 744-1680+1
256*BOBS SERVICE 744-1123 0
*TAYLOR T R 744-1123 0
304*DONS BARBEQUE 744-1780 0
314*SAN MARCOS BARBR SH 744-1274
316*TOTAL GRAPHICS INC 744-1108 0
318 COLEMAN MARGARET 744-3172+1
320*ROSE ANN MBL CFE SH 744-1707
322 ENGELE LEO H 744-2205+1
330*LOGAN SHARPENG SHR 744-1327
350*B&B BODY&FNDR SHOP 744-0408
366*MELS ROOT BEER 744-5836+1
410*KILEYS CHEVRON SERV 727-1765
*KILEYS CHEVRON SERV 744-0092
422*ALADDINS LAMP 744-0209
424*SAN MARCOS LQR STR 744-0485
444*SN MARCOS REXL PHRM 744-5959
448*SEVEN ELEVEN FD 050 744-5514 0
452*BARONES ITLN RSTRNT 744-1696+1
454*FASHION FAIR BEAUTY 744-5901
456*SCURTY PAC NTL BNK 744-1555+1
512 XXXX 00
540 HARDIGREE BEULAH 744-3049 0
548 MEACHAM R O 744-1227
600*SAN MARCOS JR HI SC 744-1373 0
610*HILL N DALE REALTY 744-2141 0
756 XXXX 00
800*UNITED METHODIST CH 744-0170 0
1329*RIONEER MILLS 744-5833
1450 BENESH GERALD DC 744-0118 0
1452*CARRET&REMNANT SHOR 744-1284+1
*J&B SUPPLIES 727-1631+1
1454*T&J MARKETS 727-1331+1
1456*CHARTER BOAT GM FSH 727-1393+1
*GAME FISH CHARTR BT 727-1393+1
*MARYS DRAPERY SHOP 744-1120 0
1460*COLEMAN CONSTRUCTN 727-7300
NO #*MERRIAM S G PRODUCE 744-5823+1
NO #*SN MARCOS GRANGE 744-9918
* 41 BUS 13 RES 17 NEW

MISSION BAY DR 92109 SAN DIEGO

APPENDIX E

REGULATORY RECORDS DOCUMENTATION

W Mission Rd & N Las Posas Rd
W Mission Rd & N Las Posas Rd
San Marcos, CA 92069

Inquiry Number: 06526060.2r
June 07, 2021

The EDR Radius Map™ Report with GeoCheck®

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E 2247-16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E 1528-14) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

W MISSION RD & N LAS POSAS RD
SAN MARCOS, CA 92069

COORDINATES

Latitude (North):	33.1504410 - 33° 9' 1.58''
Longitude (West):	117.1896180 - 117° 11' 22.62''
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	482316.4
UTM Y (Meters):	3667789.5
Elevation:	575 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	5641320 SAN MARCOS, CA
Version Date:	2012

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20140530, 20140603
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
W MISSION RD & N LAS POSAS RD
SAN MARCOS, CA 92069

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
A1	CONTINENTAL CLEANERS	1342 W MISSION RD	EDR Hist Cleaner	Lower	6, 0.001, SSW
A2	PIONEER MILLS	1329 W MISSION RD	LUST, SAN DIEGO CO. SAM, San Diego Co. HMMD,...	Lower	84, 0.016, SSW
A3	CVS PHARMACY #7127	1302 W MISSION RD	RCRA-LQG, FINDS, ECHO	Higher	127, 0.024, SSE
A4	CVS PHARMACY #7127	1302 W MISSION RD	San Diego Co. HMMD, CERS HAZ WASTE, CERS	Higher	127, 0.024, SSE
5	PIONEER MILLS	1329 MISSION RD W	LUST	Lower	196, 0.037, South
A6	PADILLA CONSTRUCTION	1390 ARMORLITE DR	RCRA NonGen / NLR	Lower	295, 0.056, SSW
B7	LAS POSAS VENTURE IN	1290 W MISSION RD	RCRA NonGen / NLR	Higher	382, 0.072, SSE
B8	HARMS DON INC	1290 W MISSION RD	EDR Hist Auto	Higher	382, 0.072, SSE
B9	EXXONMOBIL OIL CORP.	1290 W MISSION RD	RCRA-LQG, FINDS, ECHO	Higher	382, 0.072, SSE
B10	SAN MARCOS GAS	1290 W MISSION RD	Cortese, HAZNET, HWTS	Higher	382, 0.072, SSE
B11	SAN MARCOS GAS	1290 W MISSION RD	LUST, SAN DIEGO CO. SAM, San Diego Co. HMMD, CERS...	Higher	382, 0.072, SSE
B12	MOBIL OIL CORPORATIO	1290 W MISSION RD	UST, San Diego Co. HMMD, HAZNET, HWTS	Higher	382, 0.072, SSE
C13	PEACOCK CLEANERS	1450 W MISSION RD ST	EDR Hist Cleaner	Lower	445, 0.084, WNW
C14	PEACOCK CLEANERS	1450 W MISSION RD ST	CERS HAZ WASTE, HAZNET, CERS, HWTS	Lower	445, 0.084, WNW
D15	TECHNOGRAPHICS CO	181 BALBOA STREET	RCRA NonGen / NLR	Lower	491, 0.093, WSW
C16	PEACOCK CLEANERS	1450 MISSION RD STE	DRYCLEANERS	Lower	497, 0.094, WNW
E17	K-TECH MACHINE INC	1377 ARMORLITE DR ST	RCRA NonGen / NLR	Lower	504, 0.095, SSW
D18	MELTON S ARCO SERVIC	0130 BALBOA AVE	EDR Hist Auto	Lower	613, 0.116, SW
D19	CONCOURS CLASSICS	155 BALBOA SUITE D-2	RCRA-SQG, FINDS, ECHO	Lower	620, 0.117, SW
D20	PACIFIC METAL PRODUC	155 BALBOA STREET, S	CERS HAZ WASTE	Lower	620, 0.117, SW
21	JULIANNE RULJANCICH	1300 GRANITE RD.	RCRA NonGen / NLR	Higher	637, 0.121, ENE
F22	SM BRAKE MASTERS	1300 ARMORLITE DR	RCRA NonGen / NLR	Lower	668, 0.127, South
F23	MISSION AUTO REPAIR	1300 ARMORLITE DR	San Diego Co. HMMD, CERS HAZ WASTE, CERS	Lower	668, 0.127, South
F24	SOLID WASTES SERVICE	224 LOS POSAS RD	HIST UST, RCRA NonGen / NLR, FINDS	Lower	683, 0.129, South
F25	MASHBURN WASTE	224 LAS POSAS RD S	LUST	Lower	683, 0.129, South
F26	PACIFIC BELL SNMCCA1	225 N LAS POSAS RD	UST, San Diego Co. HMMD, SWEEPS UST, CERS TANKS,...	Lower	719, 0.136, South
F27	PACIFIC BELL	225 LOS POSAS	RCRA-LQG, HIST UST, FINDS, ECHO	Lower	719, 0.136, South
E28	ADVANCED STRUCTURES	1315 ARMORLITE DR	San Diego Co. HMMD, RCRA NonGen / NLR, FINDS, ECHO	Lower	724, 0.137, SSW
F29	TORREY CHEMICAL CO	217 LAS POSAS RD	SEMS-ARCHIVE	Lower	735, 0.139, South
F30	TORREY CHEMICAL CO.	217 LAS POSAS ROAD	ENVIROSTOR	Lower	735, 0.139, South
F31	GRANDWOOD INC	1305 ARMORLITE DR	RCRA-SQG, FINDS, EMI	Lower	753, 0.143, SSW
G32	BENCHMARK LANDSCAPE	145 N PACIFIC ST	RCRA NonGen / NLR	Lower	793, 0.150, SW
G33	BENCHMARK LANSCAPE I	145 N PACIFIC ST	SWF/LF, San Diego Co. HMMD, CERS HAZ WASTE, CERS	Lower	793, 0.150, SW
F34	COCA COLA ENTERPISES	LAS POSAS/ARMORLITE	SAN DIEGO CO. SAM	Lower	847, 0.160, South
H35	VACANT LOT	199 LAS POSAS RD	SAN DIEGO CO. SAM, San Diego Co. HMMD	Lower	999, 0.189, South
I36	MEL'S AUTO REPAIR, L	139 N PACIFIC ST	San Diego Co. HMMD, CERS HAZ WASTE, CERS	Lower	1035, 0.196, WSW
I37	MEL'S AUTO REPAIR LL	139 NORTH PACIFIC ST	RCRA NonGen / NLR	Lower	1035, 0.196, WSW
H38	COCA COLA ENTERPISES	NONE LAS POSAS/ARMOR	CPS-SLIC, CERS	Lower	1038, 0.197, South
H39	READY LINE FLEET SER	1322 DESCANSO AVE ST	RCRA NonGen / NLR	Lower	1078, 0.204, SSW

MAPPED SITES SUMMARY

Target Property Address:
W MISSION RD & N LAS POSAS RD
SAN MARCOS, CA 92069

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
H40	READY LINE FLEET SER	1322 DESCANSO AVE ST	San Diego Co. HMMD, CERS HAZ WASTE, HAZNET, CERS,...	Lower	1078, 0.204, SSW
J41	IRON FACTORY THE	1402-C DESCANSO RD	RCRA NonGen / NLR	Lower	1089, 0.206, SSW
J42	CARB ON TECH	1402 DESCANSO AVE ST	RCRA NonGen / NLR	Lower	1089, 0.206, SSW
J43	CARB-ON TECH	1402 DESCANSO AVE ST	San Diego Co. HMMD, CERS HAZ WASTE, CERS	Lower	1089, 0.206, SSW
H44	SINGH GROUP INC.	1308 DESCANSO AVE	HAULERS, San Diego Co. HMMD, HWT, MWMP, PEST LIC	Lower	1095, 0.207, South
H45	BAJA PACIFIC	1308 DECANSO AVE	RCRA NonGen / NLR	Lower	1095, 0.207, South
J46	DRAPERIES & STUFF	1404 DESCANSO AVE ST	RCRA-SQG, FINDS, ECHO	Lower	1114, 0.211, SSW
J47	D & C AUTOBODY & PAI	1404 DESCANSO AVE ST	San Diego Co. HMMD, CERS HAZ WASTE, CERS, HWTS	Lower	1114, 0.211, SSW
J48	RADIATOR SHOP	1404 DESCANSO AVE ST	RCRA NonGen / NLR	Lower	1114, 0.211, SSW
J49	D&C AUTOBODY & PAINT	1404 DESCANSO AVE ST	RCRA NonGen / NLR	Lower	1114, 0.211, SSW
J50	J&X AUTO N BODY REPA	1404 DESCANSO AVE ST	RCRA NonGen / NLR	Lower	1114, 0.211, SSW
J51	ENVIRONMENTAL HEALTH	1414 DESCANSO #H	RCRA-SQG, FINDS, ECHO	Lower	1166, 0.221, SW
J52	TERRY'S NISSAN SPECI	1339 DESCANSO AVE	San Diego Co. HMMD, CERS HAZ WASTE, CERS	Lower	1181, 0.224, SSW
J53	TERRY'S NISSAN SPECI	1339 DESCANSO AVE	RCRA NonGen / NLR	Lower	1181, 0.224, SSW
K54	GAMA AUTO TIRE REPAI	1325 DESCANSO AVE	RCRA NonGen / NLR	Lower	1188, 0.225, SSW
J55	ACCURATE AUTOWERKS	1331 DESCANSO AVE	RCRA NonGen / NLR	Lower	1197, 0.227, SSW
J56	ACCURATE AUTOWERKS	1331 DESCANSO AVE	San Diego Co. HMMD, CERS HAZ WASTE, HAZNET, CERS,...	Lower	1197, 0.227, SSW
I57	VECCHIO MONDO IMPORT	120 N PACIFIC ST STE	RCRA NonGen / NLR	Lower	1237, 0.234, WSW
I58	PIONEER INDUSTRIAL P	120 N PACIFIC STE G3	RCRA-SQG	Lower	1237, 0.234, WSW
I59	GERLAND MACHINE INC	120 N PACIFIC ST STE	RCRA NonGen / NLR	Lower	1237, 0.234, WSW
I60	OLD FORD GARAGE	120 N PACIFIC ST UNI	RCRA-SQG, FINDS, ECHO	Lower	1237, 0.234, WSW
I61	BEST AUTO BODY AND F	120 N PACIFIC B3	RCRA-SQG, FINDS, ECHO, HAZNET, HWTS	Lower	1237, 0.234, WSW
I62	CASEYS AUTO MACHINE	120 N PACIFIC ST STE	RCRA-SQG, FINDS, ECHO	Lower	1237, 0.234, WSW
L63	NORTH COUNTY SHOOTIN	1440 DESCANSO AVE	RCRA NonGen / NLR	Lower	1258, 0.238, SW
L64	GABRIEL P. CASTANO	1450 DESCANSO AVE	RCRA NonGen / NLR	Lower	1281, 0.243, SW
K65	MATTS NEWBORN AUTO P	148 LAS POSAS RD	RCRA-SQG, FINDS, ECHO	Lower	1285, 0.243, South
66	CREST BEVERAGE	1152 ARMORLITE DR	LUST, SAN DIEGO CO. SAM, San Diego Co. HMMD,...	Lower	1629, 0.309, SSE
67	MOYER CHEMICAL	1227 LOS VALLECITOS	SEMS-ARCHIVE	Lower	1740, 0.330, South
M68	SAN MARCOS ROAD STAT	1600 DESCANSO AVE	LUST	Lower	1946, 0.369, WSW
M69	COUNTY OF SD/DIVISIO	1600 DESCANSO AVE	LUST, SWEEPS UST	Lower	1946, 0.369, WSW
M70	SAN MARCOS ROAD STAT	1600 DESCANSO	HIST CORTESE	Lower	1946, 0.369, WSW
N71	SAN MARCOS AMPM	125 N RANCHO SANTA F	SAN DIEGO CO. SAM, UST, Cortese	Higher	2133, 0.404, West
N72	GLENN YOUNG	125 N RANCHO SANTA F	LUST, CPS-SLIC, HIST UST, SAN DIEGO CO LOP, CERS	Higher	2133, 0.404, West
O73	SIGNET ARMORLITE, IN	1001 ARMORLITE DR.	CPS-SLIC	Lower	2184, 0.414, SE
O74	SIGNET ARMORLITE	1001 ARMORLITE DR	SEMS-ARCHIVE, CORRACTS, RCRA-TSDF, RCRA-LQG,...	Lower	2184, 0.414, SE
N75	C.D.R. - SHELL	112 N RANCHO SANTA F	LUST, San Diego Co. HMMD, SWEEPS UST, HIST UST,...	Higher	2233, 0.423, West
N76	RANCHO SANTA FE EXXO	112 N RANCHO SANTA F	SAN DIEGO CO. SAM, UST, San Diego Co. HMMD,...	Higher	2233, 0.423, West
77	CNTY OF SD SAN MARCO	1579 OSAGE ST	LUST, SAN DIEGO CO. SAM, AST, San Diego Co. HMMD,...	Higher	2236, 0.423, WSW
P78	DEWEY PEST CONTROL	1370 GRAND AVENUE	RCRA-SQG, LUST, SAN DIEGO CO. SAM, CPS-SLIC, UST,...	Lower	2255, 0.427, SSW

MAPPED SITES SUMMARY

Target Property Address:
W MISSION RD & N LAS POSAS RD
SAN MARCOS, CA 92069

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
P79	COLUCCI DEVELOPMENT	1325 GRAND AVE	CPS-SLIC	Lower	2338, 0.443, SSW
Q80	AIR PRODUCTS AND CHE	1415 GRAND AVE	LUST, SWEEPS UST, SAN DIEGO CO LOP	Lower	2382, 0.451, SSW
Q81	AIRGAS USA LLC	1415 GRAND AVE	LUST, SAN DIEGO CO. SAM, San Diego Co. HMMD, HIST...	Lower	2382, 0.451, SSW
82	PATIO GUYS INC	935 BAILEY CT STE D	RCRA-SQG, SAN DIEGO CO. SAM, CPS-SLIC, San Diego...	Lower	2413, 0.457, SE
R83	TEXACO	105 RANCHO SANTA FE	LUST, CPS-SLIC, HIST UST, Cortese, HIST CORTESE,...	Higher	2487, 0.471, WSW
R84	TEXACO SERVICE STATI	105 RANCHO SANTA FE	LUST	Higher	2487, 0.471, WSW
R85	TEXACO	105 RANCHO SANTA FE	LUST, SAN DIEGO CO. SAM, San Diego Co. HMMD,...	Higher	2487, 0.471, WSW
R86	SHELL SERVICE STATIO	112 RANCHO SANTA FE/	HIST CORTESE	Higher	2525, 0.478, West
R87	CHEVRON SERVICE STAT	110 RANCHO SANTA FE	LUST, EMI, HIST CORTESE	Higher	2537, 0.480, West
R88	EXXON #1041	112 RANCHO SANTA FE	LUST, EMI, CERS	Higher	2547, 0.482, West
89	SPANJIAN/ DUFOUR	1050 LOS VALLECITOS	SAN DIEGO CO. SAM, CPS-SLIC, CERS	Lower	2602, 0.493, SSE
R90	UNITED PACIFIC 0658	110 S RANCHO SANTA F	LUST, SAN DIEGO CO. SAM, UST, San Diego Co. HMMD,...	Higher	2631, 0.498, WSW
91	MASHBURN SANITATION	224 LAS POSAS ROAD	SWF/LF, Notify 65	Lower	3070, 0.581, SSW
92	RANCHO SANTA LUNA SC	SANTA LUNA HILLS	ENVIROSTOR, SCH	Higher	3817, 0.723, NW
93	HUES METAL FINISHING	977 LINDA VISTA DR	ENVIROSTOR, San Diego Co. HMMD, CERS HAZ WASTE,...	Lower	3821, 0.724, SSE
94	MACDERMID PRINTING S	260 SOUTH PACIFIC ST	RCRA-LQG, ENVIROSTOR, LUST, SWEEPS UST, HIST UST,..	Lower	4236, 0.802, SW
95	SAN MARCOS CAL STATE	800 WEST VALLECITOS	ENVIROSTOR	Lower	4395, 0.832, SE
96	NO. CO. HEALTH SVCS.	BOARDWALK & PARK PLA	ENVIROSTOR	Lower	4688, 0.888, South
97	SAN MARCOS UNIFIED S	SOUTHWEST CORNER OF	ENVIROSTOR, SCH	Higher	4945, 0.937, ESE
98	CRIBBAGE LANE & SAN		Notify 65	Lower	5160, 0.977, SSE

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL ---------- National Priority List
Proposed NPL ---------- Proposed National Priority List Sites
NPL LIENS ---------- Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL ---------- National Priority List Deletions

Federal CERCLIS list

FEDERAL FACILITY ---------- Federal Facility Site Information listing
SEMS ---------- Superfund Enterprise Management System

Federal RCRA generators list

RCRA-VSQG ---------- RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

Federal institutional controls / engineering controls registries

LUCIS ---------- Land Use Control Information System
US ENG CONTROLS ---------- Engineering Controls Sites List
US INST CONTROLS ---------- Institutional Controls Sites List

Federal ERNS list

ERNS ---------- Emergency Response Notification System

State- and tribal - equivalent NPL

RESPONSE ---------- State Response Sites

State and tribal leaking storage tank lists

INDIAN LUST ---------- Leaking Underground Storage Tanks on Indian Land

EXECUTIVE SUMMARY

State and tribal registered storage tank lists

FEMA UST ---- Underground Storage Tank Listing
AST ---- Aboveground Petroleum Storage Tank Facilities
INDIAN UST ---- Underground Storage Tanks on Indian Land

State and tribal voluntary cleanup sites

INDIAN VCP ---- Voluntary Cleanup Priority Listing
VCP ---- Voluntary Cleanup Program Properties

State and tribal Brownfields sites

BROWNFIELDS ---- Considered Brownfieds Sites Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS ---- A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT ---- Waste Management Unit Database
SWRCY ---- Recycler Database
HAULERS ---- Registered Waste Tire Haulers Listing
INDIAN ODI ---- Report on the Status of Open Dumps on Indian Lands
ODI ---- Open Dump Inventory
DEBRIS REGION 9 ---- Torres Martinez Reservation Illegal Dump Site Locations
IHS OPEN DUMPS ---- Open Dumps on Indian Land

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL ---- Delisted National Clandestine Laboratory Register
HIST Cal-Sites ---- Historical Calsites Database
SCH ---- School Property Evaluation Program
CDL ---- Clandestine Drug Labs
San Diego Co. HMMD ---- Hazardous Materials Management Division Database
Toxic Pits ---- Toxic Pits Cleanup Act Sites
US CDL ---- National Clandestine Laboratory Register
PFAS ---- PFAS Contamination Site Location Listing

Local Lists of Registered Storage Tanks

CA FID UST ---- Facility Inventory Database

Local Land Records

LIENS ---- Environmental Liens Listing
LIENS 2 ---- CERCLA Lien Information

Records of Emergency Release Reports

HMIRS ---- Hazardous Materials Information Reporting System

CHMIRS	California Hazardous Material Incident Report System
LDS	Land Disposal Sites Listing
MCS	Military Cleanup Sites Listing
SPILLS 90	SPILLS 90 data from FirstSearch

Other Ascertainable Records

FUDS	Formerly Used Defense Sites
DOD	Department of Defense Sites
SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing
US FIN ASSUR	Financial Assurance Information
EPA WATCH LIST	EPA WATCH LIST
2020 COR ACTION	2020 Corrective Action Program List
TSCA	Toxic Substances Control Act
TRIS	Toxic Chemical Release Inventory System
SSTS	Section 7 Tracking Systems
ROD	Records Of Decision
RMP	Risk Management Plans
RAATS	RCRA Administrative Action Tracking System
PRP	Potentially Responsible Parties
PADS	PCB Activity Database System
ICIS	Integrated Compliance Information System
FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
MLTS	Material Licensing Tracking System
COAL ASH DOE	Steam-Electric Plant Operation Data
COAL ASH EPA	Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER	PCB Transformer Registration Database
RADINFO	Radiation Information Database
HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS	Incident and Accident Data
CONSENT	Superfund (CERCLA) Consent Decrees
INDIAN RESERV	Indian Reservations
FUSRAP	Formerly Utilized Sites Remedial Action Program
UMTRA	Uranium Mill Tailings Sites
LEAD SMELTERS	Lead Smelter Sites
US AIRS	Aerometric Information Retrieval System Facility Subsystem
US MINES	Mines Master Index File
ABANDONED MINES	Abandoned Mines
FINDS	Facility Index System/Facility Registry System
DOCKET HWC	Hazardous Waste Compliance Docket Listing
UXO	Unexploded Ordnance Sites
ECHO	Enforcement & Compliance History Information
FUELS PROGRAM	EPA Fuels Program Registered Listing
CA BOND EXP. PLAN	Bond Expenditure Plan
CUPA Listings	CUPA Resources List
EMI	Emissions Inventory Data
ENF	Enforcement Action Listing
Financial Assurance	Financial Assurance Information Listing
HAZNET	Facility and Manifest Data
ICE	ICE
MINES	Mines Site Location Listing
NPDES	NPDES Permits Listing
PEST LIC	Pesticide Regulation Licenses Listing
PROC	Certified Processors Database

UIC ---------- UIC Listing
UIC GEO ---------- UIC GEO (GEOTRACKER)
WASTEWATER PITS ---------- Oil Wastewater Pits Listing
WDS ---------- Waste Discharge System
WIP ---------- Well Investigation Program Case List
MILITARY PRIV SITES ---------- MILITARY PRIV SITES (GEOTRACKER)
PROJECT ---------- PROJECT (GEOTRACKER)
WDR ---------- Waste Discharge Requirements Listing
SAN DIEGO CO LOP ---------- Local Oversight Program Listing
CIWQS ---------- California Integrated Water Quality System
CERS ---------- CERS
NON-CASE INFO ---------- NON-CASE INFO (GEOTRACKER)
OTHER OIL GAS ---------- OTHER OIL & GAS (GEOTRACKER)
PROD WATER PONDS ---------- PROD WATER PONDS (GEOTRACKER)
SAMPLING POINT ---------- SAMPLING POINT (GEOTRACKER)
WELL STIM PROJ ---------- Well Stimulation Project (GEOTRACKER)
HWTS ---------- Hazardous Waste Tracking System
MINES MRDS ---------- Mineral Resources Data System

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP ---------- EDR Proprietary Manufactured Gas Plants

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF ---------- Recovered Government Archive Solid Waste Facilities List
RGA LUST ---------- Recovered Government Archive Leaking Underground Storage Tank

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE: SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no

further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that. based upon available information, the location is not judged to be potential NPL site.

A review of the SEMS-ARCHIVE list, as provided by EDR, and dated 04/27/2021 has revealed that there are 3 SEMS-ARCHIVE sites within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
TORREY CHEMICAL CO Site ID: 0902600 EPA Id: CAD982360430	217 LAS POSAS RD	S 1/8 - 1/4 (0.139 mi.)	F29	199
MOYER CHEMICAL Site ID: 0902217 EPA Id: CAD980892723	1227 LOS VALLECITOS	S 1/4 - 1/2 (0.330 mi.)	67	360
SIGNET ARMORLITE Site ID: 0900209 EPA Id: CAD008362634	***1001 ARMORLITE DR***	***SE 1/4 - 1/2 (0.414 mi.)***	***O74***	***386***

Federal RCRA CORRACTS facilities list

CORRACTS: CORRACTS is a list of handlers with RCRA Corrective Action Activity. This report shows which nationally-defined corrective action core events have occurred for every handler that has had corrective action activity.

A review of the CORRACTS list, as provided by EDR, and dated 03/22/2021 has revealed that there is 1 CORRACTS site within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
SIGNET ARMORLITE EPA ID:: CAD008362634	***1001 ARMORLITE DR***	***SE 1/4 - 1/2 (0.414 mi.)***	***O74***	***386***

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

A review of the RCRA-TSDF list, as provided by EDR, and dated 03/22/2021 has revealed that there is 1

RCRA-TSDF site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
SIGNET ARMORLITE EPA ID:: CAD008362634	***1001 ARMORLITE DR***	***SE 1/4 - 1/2 (0.414 mi.)***	***O74***	***386***

Federal RCRA generators list

RCRA-LQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

A review of the RCRA-LQG list, as provided by EDR, and dated 03/22/2021 has revealed that there are 3 RCRA-LQG sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CVS PHARMACY #7127 EPA ID:: CAR000233858	***1302 W MISSION RD***	***SSE 0 - 1/8 (0.024 mi.)***	***A3***	***14***
EXXONMOBIL OIL CORP. EPA ID:: CAL000098361	***1290 W MISSION RD***	***SSE 0 - 1/8 (0.072 mi.)***	***B9***	***49***

Lower Elevation	Address	Direction / Distance	Map ID	Page
PACIFIC BELL EPA ID:: CAT080030620	***225 LOS POSAS***	***S 1/8 - 1/4 (0.136 mi.)***	***F27***	***192***

RCRA-SQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

A review of the RCRA-SQG list, as provided by EDR, and dated 03/22/2021 has revealed that there are 9 RCRA-SQG sites within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
CONCOURS CLASSICS EPA ID:: CAD980891386	***155 BALBOA SUITE D-2***	***SW 0 - 1/8 (0.117 mi.)***	***D19***	***126***
GRANDWOOD INC EPA ID:: CAD981453814	***1305 ARMORLITE DR***	***SSW 1/8 - 1/4 (0.143 mi.)***	***F31***	***201***
DRAPERIES & STUFF EPA ID:: CAD981672835	***1404 DESCANSO AVE ST***	***SSW 1/8 - 1/4 (0.211 mi.)***	***J46***	***268***
ENVIRONMENTAL HEALTH EPA ID:: CAD981992522	***1414 DESCANSO #H***	***SW 1/8 - 1/4 (0.221 mi.)***	***J51***	***290***
PIONEER INDUSTRIAL P	120 N PACIFIC STE G3	WSW 1/8 - 1/4 (0.234 mi.)	I58	326

EPA ID:: CAP000048090				
OLD FORD GARAGE	***120 N PACIFIC ST UNI***	***WSW 1/8 - 1/4 (0.234 mi.)***	***I60***	***330***
EPA ID:: CAD121704688				
BEST AUTO BODY AND F	***120 N PACIFIC B3***	***WSW 1/8 - 1/4 (0.234 mi.)***	***I61***	***333***
EPA ID:: CAD982431512				
CASEYS AUTO MACHINE	***120 N PACIFIC ST STE***	***WSW 1/8 - 1/4 (0.234 mi.)***	***I62***	***339***
EPA ID:: CAR000067124				
MATTS NEWBORN AUTO P	***148 LAS POSAS RD***	***S 1/8 - 1/4 (0.243 mi.)***	***K65***	***347***
EPA ID:: CAD981160203				

State- and tribal - equivalent CERCLIS

ENVIROSTOR: The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

A review of the ENVIROSTOR list, as provided by EDR, and dated 01/25/2021 has revealed that there are 8 ENVIROSTOR sites within approximately 1 mile of the target property.

Equal/Higher Elevation	**Address**	**Direction / Distance**	**Map ID**	**Page**
RANCHO SANTA LUNA SC	***SANTA LUNA HILLS***	***NW 1/2 - 1 (0.723 mi.)***	***92***	***719***
Facility Id: 37010030				
Status: No Action Required				
SAN MARCOS UNIFIED S	***SOUTHWEST CORNER OF***	***ESE 1/2 - 1 (0.937 mi.)***	***97***	***784***
Facility Id: 60002596				
Status: No Further Action				

Lower Elevation	**Address**	**Direction / Distance**	**Map ID**	**Page**
TORREY CHEMICAL CO.	217 LAS POSAS ROAD	S 1/8 - 1/4 (0.139 mi.)	F30	200
Facility Id: 37510137				
Status: Refer: Other Agency				
SIGNET ARMORLITE	***1001 ARMORLITE DR***	***SE 1/4 - 1/2 (0.414 mi.)***	***O74***	***386***
Facility Id: 80001570				
Status: Refer: RWQCB				
HUES METAL FINISHING	***977 LINDA VISTA DR***	***SSE 1/2 - 1 (0.724 mi.)***	***93***	***722***
Facility Id: 71002362				
Status: Inactive - Needs Evaluation				
MACDERMID PRINTING S	***260 SOUTH PACIFIC ST***	***SW 1/2 - 1 (0.802 mi.)***	***94***	***758***
Facility Id: 71002510				
Status: Inactive - Needs Evaluation				
SAN MARCOS CAL STATE	800 WEST VALLECITOS	SE 1/2 - 1 (0.832 mi.)	95	781

Facility Id: 37020001
Status: Refer: RWQCB

NO. CO. HEALTH SVCS.	BOARDWALK & PARK PLA	S 1/2 - 1 (0.888 mi.)	96	782

Facility Id: 37800068
Status: No Action Required

State and tribal landfill and/or solid waste disposal site lists

SWF/LF: The Solid Waste Facilities/Landfill Sites records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. The data come from the Integrated Waste Management Board's Solid Waste Information System (SWIS) database.

A review of the SWF/LF list, as provided by EDR, has revealed that there is 1 SWF/LF site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
BENCHMARK LANSCAPE I	***145 N PACIFIC ST***	***SW 1/8 - 1/4 (0.150 mi.)***	***G33***	***210***

Database: SAN DIEGO CO. LF, Date of Government Version: 10/01/2020
Database: SWF/LF (SWIS), Date of Government Version: 02/08/2021
Facility ID: 37-AA-0986
Operational Status: Active
Operational Status: ACTIVE
Regulation Status: Notification
Facility Status: ACTIVE SITES

State and tribal leaking storage tank lists

LUST: Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

A review of the LUST list, as provided by EDR, has revealed that there are 20 LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SAN MARCOS GAS	***1290 W MISSION RD***	***SSE 0 - 1/8 (0.072 mi.)***	***B11***	***56***

Database: LUST, Date of Government Version: 03/08/2021
Global Id: T0607383730
Status: Completed - Case Closed

GLENN YOUNG	***125 N RANCHO SANTA F***	***W 1/4 - 1/2 (0.404 mi.)***	***N72***	***367***

Database: LUST, Date of Government Version: 03/08/2021
Global Id: T0607301273
Global Id: T0607300398
Status: Completed - Case Closed

C.D.R. - SHELL	***112 N RANCHO SANTA F***	***W 1/4 - 1/2 (0.423 mi.)***	***N75***	***485***

Database: LUST, Date of Government Version: 03/08/2021
Global Id: T0619784179
Global Id: T0607302478

Status: Open - Remediation

CNTY OF SD SAN MARCO ***1579 OSAGE ST*** ***WSW 1/4 - 1/2 (0.423 mi.)*** ***77*** ***521***
Database: LUST, Date of Government Version: 03/08/2021
Global Id: T0607302697
Global Id: T0607302282
Status: Completed - Case Closed

TEXACO ***105 RANCHO SANTA FE*** ***WSW 1/4 - 1/2 (0.471 mi.)*** ***R83*** ***648***
Database: LUST, Date of Government Version: 03/08/2021
Status: Remedial action (cleanup) Underway
Global Id: T0607302827
Global Id: T0607301309
Case Number: 9UT2562
Status: Completed - Case Closed

TEXACO SERVICE STATI 105 RANCHO SANTA FE WSW 1/4 - 1/2 (0.471 mi.) R84 662
Database: LUST REG 9, Date of Government Version: 03/01/2001
Closed Date: 8/25/88
Status: Case Closed
Case Number: 9UT535

TEXACO ***105 RANCHO SANTA FE*** ***WSW 1/4 - 1/2 (0.471 mi.)*** ***R85*** ***663***
Database: LUST REG 9, Date of Government Version: 03/01/2001

CHEVRON SERVICE STAT ***110 RANCHO SANTA FE*** ***W 1/4 - 1/2 (0.480 mi.)*** ***R87*** ***674***
Database: LUST REG 9, Date of Government Version: 03/01/2001
Status: Remediation Plan
Case Number: 9UT878

EXXON #1041 ***112 RANCHO SANTA FE*** ***W 1/4 - 1/2 (0.482 mi.)*** ***R88*** ***679***
Database: LUST REG 9, Date of Government Version: 03/01/2001
Status: Preliminary site assessment underway
Case Number: 9UT3709

UNITED PACIFIC 0658 ***110 S RANCHO SANTA F*** ***WSW 1/4 - 1/2 (0.498 mi.)*** ***R90*** ***688***
Database: LUST, Date of Government Version: 03/08/2021
Global Id: T0607303122
Status: Completed - Case Closed

Lower Elevation	Address	Direction / Distance	Map ID	Page
PIONEER MILLS	***1329 W MISSION RD***	***SSW 0 - 1/8 (0.016 mi.)***	***A2***	***9***

Database: LUST, Date of Government Version: 03/08/2021
Closed Date: 2/12/93
Status: Case Closed
Global Id: T0607300032
Case Number: 9UT1010
Status: Completed - Case Closed

PIONEER MILLS 1329 MISSION RD W S 0 - 1/8 (0.037 mi.) 5 43
Database: LUST REG 9, Date of Government Version: 03/01/2001

MASHBURN WASTE 224 LAS POSAS RD S S 1/8 - 1/4 (0.129 mi.) F25 180
Database: LUST REG 9, Date of Government Version: 03/01/2001
Status: Preliminary site assessment workplan submitted
Case Number: 9UT3726

CREST BEVERAGE ***1152 ARMORLITE DR*** ***SSE 1/4 - 1/2 (0.309 mi.)*** ***66*** ***350***
Database: LUST REG 9, Date of Government Version: 03/01/2001
Database: LUST, Date of Government Version: 03/08/2021

Closed Date: 5/31/90
Status: Case Closed
Global Id: T0607300256
Case Number: 9UT1422
Status: Completed - Case Closed

SAN MARCOS ROAD STAT 1600 DESCANSO AVE WSW 1/4 - 1/2 (0.369 mi.) M68 361
Database: LUST REG 9, Date of Government Version: 03/01/2001
Status: Preliminary site assessment workplan submitted
Case Number: 9UT3937

COUNTY OF SD/DIVISIO ***1600 DESCANSO AVE*** ***WSW 1/4 - 1/2 (0.369 mi.)*** ***M69*** ***362***
Database: LUST REG 9, Date of Government Version: 03/01/2001
Status: Preliminary site assessment underway
Case Number: 9UT3514

SIGNET ARMORLITE ***1001 ARMORLITE DR*** ***SE 1/4 - 1/2 (0.414 mi.)*** ***O74*** ***386***
Database: LUST REG 9, Date of Government Version: 03/01/2001
Database: LUST, Date of Government Version: 03/08/2021
Closed Date: 9/22/86
Status: Case Closed
Global Id: T0607302793
Case Number: 9UT493
Status: Completed - Case Closed

DEWEY PEST CONTROL ***1370 GRAND AVENUE*** ***SSW 1/4 - 1/2 (0.427 mi.)*** ***P78*** ***592***
Database: LUST REG 9, Date of Government Version: 03/01/2001
Closed Date: 8/26/87
Status: Case Closed
Case Number: 9UT301

AIR PRODUCTS AND CHE ***1415 GRAND AVE*** ***SSW 1/4 - 1/2 (0.451 mi.)*** ***Q80*** ***617***
Database: LUST REG 9, Date of Government Version: 03/01/2001
Closed Date: 2/4/91
Status: Case Closed
Case Number: 9UT1661

AIRGAS USA LLC ***1415 GRAND AVE*** ***SSW 1/4 - 1/2 (0.451 mi.)*** ***Q81*** ***620***
Database: LUST, Date of Government Version: 03/08/2021
Global Id: T0607300476
Status: Completed - Case Closed

SAN DIEGO CO. SAM: The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

A review of the SAN DIEGO CO. SAM list, as provided by EDR, and dated 03/23/2010 has revealed that there are 15 SAN DIEGO CO. SAM sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SAN MARCOS GAS	***1290 W MISSION RD***	***SSE 0 - 1/8 (0.072 mi.)***	***B11***	***56***
Case Number: H25233-001				
Facility Status: Preliminary Assessment				
SAN MARCOS AMPM	***125 N RANCHO SANTA F***	***W 1/4 - 1/2 (0.404 mi.)***	***N71***	***365***
Case Number: H05181-002				
Case Number: H05181-003				

Case Number: H05181-004
Case Number: H05181-001
Facility Status: Remedial Investigation
Facility Status: Closed Case

RANCHO SANTA FE EXXO	***112 N RANCHO SANTA F***	***W 1/4 - 1/2 (0.423 mi.)***	***N76***	***514***

Case Number: H03229-002
Case Number: H03229-001
Facility Status: Preliminary Assessment
Facility Status: Remedial Investigation

CNTY OF SD SAN MARCO	***1579 OSAGE ST***	***WSW 1/4 - 1/2 (0.423 mi.)***	***77***	***521***

Case Number: H04814-002
Case Number: H04814-001
Facility Status: Remedial Investigation
Facility Status: Closed Case

TEXACO	***105 RANCHO SANTA FE***	***WSW 1/4 - 1/2 (0.471 mi.)***	***R85***	***663***

Case Number: H05804-001
Case Number: H05804-002
Case Number: H05804-003
Facility Status: Remedial Investigation
Facility Status: Closed Case

UNITED PACIFIC 0658	***110 S RANCHO SANTA F***	***WSW 1/4 - 1/2 (0.498 mi.)***	***R90***	***688***

Case Number: H13261-001
Facility Status: Remedial Investigation

Lower Elevation	**Address**	**Direction / Distance**	**Map ID**	**Page**
PIONEER MILLS	***1329 W MISSION RD***	***SSW 0 - 1/8 (0.016 mi.)***	***A2***	***9***

Case Number: H02919-001
Facility Status: Closed Case

COCA COLA ENTERPISES	LAS POSAS/ARMORLITE	S 1/8 - 1/4 (0.160 mi.)	F34	224

Case Number: H36816-001
Facility Status: Closed Case

VACANT LOT	***199 LAS POSAS RD***	***S 1/8 - 1/4 (0.189 mi.)***	***H35***	***224***

Case Number: H25926-001
Facility Status: Closed Case

CREST BEVERAGE	***1152 ARMORLITE DR***	***SSE 1/4 - 1/2 (0.309 mi.)***	***66***	***350***

Case Number: H20781-001
Facility Status: Closed Case

SIGNET ARMORLITE	***1001 ARMORLITE DR***	***SE 1/4 - 1/2 (0.414 mi.)***	***O74***	***386***

Case Number: H02662-001
Case Number: H02662-002
Facility Status: Leak Being Confirmed
Facility Status: Closed Case

DEWEY PEST CONTROL	***1370 GRAND AVENUE***	***SSW 1/4 - 1/2 (0.427 mi.)***	***P78***	***592***

Case Number: H04345-001
Facility Status: Closed Case

AIRGAS USA LLC	***1415 GRAND AVE***	***SSW 1/4 - 1/2 (0.451 mi.)***	***Q81***	***620***

Case Number: H02614-001
Facility Status: Closed Case

PATIO GUYS INC	***935 BAILEY CT STE D***	***SE 1/4 - 1/2 (0.457 mi.)***	***82***	***642***

Case Number: H06559-001

Facility Status: Closed Case

SPANJIAN/ DUFOUR ***1050 LOS VALLECITOS*** ***SSE 1/4 - 1/2 (0.493 mi.)*** ***89*** ***684***
Case Number: H29237-001
Facility Status: Remedial Action (Clean-Up)

CPS-SLIC: Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

A review of the CPS-SLIC list, as provided by EDR, has revealed that there are 9 CPS-SLIC sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
GLENN YOUNG	***125 N RANCHO SANTA F***	***W 1/4 - 1/2 (0.404 mi.)***	***N72***	***367***
Database: CPS-SLIC, Date of Government Version: 03/08/2021 Facility Status: Completed - Case Closed Global Id: T0608148767 Global Id: T0608153478				
TEXACO	***105 RANCHO SANTA FE***	***WSW 1/4 - 1/2 (0.471 mi.)***	***R83***	***648***
Database: CPS-SLIC, Date of Government Version: 03/08/2021 Facility Status: Completed - Case Closed Global Id: T0608107669				

Lower Elevation	Address	Direction / Distance	Map ID	Page
COCA COLA ENTERPISES	***NONE LAS POSAS/ARMOR***	***S 1/8 - 1/4 (0.197 mi.)***	***H38***	***235***
Database: CPS-SLIC, Date of Government Version: 03/08/2021 Facility Status: Completed - Case Closed Global Id: T0608184290				
SIGNET ARMORLITE, IN	1001 ARMORLITE DR.	SE 1/4 - 1/2 (0.414 mi.)	O73	380
Database: SLIC REG 9, Date of Government Version: 09/10/2007 Status: Open Status: Dead Status: Closed				
SIGNET ARMORLITE	***1001 ARMORLITE DR***	***SE 1/4 - 1/2 (0.414 mi.)***	***O74***	***386***
Database: CPS-SLIC, Date of Government Version: 03/08/2021 Facility Status: Completed - Case Closed Global Id: T10000003706 Global Id: SL209154190				
DEWEY PEST CONTROL	***1370 GRAND AVENUE***	***SSW 1/4 - 1/2 (0.427 mi.)***	***P78***	***592***
Database: CPS-SLIC, Date of Government Version: 03/08/2021 Facility Status: Completed - Case Closed Global Id: T0607301777				
COLUCCI DEVELOPMENT	1325 GRAND AVE	SSW 1/4 - 1/2 (0.443 mi.)	P79	617
Database: SLIC REG 9, Date of Government Version: 09/10/2007 Status: Dead				
PATIO GUYS INC	***935 BAILEY CT STE D***	***SE 1/4 - 1/2 (0.457 mi.)***	***82***	***642***
Database: CPS-SLIC, Date of Government Version: 03/08/2021 Facility Status: Completed - Case Closed				

Global Id: T0608199583

SPANJIAN/ DUFOUR	***1050 LOS VALLECITOS***	***SSE 1/4 - 1/2 (0.493 mi.)***	***89***	***684***

Database: CPS-SLIC, Date of Government Version: 03/08/2021
Database: SLIC REG 9, Date of Government Version: 09/10/2007
Status: Dead
Status: Open
Facility Status: Completed - Case Closed
Global Id: SL0607396081

State and tribal registered storage tank lists

UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the State Water Resources Control Board's Hazardous Substance Storage Container Database.

A review of the UST list, as provided by EDR, has revealed that there are 2 UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
MOBIL OIL CORPORATIO	***1290 W MISSION RD***	***SSE 0 - 1/8 (0.072 mi.)***	***B12***	***102***

Database: UST, Date of Government Version: 03/08/2021
Facility Id: 37-000-215691
Facility Id: H25233

Lower Elevation	Address	Direction / Distance	Map ID	Page
PACIFIC BELL SNMCCA1	***225 N LAS POSAS RD***	***S 1/8 - 1/4 (0.136 mi.)***	***F26***	***181***

Database: UST, Date of Government Version: 03/08/2021
Facility Id: H06360
Facility Id: 37-000-106360

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Hazardous waste / Contaminated Sites

CERS HAZ WASTE: List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, and RCRA LQ HW Generator programs.

A review of the CERS HAZ WASTE list, as provided by EDR, and dated 01/20/2021 has revealed that there are 12 CERS HAZ WASTE sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CVS PHARMACY #7127	***1302 W MISSION RD***	***SSE 0 - 1/8 (0.024 mi.)***	***A4***	***24***
SAN MARCOS GAS	***1290 W MISSION RD***	***SSE 0 - 1/8 (0.072 mi.)***	***B11***	***56***

Lower Elevation	Address	Direction / Distance	Map ID	Page
PEACOCK CLEANERS	***1450 W MISSION RD ST***	***WNW 0 - 1/8 (0.084 mi.)***	***C14***	***111***
PACIFIC METAL PRODUC	155 BALBOA STREET, S	SW 0 - 1/8 (0.117 mi.)	D20	129

Lower Elevation	Address	Direction / Distance	Map ID	Page
MISSION AUTO REPAIR	*1300 ARMORLITE DR*	*S 1/8 - 1/4 (0.127 mi.)*	*F23*	*135*
BENCHMARK LANSCAPE I	*145 N PACIFIC ST*	*SW 1/8 - 1/4 (0.150 mi.)*	*G33*	*210*
MEL'S AUTO REPAIR, L	*139 N PACIFIC ST*	*WSW 1/8 - 1/4 (0.196 mi.)*	*I36*	*225*
READY LINE FLEET SER	*1322 DESCANSO AVE ST*	*SSW 1/8 - 1/4 (0.204 mi.)*	*H40*	*238*
CARB-ON TECH	*1402 DESCANSO AVE ST*	*SSW 1/8 - 1/4 (0.206 mi.)*	*J43*	*257*
D & C AUTOBODY & PAI	*1404 DESCANSO AVE ST*	*SSW 1/8 - 1/4 (0.211 mi.)*	*J47*	*271*
TERRY'S NISSAN SPECI	*1339 DESCANSO AVE*	*SSW 1/8 - 1/4 (0.224 mi.)*	*J52*	*293*
ACCURATE AUTOWERKS	*1331 DESCANSO AVE*	*SSW 1/8 - 1/4 (0.227 mi.)*	*J56*	*310*

Local Lists of Registered Storage Tanks

SWEEPS UST: Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

A review of the SWEEPS UST list, as provided by EDR, and dated 06/01/1994 has revealed that there are 2 SWEEPS UST sites within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
PIONEER MILLS	***1329 W MISSION RD***	***SSW 0 - 1/8 (0.016 mi.)***	***A2***	***9***
Status: A				
Comp Number: 2919				
PACIFIC BELL SNMCCA1	***225 N LAS POSAS RD***	***S 1/8 - 1/4 (0.136 mi.)***	***F26***	***181***
Status: A				
Tank Status: A				
Comp Number: 6360				

HIST UST: Historical UST Registered Database.

A review of the HIST UST list, as provided by EDR, and dated 10/15/1990 has revealed that there are 3 HIST UST sites within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
PIONEER MILLS	***1329 W MISSION RD***	***SSW 0 - 1/8 (0.016 mi.)***	***A2***	***9***
Facility Id: 00000018776				
SOLID WASTES SERVICE	***224 LOS POSAS RD***	***S 1/8 - 1/4 (0.129 mi.)***	***F24***	***140***
Facility Id: 00000035184				
PACIFIC BELL	***225 LOS POSAS***	***S 1/8 - 1/4 (0.136 mi.)***	***F27***	***192***
Facility Id: 00000057717				

EXECUTIVE SUMMARY

CERS TANKS: List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Aboveground Petroleum Storage and Underground Storage Tank regulatory programs.

A review of the CERS TANKS list, as provided by EDR, and dated 01/20/2021 has revealed that there are 2 CERS TANKS sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SAN MARCOS GAS	***1290 W MISSION RD***	***SSE 0 - 1/8 (0.072 mi.)***	***B11***	***56***
Lower Elevation	**Address**	**Direction / Distance**	**Map ID**	**Page**
PACIFIC BELL SNMCCA1	***225 N LAS POSAS RD***	***S 1/8 - 1/4 (0.136 mi.)***	***F26***	***181***

Local Land Records

DEED: The use of recorded land use restrictions is one of the methods the DTSC uses to protect the public from unsafe exposures to hazardous substances and wastes .

A review of the DEED list, as provided by EDR, and dated 03/02/2021 has revealed that there is 1 DEED site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
SIGNET ARMORLITE	***1001 ARMORLITE DR***	***SE 1/4 - 1/2 (0.414 mi.)***	***O74***	***386***
Status: COMPLETED - CASE CLOSED Envirostor ID: T10000003706 Envirostor ID: SL209154190				

Other Ascertainable Records

RCRA NonGen / NLR: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 03/22/2021 has revealed that there are 24 RCRA NonGen / NLR sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
LAS POSAS VENTURE IN EPA ID:: CAL000375415	1290 W MISSION RD	SSE 0 - 1/8 (0.072 mi.)	B7	45
JULIANNE RULJANCICH EPA ID:: CAC003002460	1300 GRANITE RD.	ENE 0 - 1/8 (0.121 mi.)	21	130
Lower Elevation	**Address**	**Direction / Distance**	**Map ID**	**Page**
PADILLA CONSTRUCTION EPA ID:: CAL000340416	1390 ARMORLITE DR	SSW 0 - 1/8 (0.056 mi.)	A6	43
TECHNOGRAPHICS CO	181 BALBOA STREET	WSW 0 - 1/8 (0.093 mi.)	D15	119

EPA ID:: CAL000091925				
K-TECH MACHINE INC EPA ID:: CAL000148579	1377 ARMORLITE DR ST	SSW 0 - 1/8 (0.095 mi.)	E17	123
SM BRAKE MASTERS EPA ID:: CAL000391569	1300 ARMORLITE DR	S 1/8 - 1/4 (0.127 mi.)	F22	133
SOLID WASTES SERVICE EPA ID:: CAD054780051	***224 LOS POSAS RD***	***S 1/8 - 1/4 (0.129 mi.)***	***F24***	***140***
ADVANCED STRUCTURES EPA ID:: CAD080920739	***1315 ARMORLITE DR***	***SSW 1/8 - 1/4 (0.137 mi.)***	***E28***	***195***
BENCHMARK LANDSCAPE EPA ID:: CAL000319551	145 N PACIFIC ST	SW 1/8 - 1/4 (0.150 mi.)	G32	207
MEL'S AUTO REPAIR LL EPA ID:: CAL000063269	139 NORTH PACIFIC ST	WSW 1/8 - 1/4 (0.196 mi.)	I37	232
READY LINE FLEET SER EPA ID:: CAL000417746	1322 DESCANSO AVE ST	SSW 1/8 - 1/4 (0.204 mi.)	H39	236
IRON FACTORY THE EPA ID:: CAD098234511	1402-C DESCANSO RD	SSW 1/8 - 1/4 (0.206 mi.)	J41	252
CARB ON TECH EPA ID:: CAL000452191	1402 DESCANSO AVE ST	SSW 1/8 - 1/4 (0.206 mi.)	J42	255
BAJA PACIFIC EPA ID:: CAL000294570	1308 DECANSO AVE	S 1/8 - 1/4 (0.207 mi.)	H45	266
RADIATOR SHOP EPA ID:: CAL000358652	1404 DESCANSO AVE ST	SSW 1/8 - 1/4 (0.211 mi.)	J48	282
D&C AUTOBODY & PAINT EPA ID:: CAL000451493	1404 DESCANSO AVE ST	SSW 1/8 - 1/4 (0.211 mi.)	J49	285
J&X AUTO N BODY REPA EPA ID:: CAL000237894	1404 DESCANSO AVE ST	SSW 1/8 - 1/4 (0.211 mi.)	J50	287
TERRY'S NISSAN SPECI EPA ID:: CAL000221808	1339 DESCANSO AVE	SSW 1/8 - 1/4 (0.224 mi.)	J53	303
GAMA AUTO TIRE REPAI EPA ID:: CAL000393443	1325 DESCANSO AVE	SSW 1/8 - 1/4 (0.225 mi.)	K54	305
ACCURATE AUTOWERKS EPA ID:: CAL000346765	1331 DESCANSO AVE	SSW 1/8 - 1/4 (0.227 mi.)	J55	308
VECCHIO MONDO IMPORT EPA ID:: CAL000338198	120 N PACIFIC ST STE	WSW 1/8 - 1/4 (0.234 mi.)	I57	323
GERLAND MACHINE INC EPA ID:: CAL000301230	120 N PACIFIC ST STE	WSW 1/8 - 1/4 (0.234 mi.)	I59	328
NORTH COUNTY SHOOTIN EPA ID:: CAL000442673	1440 DESCANSO AVE	SW 1/8 - 1/4 (0.238 mi.)	L63	342
GABRIEL P. CASTANO EPA ID:: CAC003015009	1450 DESCANSO AVE	SW 1/8 - 1/4 (0.243 mi.)	L64	345

EXECUTIVE SUMMARY

Cortese: The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

A review of the Cortese list, as provided by EDR, and dated 12/17/2020 has revealed that there are 11 Cortese sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SAN MARCOS GAS	***1290 W MISSION RD***	***SSE 0 - 1/8 (0.072 mi.)***	***B10***	***52***
Cleanup Status: COMPLETED - CASE CLOSED				
SAN MARCOS AMPM	***125 N RANCHO SANTA F***	***W 1/4 - 1/2 (0.404 mi.)***	***N71***	***365***
Cleanup Status: COMPLETED - CASE CLOSED				
C.D.R. - SHELL	***112 N RANCHO SANTA F***	***W 1/4 - 1/2 (0.423 mi.)***	***N75***	***485***
Cleanup Status: OPEN - REMEDIATION				
RANCHO SANTA FE EXXO	***112 N RANCHO SANTA F***	***W 1/4 - 1/2 (0.423 mi.)***	***N76***	***514***
Cleanup Status: OPEN - REMEDIATION				
CNTY OF SD SAN MARCO	***1579 OSAGE ST***	***WSW 1/4 - 1/2 (0.423 mi.)***	***77***	***521***
Cleanup Status: COMPLETED - CASE CLOSED				
TEXACO	***105 RANCHO SANTA FE***	***WSW 1/4 - 1/2 (0.471 mi.)***	***R83***	***648***
Cleanup Status: COMPLETED - CASE CLOSED				
UNITED PACIFIC 0658	***110 S RANCHO SANTA F***	***WSW 1/4 - 1/2 (0.498 mi.)***	***R90***	***688***
Cleanup Status: COMPLETED - CASE CLOSED				

Lower Elevation	Address	Direction / Distance	Map ID	Page
PIONEER MILLS	***1329 W MISSION RD***	***SSW 0 - 1/8 (0.016 mi.)***	***A2***	***9***
Cleanup Status: COMPLETED - CASE CLOSED				
CREST BEVERAGE	***1152 ARMORLITE DR***	***SSE 1/4 - 1/2 (0.309 mi.)***	***66***	***350***
Cleanup Status: COMPLETED - CASE CLOSED				
SIGNET ARMORLITE	***1001 ARMORLITE DR***	***SE 1/4 - 1/2 (0.414 mi.)***	***O74***	***386***
Cleanup Status: COMPLETED - CASE CLOSED				
AIRGAS USA LLC	***1415 GRAND AVE***	***SSW 1/4 - 1/2 (0.451 mi.)***	***Q81***	***620***
Cleanup Status: COMPLETED - CASE CLOSED				

DRYCLEANERS: A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaners' agents; linen supply; coin-operated laundries and cleaning; drycleaning plants except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

A review of the DRYCLEANERS list, as provided by EDR, has revealed that there is 1 DRYCLEANERS site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
PEACOCK CLEANERS	1450 MISSION RD STE	WNW 0 - 1/8 (0.094 mi.)	C16	122
Database: DRYCLEANERS, Date of Government Version: 03/01/2021				
EPA Id: CAL000139035				
EPA Id: CAL000334565				

HIST CORTESE: The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

A review of the HIST CORTESE list, as provided by EDR, and dated 04/01/2001 has revealed that there are 9 HIST CORTESE sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
TEXACO Reg Id: 9UT535	***105 RANCHO SANTA FE***	***WSW 1/4 - 1/2 (0.471 mi.)***	***R83***	***648***
SHELL SERVICE STATIO	112 RANCHO SANTA FE/	W 1/4 - 1/2 (0.478 mi.)	R86	674
CHEVRON SERVICE STAT Reg Id: 9UT878	***110 RANCHO SANTA FE***	***W 1/4 - 1/2 (0.480 mi.)***	***R87***	***674***

Lower Elevation	Address	Direction / Distance	Map ID	Page
PIONEER MILLS Reg Id: 9UT1010	***1329 W MISSION RD***	***SSW 0 - 1/8 (0.016 mi.)***	***A2***	***9***
CREST BEVERAGE Reg Id: 9UT1422	***1152 ARMORLITE DR***	***SSE 1/4 - 1/2 (0.309 mi.)***	***66***	***350***
SAN MARCOS ROAD STAT Reg Id: 9UT3514 Reg Id: 9UT3937	1600 DESCANSO	WSW 1/4 - 1/2 (0.369 mi.)	M70	364
SIGNET ARMORLITE Reg Id: 9UT493	***1001 ARMORLITE DR***	***SE 1/4 - 1/2 (0.414 mi.)***	***O74***	***386***
DEWEY PEST CONTROL Reg Id: 9UT301	***1370 GRAND AVENUE***	***SSW 1/4 - 1/2 (0.427 mi.)***	***P78***	***592***
AIRGAS USA LLC Reg Id: 9UT1661	***1415 GRAND AVE***	***SSW 1/4 - 1/2 (0.451 mi.)***	***Q81***	***620***

HWP: Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

A review of the HWP list, as provided by EDR, and dated 02/16/2021 has revealed that there is 1 HWP site within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
SIGNET ARMORLITE EPA ID: CAD008362634 Cleanup Status: CLOSED	***1001 ARMORLITE DR***	***SE 1/4 - 1/2 (0.414 mi.)***	***O74***	***386***

HWT: A listing of hazardous waste transporters. In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by DTSC. A hazardous waste transporter registration is valid for one year and is assigned a unique registration number.

A review of the HWT list, as provided by EDR, and dated 01/05/2021 has revealed that there is 1 HWT site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
SINGH GROUP INC.	***1308 DESCANSO AVE***	***S 1/8 - 1/4 (0.207 mi.)***	***H44***	***263***
Reg Num: 4695				

MWMP: The Medical Waste Management Program (MWMP) ensures the proper handling and disposal of medical waste by permitting and inspecting medical waste Offsite Treatment Facilities (PDF) and Transfer Stations (PDF) throughout the state. MWMP also oversees all Medical Waste Transporters.

A review of the MWMP list, as provided by EDR, and dated 01/29/2021 has revealed that there is 1 MWMP site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
SINGH GROUP INC.	***1308 DESCANSO AVE***	***S 1/8 - 1/4 (0.207 mi.)***	***H44***	***263***
Registration Number: 4695				

Notify 65: Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

A review of the Notify 65 list, as provided by EDR, and dated 03/12/2021 has revealed that there are 2 Notify 65 sites within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
MASHBURN SANITATION	***224 LAS POSAS ROAD***	***SSW 1/2 - 1 (0.581 mi.)***	***91***	***719***
CRIBBAGE LANE & SAN		SSE 1/2 - 1 (0.977 mi.)	98	786

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR Hist Auto: EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

A review of the EDR Hist Auto list, as provided by EDR, has revealed that there are 2 EDR Hist Auto sites within approximately 0.125 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
HARMS DON INC	1290 W MISSION RD	SSE 0 - 1/8 (0.072 mi.)	B8	48
Lower Elevation	**Address**	**Direction / Distance**	**Map ID**	**Page**
MELTON S ARCO SERVIC	0130 BALBOA AVE	SW 0 - 1/8 (0.116 mi.)	D18	125

EXECUTIVE SUMMARY

EDR Hist Cleaner: EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

A review of the EDR Hist Cleaner list, as provided by EDR, has revealed that there are 2 EDR Hist Cleaner sites within approximately 0.125 miles of the target property.

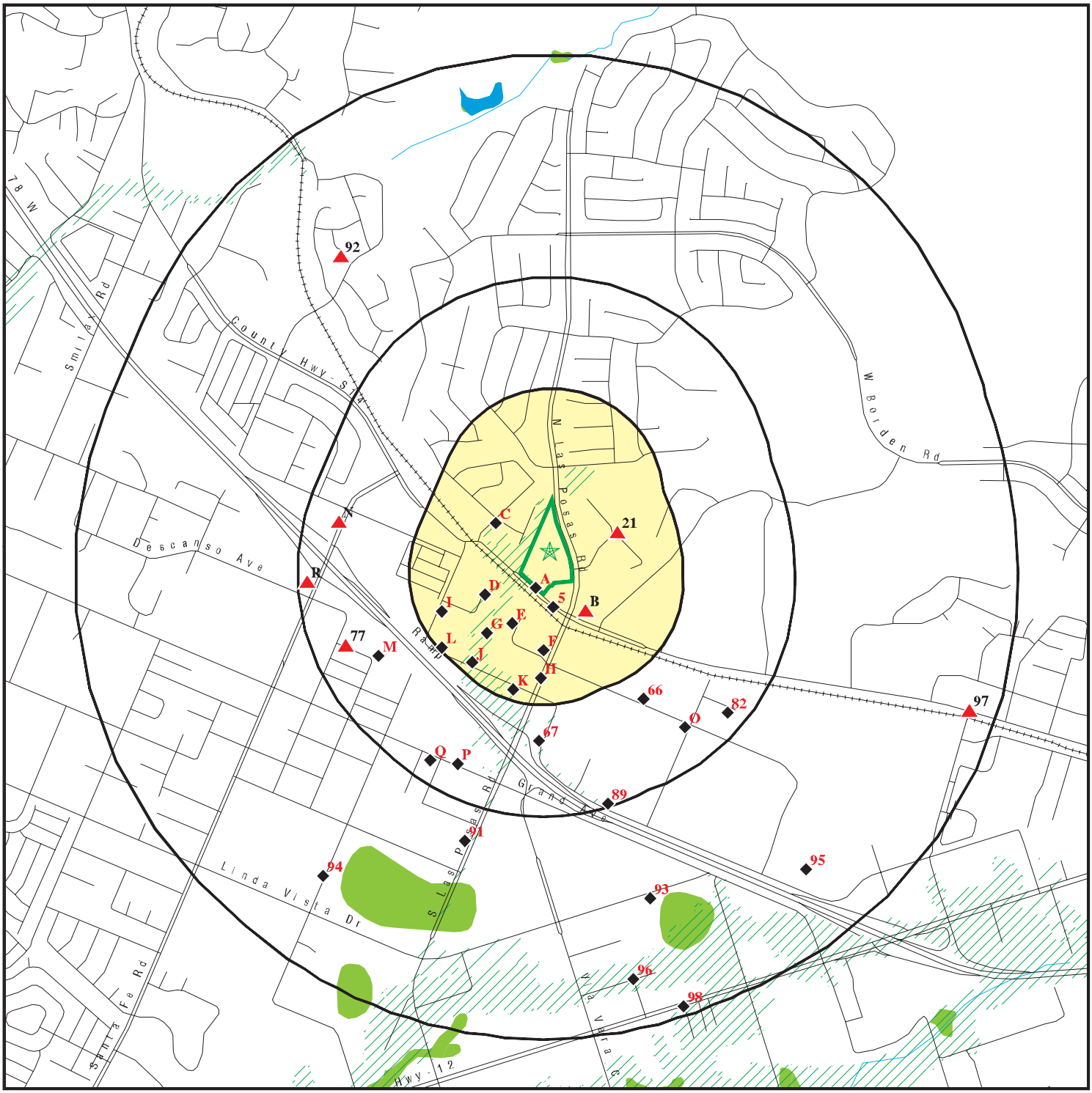
Lower Elevation	Address	Direction / Distance	Map ID	Page
CONTINENTAL CLEANERS	1342 W MISSION RD	SSW 0 - 1/8 (0.001 mi.)	A1	9
PEACOCK CLEANERS	1450 W MISSION RD ST	WNW 0 - 1/8 (0.084 mi.)	C13	111

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 2 records.

Site Name	Database(s)
K-TECH MACHINE INC.	CERS HAZ WASTE
EVANS DEDICATED SYSTEMS	ENVIROSTOR

OVERVIEW MAP - 06526060.2R



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

National Priority List Sites

Dept. Defense Sites

Indian Reservations BIA

Special Flood Hazard Area (1%)

0.2% Annual Chance Flood Hazard

National Wetland Inventory

State Wetlands

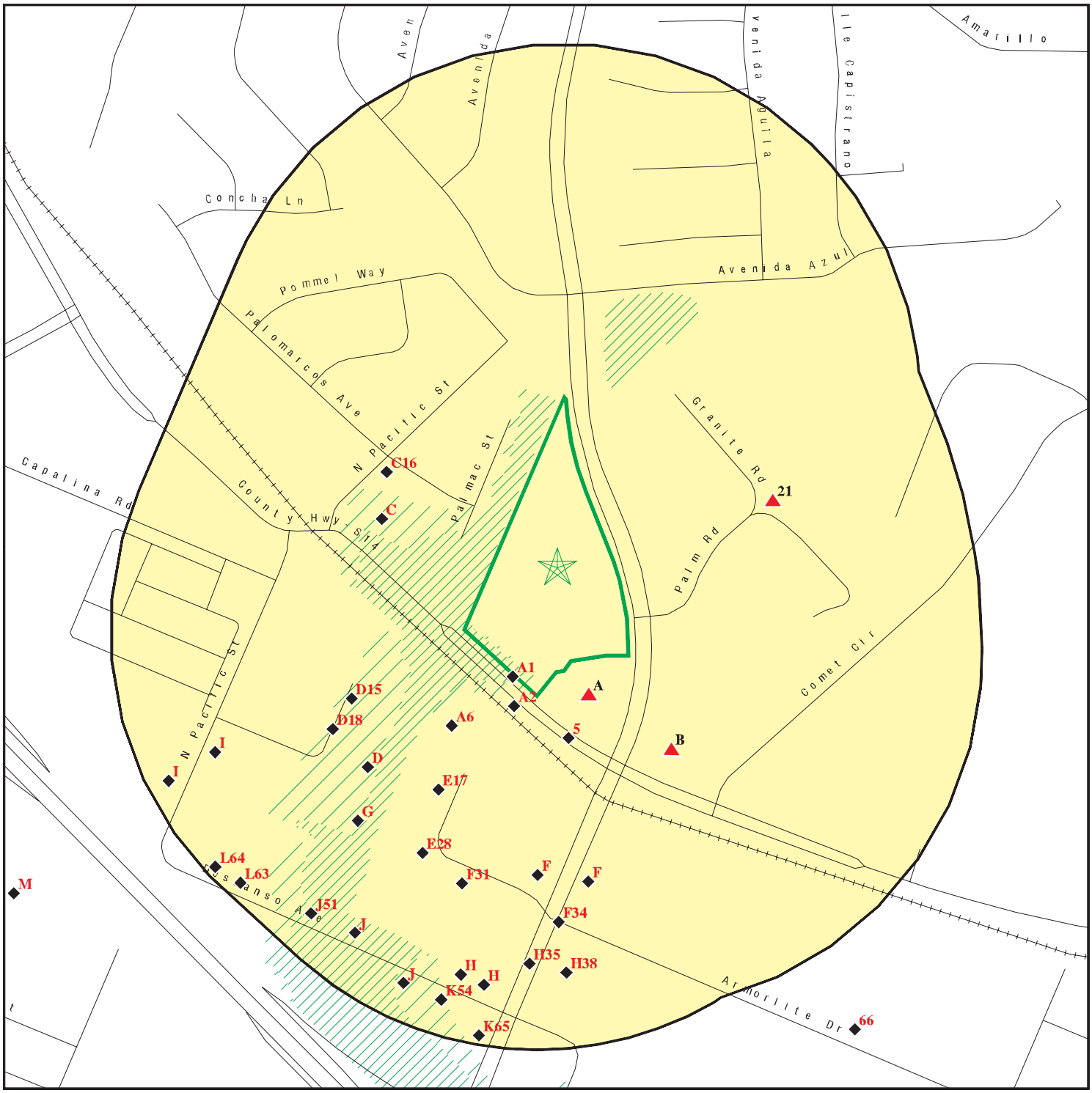
Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME:	W Mission Rd & N Las Posas Rd	CLIENT:	Hillmann Environmental Co.
ADDRESS:	W Mission Rd & N Las Posas Rd San Marcos CA 92069	CONTACT:	Gabby Cyrulik
LAT/LONG:	33.150441 / 117.189618	INQUIRY #:	06526060.2r
		DATE:	June 07, 2021 5:18 pm

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DETAIL MAP - 06526060.2R



This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: W Mission Rd & N Las Posas Rd ADDRESS: W Mission Rd & N Las Posas Rd San Marcos CA 92069 LAT/LONG: 33.150441 / 117.189618	CLIENT: Hillmann Environmental Co. CONTACT: Gabby Cyrulik INQUIRY #: 06526060.2r DATE: June 07, 2021 5:21 pm

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	1.000		0	0	0	0	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site list								
SEMS-ARCHIVE	0.500		0	1	2	NR	NR	3
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	1	0	NR	1
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	1	NR	NR	1
Federal RCRA generators list								
RCRA-LQG	0.250		2	1	NR	NR	NR	3
RCRA-SQG	0.250		1	8	NR	NR	NR	9
RCRA-VSQG	0.250		0	0	NR	NR	NR	0
Federal institutional controls / engineering controls registries								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROLS	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	0.001		0	NR	NR	NR	NR	0
State- and tribal - equivalent NPL								
RESPONSE	1.000		0	0	0	0	NR	0
State- and tribal - equivalent CERCLIS								
ENVIROSTOR	1.000		0	1	1	6	NR	8
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF	0.500		0	1	0	NR	NR	1
State and tribal leaking storage tank lists								
LUST	0.500		3	1	16	NR	NR	20

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
SAN DIEGO CO. SAM	0.500		2	2	11	NR	NR	15
INDIAN LUST	0.500		0	0	0	NR	NR	0
CPS-SLIC	0.500		0	1	8	NR	NR	9
State and tribal registered storage tank lists								
FEMA UST	0.250		0	0	NR	NR	NR	0
UST	0.250		1	1	NR	NR	NR	2
AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
State and tribal voluntary cleanup sites								
INDIAN VCP	0.500		0	0	0	NR	NR	0
VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
WMUDS/SWAT	0.500		0	0	0	NR	NR	0
SWRCY	0.500		0	0	0	NR	NR	0
HAULERS	0.001		0	NR	NR	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	0.001		0	NR	NR	NR	NR	0
HIST Cal-Sites	1.000		0	0	0	0	NR	0
SCH	0.250		0	0	NR	NR	NR	0
CDL	0.001		0	NR	NR	NR	NR	0
San Diego Co. HMMD	0.001		0	NR	NR	NR	NR	0
Toxic Pits	1.000		0	0	0	0	NR	0
CERS HAZ WASTE	0.250		4	8	NR	NR	NR	12
US CDL	0.001		0	NR	NR	NR	NR	0
PFAS	0.500		0	0	0	NR	NR	0
Local Lists of Registered Storage Tanks								
SWEEPS UST	0.250		1	1	NR	NR	NR	2
HIST UST	0.250		1	2	NR	NR	NR	3
CA FID UST	0.250		0	0	NR	NR	NR	0
CERS TANKS	0.250		1	1	NR	NR	NR	2
Local Land Records								
LIENS	0.001		0	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
LIENS 2	0.001		0	NR	NR	NR	NR	0
DEED	0.500		0	0	1	NR	NR	1
Records of Emergency Release Reports								
HMIRS	0.001		0	NR	NR	NR	NR	0
CHMIRS	0.001		0	NR	NR	NR	NR	0
LDS	0.001		0	NR	NR	NR	NR	0
MCS	0.001		0	NR	NR	NR	NR	0
SPILLS 90	0.001		0	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		5	19	NR	NR	NR	24
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	0.001		0	NR	NR	NR	NR	0
EPA WATCH LIST	0.001		0	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	0.001		0	NR	NR	NR	NR	0
TRIS	0.001		0	NR	NR	NR	NR	0
SSTS	0.001		0	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	0.001		0	NR	NR	NR	NR	0
RAATS	0.001		0	NR	NR	NR	NR	0
PRP	0.001		0	NR	NR	NR	NR	0
PADS	0.001		0	NR	NR	NR	NR	0
ICIS	0.001		0	NR	NR	NR	NR	0
FTTS	0.001		0	NR	NR	NR	NR	0
MLTS	0.001		0	NR	NR	NR	NR	0
COAL ASH DOE	0.001		0	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	0.001		0	NR	NR	NR	NR	0
RADINFO	0.001		0	NR	NR	NR	NR	0
HIST FTTS	0.001		0	NR	NR	NR	NR	0
DOT OPS	0.001		0	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	0.001		0	NR	NR	NR	NR	0
US AIRS	0.001		0	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.250		0	0	NR	NR	NR	0
FINDS	0.001		0	NR	NR	NR	NR	0
DOCKET HWC	0.001		0	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	NR	0
ECHO	0.001		0	NR	NR	NR	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
CA BOND EXP. PLAN	1.000		0	0	0	0	NR	0
Cortese	0.500		2	0	9	NR	NR	11
CUPA Listings	0.250		0	0	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
DRYCLEANERS	0.250		1	0	NR	NR	NR	1
EMI	0.001		0	NR	NR	NR	NR	0
ENF	0.001		0	NR	NR	NR	NR	0
Financial Assurance	0.001		0	NR	NR	NR	NR	0
HAZNET	0.001		0	NR	NR	NR	NR	0
ICE	0.001		0	NR	NR	NR	NR	0
HIST CORTESE	0.500		1	0	8	NR	NR	9
HWP	1.000		0	0	1	0	NR	1
HWT	0.250		0	1	NR	NR	NR	1
MINES	0.250		0	0	NR	NR	NR	0
MWMP	0.250		0	1	NR	NR	NR	1
NPDES	0.001		0	NR	NR	NR	NR	0
PEST LIC	0.001		0	NR	NR	NR	NR	0
PROC	0.500		0	0	0	NR	NR	0
Notify 65	1.000		0	0	0	2	NR	2
UIC	0.001		0	NR	NR	NR	NR	0
UIC GEO	0.001		0	NR	NR	NR	NR	0
WASTEWATER PITS	0.500		0	0	0	NR	NR	0
WDS	0.001		0	NR	NR	NR	NR	0
WIP	0.250		0	0	NR	NR	NR	0
MILITARY PRIV SITES	0.001		0	NR	NR	NR	NR	0
PROJECT	0.001		0	NR	NR	NR	NR	0
WDR	0.001		0	NR	NR	NR	NR	0
SAN DIEGO CO LOP	0.001		0	NR	NR	NR	NR	0
CIWQS	0.001		0	NR	NR	NR	NR	0
CERS	0.001		0	NR	NR	NR	NR	0
NON-CASE INFO	0.001		0	NR	NR	NR	NR	0
OTHER OIL GAS	0.001		0	NR	NR	NR	NR	0
PROD WATER PONDS	0.001		0	NR	NR	NR	NR	0
SAMPLING POINT	0.001		0	NR	NR	NR	NR	0
WELL STIM PROJ	0.001		0	NR	NR	NR	NR	0
HWTS	TP		NR	NR	NR	NR	NR	0
MINES MRDS	0.001		0	NR	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR Hist Auto	0.125		2	NR	NR	NR	NR	2
EDR Hist Cleaner	0.125		2	NR	NR	NR	NR	2
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA LF	0.001		0	NR	NR	NR	NR	0
RGA LUST	0.001		0	NR	NR	NR	NR	0
- Totals --		0	29	50	59	8	0	146

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

A1 **CONTINENTAL CLEANERS** **EDR Hist Cleaner** **1018579795**
SSW **1342 W MISSION RD** **N/A**
< 1/8 **SAN MARCOS, CA 92069**
0.001 mi.
6 ft. **Site 1 of 5 in cluster A**

Relative: EDR Hist Cleaner
Lower

Actual: Year: Name: Type:
564 ft. 1994 CONTINENTAL CLEANERS Garment Pressing And Cleaners' Agents

---

A2 **PIONEER MILLS** **LUST** **U001572219**
SSW **1329 W MISSION RD** **SAN DIEGO CO. SAM** **N/A**
< 1/8 **SAN MARCOS, CA 92069** **San Diego Co. HMMD**
0.016 mi. **SWEEPS UST**
84 ft. **Site 2 of 5 in cluster A** **HIST UST**
Cortese

Relative: **HIST CORTESE**
Lower **SAN DIEGO CO LOP**

Actual: **CERS**
566 ft.

LUST:

Name:	PIONEER MILLS
Address:	1329 W MISSION RD
City,State,Zip:	SAN MARCOS, CA 920691311
Lead Agency:	SAN DIEGO COUNTY LOP
Case Type:	LUST Cleanup Site
Geo Track:	http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0607300032
Global Id:	T0607300032
Latitude:	33.1488568
Longitude:	-117.1900597
Status:	Completed - Case Closed
Status Date:	02/12/1993
Case Worker:	Not reported
RB Case Number:	9UT1010
Local Agency:	Not reported
File Location:	Local Agency
Local Case Number:	H02919-001
Potential Media Affect:	Not reported
Potential Contaminants of Concern:	Not reported
Site History:	Not reported

LUST:

Global Id:	T0607300032
Action Type:	ENFORCEMENT
Date:	02/12/1993
Action:	Closure/No Further Action Letter

Global Id:	T0607300032
Action Type:	ENFORCEMENT
Date:	07/12/1988
Action:	Notice of Responsibility

LUST:

Global Id:	T0607300032
Status:	Open - Case Begin Date
Status Date:	06/28/1988

Global Id:	T0607300032
Status:	Completed - Case Closed

PIONEER MILLS (Continued) **U001572219**

Status Date: 02/12/1993

SAN DIEGO CO. SAM:
Name: PIONEER MILLS
Address: 1329 W MISSION RD
City,State,Zip: SAN MARCOS, CA 920691311
Case Number: H02919-001
Agency: DEH Site Assessment & Mitigation
Funding: **LOP - Federal Fund**
Facility Type: Drinking Water Aquifer Impacted
Facility Status: Closed Case
Date: 2/12/1993
Date Began: 6/28/1988

HMMD SAN DIEGO:
Name: PIONEER MILLS
Address: 1329 W MISSION RD
City,State,Zip: SAN MARCOS, CA 92069
Permit Number: 102919
Business Type: Not reported
EPA Id Number: Not reported
APN: 219-122-03-00
Last HMMD Inspection: Not reported
Facility Telephone: 619-744-5833
Permit Status: INAC
Permit Expiration: Not reported
Date Last Updated: 11/02/2012
Facility Owner: PIONEER MILLS
Facility Mailing Address: P.O. BOX P O BOX 218
Facility Mailing City: SAN MARCOS
Facility Mailing State: CA
Facility Mailing Zip: 92069-
UST Owner: PIONEER MILLS
Handle Regulated Hazmat: Not reported
Own Or Operate UST: Not reported
Subject To APSA: Not reported
Generate Haz Waste: Not reported
Treat Haz Waste: Not reported
Generate Medical Waste: Not reported

UST:
UST Name: UNDERGROUND TANK 102919 T001
Last Update: 2012-11-02 14:17:38
Permit Number: 102919
Tank Type: SINGLE WALL
Additional Id: #1
Capacity Gallons: 2000
UST Contents: DIESEL
Other Content Info: DIESEL
Reg Status: REMOVED
Remove Close Date: 1988-06-28 00:00:00
Year Installed: 1973-01-01 00:00:00
Pipe Type: Not reported
Delivery System: Not reported
Monitor Code: 24
UST Monitor Method: VISUAL MONITORING: DAILY (MINIMUM) LOG OF INSPECTIONS

PIONEER MILLS (Continued) **U001572219**

UST Name:	UNDERGROUND TANK 102919 T002
Last Update:	2012-11-02 14:17:38
Permit Number:	102919
Tank Type:	SINGLE WALL
Additional Id:	2
Capacity Gallons:	2000
UST Contents:	DIESEL
Other Content Info:	DIESEL
Reg Status:	REMOVED
Remove Close Date:	1988-06-28 00:00:00
Year Installed:	Not reported
Pipe Type:	Not reported
Delivery System:	Not reported
Monitor Code:	90
UST Monitor Method:	NO MONITORING ALTERNATIVE SELECTED. VERIFY AND ENTER MONITORING ALTERNATIVE DURING INSPECTION.

SWEEPS UST:

Name:	PIONEER MILLS
Address:	1329 W MISSION RD
City:	SAN MARCOS
Status:	Active
Comp Number:	2919
Number:	9
Board Of Equalization:	44-021755
Referral Date:	Not reported
Action Date:	06-26-92
Created Date:	02-29-88
Owner Tank Id:	Not reported
SWRCB Tank Id:	Not reported
Tank Status:	Not reported
Capacity:	Not reported
Active Date:	Not reported
Tank Use:	Not reported
STG:	Not reported
Content:	Not reported
Number Of Tanks:	Not reported

Name:	PIONEER MILLS
Address:	1329 W MISSION RD
City:	SAN MARCOS
Status:	Not reported
Comp Number:	2919
Number:	Not reported
Board Of Equalization:	44-021755
Referral Date:	Not reported
Action Date:	Not reported
Created Date:	Not reported
Owner Tank Id:	Not reported
SWRCB Tank Id:	37-000-002919-000001
Tank Status:	Not reported
Capacity:	2000
Active Date:	Not reported
Tank Use:	M.V. FUEL
STG:	PRODUCT
Content:	OTHER

PIONEER MILLS (Continued) **U001572219**

Number Of Tanks: 2

Name: PIONEER MILLS
Address: 1329 W MISSION RD
City: SAN MARCOS
Status: Not reported
Comp Number: 2919
Number: Not reported
Board Of Equalization: 44-021755
Referral Date: Not reported
Action Date: Not reported
Created Date: Not reported
Owner Tank Id: Not reported
SWRCB Tank Id: 37-000-002919-000002
Tank Status: Not reported
Capacity: 2000
Active Date: Not reported
Tank Use: M.V. FUEL
STG: PRODUCT
Content: OTHER
Number Of Tanks: Not reported

HIST UST:
Name: PIONEER MILLS
Address: 1329 W MISSION RD
City,State,Zip: SAN MARCOS, CA 92069
File Number: 0002F194
URL: http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0002F194.pdf
Region: STATE
Facility ID: 00000018776
Facility Type: Other
Other Type: FEED MANUFACTURE
Contact Name: DEAN KRUM
Telephone: 6197445833
Owner Name: PIONEER MILLS
Owner Address: 1329 W. MISSION RD.
Owner City,St,Zip: SAN MARCOS, CA 92069
Total Tanks: 0001

Tank Num: 001
Container Num: #1
Year Installed: 1973
Tank Capacity: 00002000
Tank Used for: PRODUCT
Type of Fuel: DIESEL
Container Construction Thickness: 3/16
Leak Detection: Visual

Click here for Geo Tracker PDF:

CORTESE:
Name: PIONEER MILLS
Address: 1329 W MISSION RD
City,State,Zip: SAN MARCOS, CA 920691311
Region: CORTESE
Envirostor Id: Not reported

PIONEER MILLS (Continued) **U001572219**

Global ID:	T0607300032
Site/Facility Type:	LUST CLEANUP SITE
Cleanup Status:	COMPLETED - CASE CLOSED
Status Date:	Not reported
Site Code:	Not reported
Latitude:	Not reported
Longitude:	Not reported
Owner:	Not reported
Enf Type:	Not reported
Swat R:	Not reported
Flag:	active
Order No:	Not reported
Waste Discharge System No:	Not reported
Effective Date:	Not reported
Region 2:	Not reported
WID Id:	Not reported
Solid Waste Id No:	Not reported
Waste Management Uit Name:	Not reported
File Name:	Active Open

HIST CORTESE:

edr_fname:	PIONEER MILLS
edr_fadd1:	1329 MISSION
City,State,Zip:	SAN MARCOS, CA 92069
Region:	CORTESE
Facility County Code:	37
Reg By:	LTNKA
Reg Id:	9UT1010

SAN DIEGO CO LOP:

Name:	PIONEER MILLS
Address:	1329 W MISSION RD
City,State,Zip:	SAN MARCOS, CA 92069
Record ID:	DEH1988-LSAM-H02919-001
Record Status:	Completed
Opened Date:	06/28/1988
Parcel Number:	219-122-03-00
Case Type:	LOP - Local Oversight Program
Historical Name:	PIONEER MILLS
SWRCB Global ID:	T0607300032
Funding:	F - LOP Federal Fund
Lead Agency:	DEH/SAM
Lead Agency Date:	06/28/1988
Census Tract:	200.29
Community:	San Marcos
Jurisdiction:	SAN MARCOS
Watershed Basin Number:	904.52
Water Purveyor:	VALLECITOS WATER DISTRICT
Fire Agency:	SAN MARCOS FIRE PROT DIST
Latitude:	33.1478722
Longitude:	-117.1897863
X MapCoord:	6274016.649
Y MapCoord:	1998690.293

CERS:

Name:	PIONEER MILLS

PIONEER MILLS (Continued) **U001572219**

Address: 1329 W MISSION RD
City,State,Zip: SAN MARCOS, CA 920691311
Site ID: 195573
CERS ID: T0607300032
CERS Description: Leaking Underground Storage Tank Cleanup Site

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A3 **CVS PHARMACY #7127** **RCRA-LQG 1015753054**
SSE **1302 W MISSION RD** **FINDS CAR000233858**
< 1/8 **SAN MARCOS, CA 92069** **ECHO**
0.024 mi.
127 ft. **Site 3 of 5 in cluster A**

Relative: **Higher**
Actual: **576 ft.**

RCRA-LQG:

Date Form Received by Agency:		2020-02-16 00:00:00.0
Handler Name:	CVS PHARMACY # 7127	
Handler Address:		1302 WEST MISSION ROAD
Handler City,State,Zip:		SAN MARCOS, CA 92069-0000
EPA ID:		CAR000233858
Contact Name:		NICOLE WILKINSON
Contact Address:		CVS DRIVE
Contact City,State,Zip:		WOONSOCKET, RI 02895
Contact Telephone:		401-770-7132
Contact Fax:		Not reported
Contact Email:		NICOLE.WILKINSON@CVSHEALTH.COM
Contact Title:		DIRECTOR CORPORATE ENVIRONMENTAL
EPA Region:		09
Land Type:		Private
Federal Waste Generator Description:		Large Quantity Generator
Non-Notifier:		Not reported
Biennial Report Cycle:		2019
Accessibility:		Not reported
Active Site Indicator:		Handler Activities
State District Owner:		Not reported
State District:		Not reported
Mailing Address:		CVS DRIVE MC2340
Mailing City,State,Zip:		WOONSOCKET, RI 02895
Owner Name:		BUCKWHITE PROPERTIES
Owner Type:		Private
Operator Name:		GARFIELD BEACH CVS, L.L.C.
Operator Type:		Private
Short-Term Generator Activity:		No
Importer Activity:		No
Mixed Waste Generator:		No
Transporter Activity:		No
Transfer Facility Activity:		No
Recycler Activity with Storage:		No
Small Quantity On-Site Burner Exemption:		No
Smelting Melting and Refining Furnace Exemption:		No
Underground Injection Control:		No
Off-Site Waste Receipt:		No
Universal Waste Indicator:		No
Universal Waste Destination Facility:		No
Federal Universal Waste:		No
Active Site Fed-Reg Treatment Storage and Disposal Facility:		Not reported
Active Site Converter Treatment storage and Disposal Facility:		Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:		Not reported
Active Site State-Reg Handler:		---
Federal Facility Indicator:		Not reported

CVS PHARMACY #7127 (Continued) **1015753054**

Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2020-08-28 14:40:44.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Biennial: List of Years
Year: 2017

Click Here for Biennial Reporting System Data:
Year: 2015

Click Here for Biennial Reporting System Data:
Year: 2013

Click Here for Biennial Reporting System Data:

Hazardous Waste Summary:
Waste Code: D001
Waste Description: IGNITABLE WASTE

Waste Code: D002
Waste Description: CORROSIVE WASTE

CVS PHARMACY #7127 (Continued) **1015753054**

Waste Code: D003
Waste Description: REACTIVE WASTE

Waste Code: D004
Waste Description: ARSENIC

Waste Code: D005
Waste Description: BARIUM

Waste Code: D006
Waste Description: CADMIUM

Waste Code: D007
Waste Description: CHROMIUM

Waste Code: D008
Waste Description: LEAD

Waste Code: D009
Waste Description: MERCURY

Waste Code: D010
Waste Description: SELENIUM

Waste Code: D011
Waste Description: SILVER

Waste Code: D016
Waste Description: 2,4-D (2,4-DICHLOROPHENOXYACETIC ACID)

Waste Code: D018
Waste Description: BENZENE

Waste Code: D022
Waste Description: CHLOROFORM

Waste Code: D024
Waste Description: M-CRESOL

Waste Code: D025
Waste Description: P-CRESOL

Waste Code: D026
Waste Description: CRESOL

Waste Code: D027
Waste Description: 1,4-DICHLOROBENZENE

Waste Code: D035
Waste Description: METHYL ETHYL KETONE

Waste Code: D039
Waste Description: TETRACHLOROETHYLENE

Waste Code: P001
Waste Description: 2H-1-BENZOPYRAN-2-ONE, 4-HYDROXY-3-(3-OXO-1-PHENYLBUTYL)-, & SALTS, WHEN PRESENT AT CONCENTRATIONS GREATER THAN 0.3% (OR) WARFARIN, &

CVS PHARMACY #7127 (Continued) **1015753054**

SALTS, WHEN PRESENT AT CONCENTRATIONS GREATER THAN 0.3%

Waste Code: P012
Waste Description: ARSENIC OXIDE AS2O3 (OR) ARSENIC TRIOXIDE

Waste Code: P042
Waste Description: 1,2-BENZENEDIOL, 4-[1-HYDROXY-2-(METHYLAMINO)ETHYL]-, (R)- (OR) EPINEPHRINE

Waste Code: P075
Waste Description: NICOTINE, & SALTS (OR) PYRIDINE, 3-(1-METHYL-2-PYRROLIDINYL)-,(S)-, & SALTS

Waste Code: P081
Waste Description: 1,2,3-PROPANETRIOL, TRINITRATE (R) (OR) NITROGLYCERINE (R)

Waste Code: P188
Waste Description: BENZOIC ACID, 2-HYDROXY-, COMPD. WITH (3AS-CIS)-1,2,3,3A,8,8A-HEXAHYDRO-1,3A,8-TRIMETHYLPYRROLO[2,3-B]INDOL-5-YL METHYLCARBAMATE ESTER (1:1) (OR) PHYSOSTIGMINE SALICYLATE

Waste Code: U002
Waste Description: 2-PROPANONE (I) (OR) ACETONE (I)

Waste Code: U010
Waste Description: AZIRINO [2',3':3,4]PYRROLO[1,2-A]INDOLE-4,7-DIONE, 6-AMINO-8-[[(AMINOCARBONYL)OXY]METHYL]-1,1A,2,8,8A,8B-HEXAHYDRO-8A-METHOXY-5-METHYL-, [1AS-(1AALPHA, 8BETA, 8AALPHA, 8BALPHA)]- (OR) MITOMYCIN C

Waste Code: U031
Waste Description: 1-BUTANOL (I) (OR) N-BUTYL ALCOHOL (I)

Waste Code: U034
Waste Description: ACETALDEHYDE, TRICHLORO- (OR) CHLORAL

Waste Code: U035
Waste Description: BENZENEBUTANOIC ACID, 4-[BIS(2-CHLOROETHYL)AMINO]- (OR) CHLORAMBUCIL

Waste Code: U044
Waste Description: CHLOROFORM (OR) METHANE, TRICHLORO-

Waste Code: U058
Waste Description: 2H-1,3,2-OXAZAPHOSPHORIN-2-AMINE, N,N-BIS(2-CHLOROETHYL)TETRAHYDRO-, 2-OXIDE (OR) CYCLOPHOSPHAMIDE

Waste Code: U059
Waste Description: 5,12-NAPHTHACENEDIONE, 8-ACETYL-10-[(3-AMINO-2,3,6-TRIDEOXY)-ALPHA-L-LYXO-HEXOPYRANOSYL)OXY]-7,8,9,10-TETRAHYDRO-6,8,11-TRIHYDROXY-1-METHOXY-, (8S-CIS)- (OR) DAUNOMYCIN

Waste Code: U070
Waste Description: BENZENE, 1,2-DICHLORO- (OR) O-DICHLOROBENZENE

Waste Code: U072
Waste Description: BENZENE, 1,4-DICHLORO- (OR) P-DICHLOROBENZENE

CVS PHARMACY #7127 (Continued) **1015753054**

Waste Code: U089
Waste Description: DIETHYLSTILBESTEROL (OR) PHENOL, 4,4'-(1,2-DIETHYL-1,2-ETHENEDIYL)BIS, (E)-

Waste Code: U122
Waste Description: FORMALDEHYDE

Waste Code: U129
Waste Description: CYCLOHEXANE, 1,2,3,4,5,6-HEXACHLORO-, (1ALPHA, 2ALPHA, 3BETA, 4ALPHA, 5ALPHA, 6BETA)- (OR) LINDANE

Waste Code: U132
Waste Description: HEXACHLOROPHENE (OR) PHENOL, 2,2'-METHYLENEBIS[3,4,6-TRICHLORO-

Waste Code: U150
Waste Description: L-PHENYLALANINE, 4-[BIS(2-CHLOROETHYL)AMINO]- (OR) MELPHALAN

Waste Code: U151
Waste Description: MERCURY

Waste Code: U154
Waste Description: METHANOL (I) (OR) METHYL ALCOHOL (I)

Waste Code: U165
Waste Description: NAPHTHALENE

Waste Code: U188
Waste Description: PHENOL

Waste Code: U200
Waste Description: RESERPINE (OR) YOHIMBAN-16-CARBOXYLIC ACID, 11,17-DIMETHOXY-18-[(3,4,5-TRIMETHOXYBENZOYL)OXY]-, METHYL ESTER, (3BETA, 16BETA, 17ALPHA, 18BETA, 20ALPHA)-

Waste Code: U201
Waste Description: 1,3-BENZENEDIOL (OR) RESORCINOL

Waste Code: U204
Waste Description: SELENIOUS ACID (OR) SELENIUM DIOXIDE

Waste Code: U205
Waste Description: SELENIUM SULFIDE (OR) SELENIUM SULFIDE SES2 (R,T)

Waste Code: U206
Waste Description: D-GLUCOSE, 2-DEOXY-2-[[(METHYLNITROSOAMINO)-CARBONYL]AMINO]- (OR) GLUCOPYRANOSE, 2-DEOXY-2-(3-METHYL-3-NITROSOUREIDO)-,D- (OR) STREPTOZOTOCIN

Waste Code: U210
Waste Description: ETHENE, TETRACHLORO- (OR) TETRACHLOROETHYLENE

Waste Code: U279
Waste Description: U279

Waste Code: U411
Waste Description: U411

CVS PHARMACY #7127 (Continued) **1015753054**

Handler - Owner Operator:

Owner/Operator Indicator:	Operator
Owner/Operator Name:	GARFIELD BEACH CVS, L.L.C.
Legal Status:	Private
Date Became Current:	2010-04-25 00:00:00.
Date Ended Current:	Not reported
Owner/Operator Address:	Not reported
Owner/Operator City,State,Zip:	Not reported
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name:	GARFIELD BEACH CVS LLC
Legal Status:	Private
Date Became Current:	2010-04-25 00:00:00.
Date Ended Current:	Not reported
Owner/Operator Address:	Not reported
Owner/Operator City,State,Zip:	Not reported
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name:	GARFIELD BEACH CVS LLC
Legal Status:	Private
Date Became Current:	2010-04-25 00:00:00.
Date Ended Current:	Not reported
Owner/Operator Address:	Not reported
Owner/Operator City,State,Zip:	Not reported
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name:	BUCKWHITE PROPERTIES
Legal Status:	Private
Date Became Current:	2010-09-22 00:00:00.
Date Ended Current:	Not reported
Owner/Operator Address:	2 JADE COVE
Owner/Operator City,State,Zip:	CORONA DEL MAR, CA 92625
Owner/Operator Telephone:	949-720-7446
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	NICOLE.WILKINSON@CVSHEALTH.COM

Owner/Operator Indicator:	Operator
Owner/Operator Name:	GARFIELD BEACH CVS, L.L.C.
Legal Status:	Private
Date Became Current:	2010-04-25 00:00:00.
Date Ended Current:	Not reported
Owner/Operator Address:	1 CVS DRIVE
Owner/Operator City,State,Zip:	WOONSOCKET, RI 02895
Owner/Operator Telephone:	401-765-1500

CVS PHARMACY #7127 (Continued) **1015753054**

Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	CORPORATEENVIRONMENTALTEAM@CVSHEALTH.COM
Owner/Operator Indicator:	Owner
Owner/Operator Name:	BUCKWHITE PROPERTIES
Legal Status:	Private
Date Became Current:	2010-09-22 00:00:00.
Date Ended Current:	Not reported
Owner/Operator Address:	2 JADE COVE
Owner/Operator City,State,Zip:	CORONA DEL MAR, CA 92625
Owner/Operator Telephone:	949-720-7446
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Owner
Owner/Operator Name:	BUCKWHITE PROPERTIES
Legal Status:	Private
Date Became Current:	2010-09-22 00:00:00.
Date Ended Current:	Not reported
Owner/Operator Address:	2 JADE COVE
Owner/Operator City,State,Zip:	CORONA DEL MAR, RI 92625
Owner/Operator Telephone:	949-720-7446
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Owner
Owner/Operator Name:	BUCKWHITE PROPERTIES
Legal Status:	Private
Date Became Current:	2010-09-22 00:00:00.
Date Ended Current:	Not reported
Owner/Operator Address:	2 JADE COVE
Owner/Operator City,State,Zip:	CORONA DEL MAR, CA 92625
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Owner
Owner/Operator Name:	BUCKWHITE PROPERTIES
Legal Status:	Private
Date Became Current:	2010-09-22 00:00:00.
Date Ended Current:	Not reported
Owner/Operator Address:	2 JADE COVE
Owner/Operator City,State,Zip:	CORONA DEL MAR, CA 92625
Owner/Operator Telephone:	949-720-7446
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	NICOLE.WILKINSON@CVSHEALTH.COM
Owner/Operator Indicator:	Operator
Owner/Operator Name:	GARFIELD BEACH CVS, L.L.C.
Legal Status:	Private
Date Became Current:	2010-04-25 00:00:00.
Date Ended Current:	Not reported

CVS PHARMACY #7127 (Continued) **1015753054**

Owner/Operator Address: 1 CVS DRIVE
Owner/Operator City,State,Zip: WOONSOCKET, RI 02895
Owner/Operator Telephone: 401-765-1500
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: CORPORATEENVIRONMENTALTEAM@CVSHEALTH.COM

Historic Generators:

Receive Date: 2014-03-01 00:00:00.0
Handler Name: CVS PHARMACY #7127
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 2016-08-31 00:00:00.0
Handler Name: CVS PHARMACY #7127
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 2018-03-01 00:00:00.0
Handler Name: CVS PHARMACY # 7127
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: No
Electronic Manifest Broker: No

Receive Date: 2020-02-16 00:00:00.0
Handler Name: CVS PHARMACY # 7127
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes

CVS PHARMACY #7127 (Continued) **1015753054**

Non Storage Recycler Activity: No
Electronic Manifest Broker: No

Receive Date: 2013-01-03 00:00:00.0
Handler Name: CVS PHARMACY NO 7127
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 44611
NAICS Description: PHARMACIES AND DRUG STORES

NAICS Code: 446110
NAICS Description: PHARMACIES AND DRUG STORES

Facility Has Received Notices of Violation:
Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported

CVS PHARMACY #7127 (Continued) **1015753054**

Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number:Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Evaluation Action Summary:
Evaluation Date: 2017-06-28 00:00:00.0
Evaluation Responsible Agency: State
Found Violation: No
Evaluation Type Description: COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier: Not reported
Evaluation Responsible Sub-Organization: Not reported
Actual Return to Compliance Date: Not reported
Scheduled Compliance Date: Not reported
Date of Request: Not reported
Date Response Received: Not reported
Request Agency: Not reported
Former Citation: Not reported

CVS PHARMACY #7127 (Continued) **1015753054**

Evaluation Date:	2019-11-01 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

FINDS:
Registry ID: 110055736306

Click Here:

Environmental Interest/Information System:
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.
STATE MASTER
HAZARDOUS WASTE BIENNIAL REPORTER

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid:	1015753054
Registry ID:	110055736306
DFR URL:	http://echo.epa.gov/detailed-facility-report?fid=110055736306
Name:	CVS PHARMACY #7127
Address:	1302 W MISSION RD
City,State,Zip:	SAN MARCOS, CA 92069

A4 **CVS PHARMACY #7127** **San Diego Co. HMMD** **S111858020**
SSE **1302 W MISSION RD** **CERS HAZ WASTE** **N/A**
< 1/8 **SAN MARCOS, CA 92069** **CERS**
0.024 mi.
127 ft. **Site 4 of 5 in cluster A**

Relative:
Higher

Actual:
576 ft.

HMMD SAN DIEGO:

Name:	CVS PHARMACY #7127
Address:	1302 W MISSION RD
City,State,Zip:	SAN MARCOS, CA 92069
Permit Number:	Not reported
Business Type:	Not reported
EPA Id Number:	CAR000233858
APN:	Not reported
Last HMMD Inspection:	Not reported
Facility Telephone:	(760) 471-7205
Permit Status:	Permit Renewed
Permit Expiration:	Not reported

CVS PHARMACY #7127 (Continued) **S111858020**

Date Last Updated: 05/27/2020
Facility Owner: Not reported
Facility Mailing Address: One CVS Drive - MC 1160, Woonsocket, RI 02895
Facility Mailing City: Not reported
Facility Mailing State: Not reported
Facility Mailing Zip: Not reported
UST Owner: N
Handle Regulated Hazmat: Not reported
Own Or Operate UST: Not reported
Subject To APSA: Not reported
Generate Haz Waste: Y
Treat Haz Waste: N
Generate Medical Waste: Not reported

Waste and Materials:

Record ID: DEH2010-HUPFP-212509
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2018-HWAST-0156719
Trade Secret: N
Hazardous Material Type: Not reported
Last Updated: 2019-05-15T02:32:26.000
Chemical Name: Waste Flammable Liquids, N.O.S.
Common Name: RCRA Pharmaceutical Waste, Flammable
Case Number: Not reported

Record ID: DEH2010-HUPFP-212509
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2018-HWAST-0156720
Trade Secret: N
Hazardous Material Type: Not reported
Last Updated: 2019-05-15T02:32:26.000
Chemical Name: Waste Toxic Solids, Organic, N.O.S.
Common Name: RCRA Pharmaceutical Waste
Case Number: Not reported

Record ID: DEH2010-HUPFP-212509
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2018-HWAST-0156721
Trade Secret: N
Hazardous Material Type: Not reported
Last Updated: 2019-05-15T02:32:26.000
Chemical Name: Waste Toxic Solids, Organic, N.O.S. (Acute Toxic Solid)
Common Name: RCRA Acute Pharmaceutical Waste
Case Number: Not reported

Record ID: DEH2010-HUPFP-212509
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2018-HWAST-0156722
Trade Secret: N
Hazardous Material Type: Not reported
Last Updated: 2019-05-15T02:32:26.000
Chemical Name: Waste State-Regulated Pharmaceuticals, Liquids
Common Name: Non-RCRA Waste Pharmaceuticals, Liquids
Case Number: Not reported

CVS PHARMACY #7127 (Continued) **S111858020**

Record ID:	DEH2010-HUPFP-212509
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2018-HWAST-0156723
Trade Secret:	N
Hazardous Material Type:	Not reported
Last Updated:	2019-05-15T02:32:26.000
Chemical Name:	Waste State-Regulated Pharmaceuticals, Solids
Common Name:	Non-RCRA Waste Pharmaceuticals, Solids
Case Number:	Not reported

Record ID:	DEH2010-HUPFP-212509
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2018-HWAST-0156724
Trade Secret:	N
Hazardous Material Type:	Not reported
Last Updated:	2019-05-15T02:32:26.000
Chemical Name:	Infectious waste, sharps
Common Name:	Sharps Waste
Case Number:	Not reported

Record ID:	DEH2010-HUPFP-212509
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2018-HWAST-0156725
Trade Secret:	N
Hazardous Material Type:	Not reported
Last Updated:	2019-05-15T02:32:26.000
Chemical Name:	Waste Aerosols, Flammable
Common Name:	Waste Aerosols, Flammable
Case Number:	Not reported

Record ID:	DEH2010-HUPFP-212509
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2018-HWAST-0156726
Trade Secret:	N
Hazardous Material Type:	Not reported
Last Updated:	2019-05-15T02:32:26.000
Chemical Name:	Waste Corrosive Liquids, N.O.S. (Acidic)
Common Name:	Waste Corrosive Liquids, N.O.S. (Acidic)
Case Number:	Not reported

Record ID:	DEH2010-HUPFP-212509
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2018-HWAST-0156727
Trade Secret:	N
Hazardous Material Type:	Not reported
Last Updated:	2019-05-15T02:32:26.000
Chemical Name:	Waste Corrosive Liquids, N.O.S. (Basic)
Common Name:	Waste Corrosive Liquids, N.O.S. (Basic)
Case Number:	Not reported

Record ID:	DEH2010-HUPFP-212509
Permit Status:	Permit Renewed

CVS PHARMACY #7127 (Continued) **S111858020**

Active Permit: Y
Child Record Id: DEH2018-HWAST-0156728
Trade Secret: N
Hazardous Material Type: Not reported
Last Updated: 2019-05-15T02:32:26.000
Chemical Name: Waste Flammable Liquids, N.O.S.
Common Name: Waste Flammable Liquids, N.O.S.
Case Number: Not reported

Record ID: DEH2010-HUPFP-212509
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2018-HWAST-0156729
Trade Secret: N
Hazardous Material Type: Not reported
Last Updated: 2019-05-15T02:32:26.000
Chemical Name: Waste Compressed Gas, Flammable, N.O.S.
Common Name: Waste Compressed Gas, Flammable, N.O.S.
Case Number: Not reported

Record ID: DEH2010-HUPFP-212509
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2018-HWAST-0156730
Trade Secret: N
Hazardous Material Type: Not reported
Last Updated: 2019-05-15T02:32:26.000
Chemical Name: Waste Oxidizing Liquid, N.O.S.
Common Name: Waste Oxidizing Liquid, N.O.S.
Case Number: Not reported

Record ID: DEH2010-HUPFP-212509
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2018-HWAST-0156731
Trade Secret: N
Hazardous Material Type: Not reported
Last Updated: 2019-05-15T02:32:26.000
Chemical Name: Waste Consumer Product, State Regulated Liquids
Common Name: Waste Consumer Product, State Regulated Liquids
Case Number: Not reported

Record ID: DEH2010-HUPFP-212509
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2018-HWAST-0156732
Trade Secret: N
Hazardous Material Type: Not reported
Last Updated: 2019-05-15T02:32:26.000
Chemical Name: Waste Consumer Product, State Regulated Solids
Common Name: Waste Consumer Product, State Regulated Solids
Case Number: Not reported

Record ID: DEH2010-HUPFP-212509
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2019-HWAST-0205498

CVS PHARMACY #7127 (Continued) **S111858020**

Trade Secret: N
Hazardous Material Type: Not reported
Last Updated: 2020-04-29T02:38:29.000
Chemical Name: Waste Corrosive Liquids, N.O.S. (Acidic)
Common Name: Waste Corrosive Liquids, N.O.S. (Acidic)
Case Number: Not reported

Record ID: DEH2010-HUPFP-212509
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2019-HWAST-0205491
Trade Secret: N
Hazardous Material Type: Not reported
Last Updated: 2020-04-29T02:38:29.000
Chemical Name: Waste Flammable Liquids, N.O.S.
Common Name: RCRA Pharmaceutical Waste, Flammable
Case Number: Not reported

Record ID: DEH2010-HUPFP-212509
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2019-HWAST-0205492
Trade Secret: N
Hazardous Material Type: Not reported
Last Updated: 2020-04-29T02:38:29.000
Chemical Name: Waste Toxic Solids, Organic, N.O.S.
Common Name: RCRA Pharmaceutical Waste
Case Number: Not reported

Record ID: DEH2010-HUPFP-212509
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2019-HWAST-0205493
Trade Secret: N
Hazardous Material Type: Not reported
Last Updated: 2020-04-29T02:38:29.000
Chemical Name: Waste Toxic Solids, Organic, N.O.S. (Acute Toxic Solid)
Common Name: RCRA Acute Pharmaceutical Waste
Case Number: Not reported

Record ID: DEH2010-HUPFP-212509
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2019-HWAST-0205494
Trade Secret: N
Hazardous Material Type: Not reported
Last Updated: 2020-04-29T02:38:29.000
Chemical Name: Waste State-Regulated Pharmaceuticals, Liquids
Common Name: Non-RCRA Waste Pharmaceuticals, Liquids
Case Number: Not reported

Record ID: DEH2010-HUPFP-212509
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2019-HWAST-0205495
Trade Secret: N
Hazardous Material Type: Not reported

CVS PHARMACY #7127 (Continued) **S111858020**

Last Updated: 2020-04-29T02:38:29.000
Chemical Name: Waste State-Regulated Pharmaceuticals, Solids
Common Name: Non-RCRA Waste Pharmaceuticals, Solids
Case Number: Not reported

Record ID: DEH2010-HUPFP-212509
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2019-HWAST-0205496
Trade Secret: N
Hazardous Material Type: Not reported
Last Updated: 2020-04-29T02:38:29.000
Chemical Name: Infectious waste, sharps
Common Name: Sharps Waste
Case Number: Not reported

Record ID: DEH2010-HUPFP-212509
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2019-HWAST-0205497
Trade Secret: N
Hazardous Material Type: Not reported
Last Updated: 2020-04-29T02:38:29.000
Chemical Name: Waste Aerosols, Flammable
Common Name: Waste Aerosols, Flammable
Case Number: Not reported

Record ID: DEH2010-HUPFP-212509
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2019-HWAST-0205499
Trade Secret: N
Hazardous Material Type: Not reported
Last Updated: 2020-04-29T02:38:29.000
Chemical Name: Waste Corrosive Liquids, N.O.S. (Basic)
Common Name: Waste Corrosive Liquids, N.O.S. (Basic)
Case Number: Not reported

Record ID: DEH2010-HUPFP-212509
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2019-HWAST-0205500
Trade Secret: N
Hazardous Material Type: Not reported
Last Updated: 2020-04-29T02:38:29.000
Chemical Name: Waste Flammable Liquids, N.O.S.
Common Name: Waste Flammable Liquids, N.O.S.
Case Number: Not reported

Record ID: DEH2010-HUPFP-212509
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2019-HWAST-0205501
Trade Secret: N
Hazardous Material Type: Not reported
Last Updated: 2020-04-29T02:38:29.000
Chemical Name: Waste Compressed Gas, Flammable, N.O.S.

CVS PHARMACY #7127 (Continued) **S111858020**

Common Name: Waste Compressed Gas, Flammable, N.O.S.
Case Number: Not reported

Record ID: DEH2010-HUPFP-212509
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2019-HWAST-0205502
Trade Secret: N
Hazardous Material Type: Not reported
Last Updated: 2020-04-29T02:38:29.000
Chemical Name: Waste Oxidizing Liquid, N.O.S.
Common Name: Waste Oxidizing Liquid, N.O.S.
Case Number: Not reported

Record ID: DEH2010-HUPFP-212509
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2019-HWAST-0205503
Trade Secret: N
Hazardous Material Type: Not reported
Last Updated: 2020-04-29T02:38:29.000
Chemical Name: Waste Consumer Product, State Regulated Liquids
Common Name: Waste Consumer Product, State Regulated Liquids
Case Number: Not reported

Record ID: DEH2010-HUPFP-212509
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2019-HWAST-0205504
Trade Secret: N
Hazardous Material Type: Not reported
Last Updated: 2020-04-29T02:38:29.000
Chemical Name: Waste Consumer Product, State Regulated Solids
Common Name: Waste Consumer Product, State Regulated Solids
Case Number: Not reported

Record ID: DEH2010-HUPFP-212509
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2016-HWAST-0082886
Trade Secret: N
Hazardous Material Type: Not reported
Last Updated: 2017-07-27T13:49:12.000
Chemical Name: Waste Aerosols, Flammable
Common Name: Waste Aerosols, Flammable
Case Number: Not reported

Record ID: DEH2010-HUPFP-212509
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2016-HWAST-0082887
Trade Secret: N
Hazardous Material Type: Not reported
Last Updated: 2017-07-27T13:49:12.000
Chemical Name: Waste Corrosive Liquids, N.O.S. (Acidic)
Common Name: Waste Corrosive Liquids, N.O.S. (Acidic)
Case Number: Not reported

CVS PHARMACY #7127 (Continued) **S111858020**

Record ID:	DEH2010-HUPFP-212509
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2016-HWAST-0082888
Trade Secret:	N
Hazardous Material Type:	Not reported
Last Updated:	2017-07-27T13:49:12.000
Chemical Name:	Waste Corrosive Liquids, N.O.S. (Basic)
Common Name:	Waste Corrosive Liquids, N.O.S. (Basic)
Case Number:	Not reported

Record ID:	DEH2010-HUPFP-212509
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2016-HWAST-0082889
Trade Secret:	N
Hazardous Material Type:	Not reported
Last Updated:	2017-07-27T13:49:12.000
Chemical Name:	Waste Flammable Liquids, N.O.S.
Common Name:	Waste Flammable Liquids, N.O.S.
Case Number:	Not reported

Record ID:	DEH2010-HUPFP-212509
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2016-HWAST-0082890
Trade Secret:	N
Hazardous Material Type:	Not reported
Last Updated:	2017-07-27T13:49:12.000
Chemical Name:	Waste Compressed Gas, Flammable, N.O.S.
Common Name:	Waste Compressed Gas, Flammable, N.O.S.
Case Number:	Not reported

Record ID:	DEH2010-HUPFP-212509
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2016-HWAST-0082891
Trade Secret:	N
Hazardous Material Type:	Not reported
Last Updated:	2017-07-27T13:49:12.000
Chemical Name:	Waste Oxidizing Liquid, N.O.S.
Common Name:	Waste Oxidizing Liquid, N.O.S.
Case Number:	Not reported

Record ID:	DEH2010-HUPFP-212509
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2016-HWAST-0082892
Trade Secret:	N
Hazardous Material Type:	Not reported
Last Updated:	2017-07-27T13:49:12.000
Chemical Name:	Waste Consumer Product, State Regulated Liquids
Common Name:	Waste Consumer Product, State Regulated Liquids
Case Number:	Not reported

Record ID:	DEH2010-HUPFP-212509
Permit Status:	Permit Renewed

CVS PHARMACY #7127 (Continued) **S111858020**

Active Permit: Y
Child Record Id: DEH2016-HWAST-0082893
Trade Secret: N
Hazardous Material Type: Not reported
Last Updated: 2017-07-27T13:49:12.000
Chemical Name: Waste Consumer Product, State Regulated Solids
Common Name: Waste Consumer Product, State Regulated Solids
Case Number: Not reported

Record ID: DEH2010-HUPFP-212509
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2016-HWAST-0082894
Trade Secret: N
Hazardous Material Type: Not reported
Last Updated: 2017-07-27T13:49:12.000
Chemical Name: Waste Toxic Solids, Organic, N.O.S.
Common Name: Waste Toxic Solids, Organic, N.O.S.
Case Number: Not reported

Record ID: DEH2010-HUPFP-212509
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2016-HWAST-0082895
Trade Secret: N
Hazardous Material Type: Not reported
Last Updated: 2017-07-27T13:49:12.000
Chemical Name: Waste Toxic Solids, Organic, N.O.S. (Acute Toxic Solid)
Common Name: Waste Toxic Solids, Organic, N.O.S. (Acute Toxic Solid)
Case Number: Not reported

Record ID: DEH2010-HUPFP-212509
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2016-HWAST-0082896
Trade Secret: N
Hazardous Material Type: Not reported
Last Updated: 2017-07-27T13:49:12.000
Chemical Name: Infectious waste, sharps
Common Name: Sharps
Case Number: Not reported

Record ID: DEH2010-HUPFP-212509
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2017-HWAST-0139756
Trade Secret: N
Hazardous Material Type: Not reported
Last Updated: 2017-12-27T01:53:58.000
Chemical Name: Waste Flammable Liquids, N.O.S.
Common Name: RCRA Pharmaceutical Waste, Flammable
Case Number: Not reported

Record ID: DEH2010-HUPFP-212509
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2017-HWAST-0139761

CVS PHARMACY #7127 (Continued) **S111858020**

Trade Secret: N
Hazardous Material Type: Not reported
Last Updated: 2017-12-27T01:53:58.000
Chemical Name: Infectious waste, sharps
Common Name: Sharps Waste
Case Number: Not reported

Record ID: DEH2010-HUPFP-212509
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2017-HWAST-0139763
Trade Secret: N
Hazardous Material Type: Not reported
Last Updated: 2017-12-27T01:53:58.000
Chemical Name: Waste Corrosive Liquids, N.O.S. (Acidic)
Common Name: Waste Corrosive Liquids, N.O.S. (Acidic)
Case Number: Not reported

Record ID: DEH2010-HUPFP-212509
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2017-HWAST-0139764
Trade Secret: N
Hazardous Material Type: Not reported
Last Updated: 2017-12-27T01:53:58.000
Chemical Name: Waste Corrosive Liquids, N.O.S. (Basic)
Common Name: Waste Corrosive Liquids, N.O.S. (Basic)
Case Number: Not reported

Record ID: DEH2010-HUPFP-212509
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2017-HWAST-0139765
Trade Secret: N
Hazardous Material Type: Not reported
Last Updated: 2017-12-27T01:53:58.000
Chemical Name: Waste Flammable Liquids, N.O.S.
Common Name: Waste Flammable Liquids, N.O.S.
Case Number: Not reported

Record ID: DEH2010-HUPFP-212509
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2017-HWAST-0139766
Trade Secret: N
Hazardous Material Type: Not reported
Last Updated: 2017-12-27T01:53:58.000
Chemical Name: Waste Compressed Gas, Flammable, N.O.S.
Common Name: Waste Compressed Gas, Flammable, N.O.S.
Case Number: Not reported

Record ID: DEH2010-HUPFP-212509
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2017-HWAST-0139767
Trade Secret: N
Hazardous Material Type: Not reported

CVS PHARMACY #7127 (Continued) **S111858020**

Last Updated: 2017-12-27T01:53:58.000
Chemical Name: Waste Oxidizing Liquid, N.O.S.
Common Name: Waste Oxidizing Liquid, N.O.S.
Case Number: Not reported

Record ID: DEH2010-HUPFP-212509
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2017-HWAST-0139768
Trade Secret: N
Hazardous Material Type: Not reported
Last Updated: 2017-12-27T01:53:58.000
Chemical Name: Waste Consumer Product, State Regulated Liquids
Common Name: Waste Consumer Product, State Regulated Liquids
Case Number: Not reported

Record ID: DEH2010-HUPFP-212509
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2017-HWAST-0139769
Trade Secret: N
Hazardous Material Type: Not reported
Last Updated: 2017-12-27T01:53:58.000
Chemical Name: Waste Consumer Product, State Regulated Solids
Common Name: Waste Consumer Product, State Regulated Solids
Case Number: Not reported

Record ID: DEH2010-HUPFP-212509
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2017-HWAST-0139757
Trade Secret: N
Hazardous Material Type: Not reported
Last Updated: 2017-12-27T01:53:58.000
Chemical Name: Waste Toxic Solids, Organic, N.O.S.
Common Name: RCRA Pharmaceutical Waste
Case Number: Not reported

Record ID: DEH2010-HUPFP-212509
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2017-HWAST-0139758
Trade Secret: N
Hazardous Material Type: Not reported
Last Updated: 2017-12-27T01:53:58.000
Chemical Name: Waste Toxic Solids, Organic, N.O.S. (Acute Toxic Solid)
Common Name: RCRA Acute Pharmaceutical Waste
Case Number: Not reported

Record ID: DEH2010-HUPFP-212509
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2017-HWAST-0139759
Trade Secret: N
Hazardous Material Type: Not reported
Last Updated: 2017-12-27T01:53:58.000
Chemical Name: Waste State-Regulated Pharmaceuticals, Liquids

CVS PHARMACY #7127 (Continued) **S111858020**

Common Name: Non-RCRA Waste Pharmaceuticals, Liquids
Case Number: Not reported

Record ID: DEH2010-HUPFP-212509
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2017-HWAST-0139760
Trade Secret: N
Hazardous Material Type: Not reported
Last Updated: 2017-12-27T01:53:58.000
Chemical Name: Waste State-Regulated Pharmaceuticals, Solids
Common Name: Non-RCRA Waste Pharmaceuticals, Solids
Case Number: Not reported

Record ID: DEH2010-HUPFP-212509
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2017-HWAST-0139762
Trade Secret: N
Hazardous Material Type: Not reported
Last Updated: 2017-12-27T01:53:58.000
Chemical Name: Waste Aerosols, Flammable
Common Name: Waste Aerosols, Flammable
Case Number: Not reported

Record ID: DEH2010-HUPFP-212509
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2020-HWAST-0235528
Trade Secret: N
Hazardous Material Type: Not reported
Last Updated: 2020-05-27T01:08:06.000
Chemical Name: Waste Flammable Liquids, N.O.S.
Common Name: RCRA Pharmaceutical Waste, Flammable
Case Number: Not reported

Record ID: DEH2010-HUPFP-212509
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2020-HWAST-0235529
Trade Secret: N
Hazardous Material Type: Not reported
Last Updated: 2020-05-27T01:08:06.000
Chemical Name: Waste Toxic Solids, Organic, N.O.S.
Common Name: RCRA Pharmaceutical Waste
Case Number: Not reported

Record ID: DEH2010-HUPFP-212509
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2020-HWAST-0235530
Trade Secret: N
Hazardous Material Type: Not reported
Last Updated: 2020-05-27T01:08:06.000
Chemical Name: Waste Toxic Solids, Organic, N.O.S. (Acute Toxic Solid)
Common Name: RCRA Acute Pharmaceutical Waste
Case Number: Not reported

CVS PHARMACY #7127 (Continued) **S111858020**

Record ID:	DEH2010-HUPFP-212509
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2020-HWAST-0235531
Trade Secret:	N
Hazardous Material Type:	Not reported
Last Updated:	2020-05-27T01:08:06.000
Chemical Name:	Waste State-Regulated Pharmaceuticals, Liquids
Common Name:	Non-RCRA Waste Pharmaceuticals, Liquids
Case Number:	Not reported

Record ID:	DEH2010-HUPFP-212509
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2020-HWAST-0235532
Trade Secret:	N
Hazardous Material Type:	Not reported
Last Updated:	2020-05-27T01:08:06.000
Chemical Name:	Waste State-Regulated Pharmaceuticals, Solids
Common Name:	Non-RCRA Waste Pharmaceuticals, Solids
Case Number:	Not reported

Record ID:	DEH2010-HUPFP-212509
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2020-HWAST-0235533
Trade Secret:	N
Hazardous Material Type:	Not reported
Last Updated:	2020-05-27T01:08:06.000
Chemical Name:	Infectious waste, sharps
Common Name:	Sharps Waste
Case Number:	Not reported

Record ID:	DEH2010-HUPFP-212509
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2020-HWAST-0235534
Trade Secret:	N
Hazardous Material Type:	Not reported
Last Updated:	2020-05-27T01:08:06.000
Chemical Name:	Waste Aerosols, Flammable
Common Name:	Waste Aerosols, Flammable
Case Number:	Not reported

Record ID:	DEH2010-HUPFP-212509
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2020-HWAST-0235535
Trade Secret:	N
Hazardous Material Type:	Not reported
Last Updated:	2020-05-27T01:08:06.000
Chemical Name:	Waste Corrosive Liquids, N.O.S. (Acidic)
Common Name:	Waste Corrosive Liquids, N.O.S. (Acidic)
Case Number:	Not reported

Record ID:	DEH2010-HUPFP-212509
Permit Status:	Permit Renewed

CVS PHARMACY #7127 (Continued) **S111858020**

Active Permit: Y
Child Record Id: DEH2020-HWAST-0235536
Trade Secret: N
Hazardous Material Type: Not reported
Last Updated: 2020-05-27T01:08:06.000
Chemical Name: Waste Corrosive Liquids, N.O.S. (Basic)
Common Name: Waste Corrosive Liquids, N.O.S. (Basic)
Case Number: Not reported

Record ID: DEH2010-HUPFP-212509
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2020-HWAST-0235537
Trade Secret: N
Hazardous Material Type: Not reported
Last Updated: 2020-05-27T01:08:06.000
Chemical Name: Waste Flammable Liquids, N.O.S.
Common Name: Waste Flammable Liquids, N.O.S.
Case Number: Not reported

Record ID: DEH2010-HUPFP-212509
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2020-HWAST-0235538
Trade Secret: N
Hazardous Material Type: Not reported
Last Updated: 2020-05-27T01:08:06.000
Chemical Name: Waste Compressed Gas, Flammable, N.O.S.
Common Name: Waste Compressed Gas, Flammable, N.O.S.
Case Number: Not reported

Record ID: DEH2010-HUPFP-212509
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2020-HWAST-0235539
Trade Secret: N
Hazardous Material Type: Not reported
Last Updated: 2020-05-27T01:08:06.000
Chemical Name: Waste Oxidizing Liquid, N.O.S.
Common Name: Waste Oxidizing Liquid, N.O.S.
Case Number: Not reported

Record ID: DEH2010-HUPFP-212509
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2020-HWAST-0235540
Trade Secret: N
Hazardous Material Type: Not reported
Last Updated: 2020-05-27T01:08:06.000
Chemical Name: Waste Consumer Product, State Regulated Liquids
Common Name: Waste Consumer Product, State Regulated Liquids
Case Number: Not reported

Record ID: DEH2010-HUPFP-212509
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2020-HWAST-0235541

CVS PHARMACY #7127 (Continued) **S111858020**

Trade Secret:	N
Hazardous Material Type:	Not reported
Last Updated:	2020-05-27T01:08:06.000
Chemical Name:	Waste Consumer Product, State Regulated Solids
Common Name:	Waste Consumer Product, State Regulated Solids
Case Number:	Not reported

Name:	CVS PHARMACY #7127
Address:	1302 W MISSION RD
City,State,Zip:	SAN MARCOS, CA 92069
Permit Number:	212509
Business Type:	6HK42
EPA Id Number:	CAL000357326
APN:	219-121-14-00
Last HMMD Inspection:	11/03/2010
Facility Telephone:	760-471-7205
Permit Status:	OPEN
Permit Expiration:	05/31/2013
Date Last Updated:	11/02/2012
Facility Owner:	GARFIELD BEACH CVS, LLC
Facility Mailing Address:	1 CVS DR, MAIL DROP 23062A
Facility Mailing City:	Woonsocket
Facility Mailing State:	RI
Facility Mailing Zip:	02895
UST Owner:	Not reported
Handle Regulated Hazmat:	Not reported
Own Or Operate UST:	Not reported
Subject To APSA:	Not reported
Generate Haz Waste:	Y
Treat Haz Waste:	Not reported
Generate Medical Waste:	Y

Inventory Active Permits (not SQG Medical):

Permit Number:	212509
Update Date:	11/02/2012
Case Number:	Not reported
Name:	WASTE 123 UNSPECIFIED ALKALINE SOL'N
Other Information:	WASTE CORROSIVE - BASES
Material Waste:	Waste
Hazardous Categories 1:	Not reported
Hazardous Categories 2:	Not reported

Permit Number:	212509
Update Date:	11/02/2012
Case Number:	Not reported
Name:	WASTE 131 AQUEOUS SOL'N W/REACTIVE ANION
Other Information:	WASTE OXIDIZERS
Material Waste:	Waste
Hazardous Categories 1:	Not reported
Hazardous Categories 2:	Not reported

Permit Number:	212509
Update Date:	11/02/2012
Case Number:	Not reported
Name:	WASTE 135 UNSPECIFIED AQUEOUS SOL'N
Other Information:	STATE REGULATED TOXIC WASTES
Material Waste:	Waste

CVS PHARMACY #7127 (Continued) **S111858020**

Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Permit Number: 212509
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 214 UNSPEC SOLVENT MIXTURE
Other Information: AEROSOLS & FLAMMABLES
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Permit Number: 212509
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 311 PHARMACEUTICAL WASTE
Other Information: RCRA HAZARDOUS WASTE
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Permit Number: 212509
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 541 PHOTOCHEM/PHOTOPROC WASTE
Other Information: TREATED (SILVER RECOVERY) ONSITE
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Permit Number: 212509
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 791 LIQUIDS WITH PH <OR= 2
Other Information: WASTE CORROSIVE - ACIDIC
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Permit Number: 212509
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 902 INFECTIOUS WASTE, SHARPS
Other Information: MAIL BACK
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Violations Active Permits:
Permit Number: 212509
Update Date: 11/02/2012
Inspection Date: 11/03/2010
Violation Code: 6HV0227
Violation: HAZWASTE TANK/CONTAINER W/O LABEL/DATE
Violation Citation: Failed to properly label/date hazardous waste container &/or tank. 66262.34(f)
Activity: ACTIVE

CVS PHARMACY #7127 (Continued) **S111858020**

CERS HAZ WASTE:
Name: CVS PHARMACY #7127
Address: 1302 W MISSION RD
City,State,Zip: SAN MARCOS, CA 92069
Site ID: 109434
CERS ID: 10376482
CERS Description: Hazardous Waste Generator

Name: CVS PHARMACY #7127
Address: 1302 W MISSION RD
City,State,Zip: SAN MARCOS, CA 92069
Site ID: 109434
CERS ID: 10376482
CERS Description: RCRA LQ HW Generator

CERS:
Name: CVS PHARMACY #7127
Address: 1302 W MISSION RD
City,State,Zip: SAN MARCOS, CA 92069
Site ID: 109434
CERS ID: 10376482
CERS Description: Chemical Storage Facilities

Evaluation:
Eval General Type: Compliance Evaluation Inspection
Eval Date: 06-28-2017
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Inspector: Zmily Zanalee Inspection ID:5694263
Eval Division: San Diego County Department of Env Health
Eval Program: HW
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 06-28-2017
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Inspector: Zmily Zanalee Inspection ID:5694263
Eval Division: San Diego County Department of Env Health
Eval Program: HWLQG
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-06-2015
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Inspector: Calcagno Leonardo Inspection ID:4486308
Eval Division: San Diego County Department of Env Health
Eval Program: HW
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 11-01-2019
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Inspector: Shaker Mirna Inspection ID:6191492
Eval Division: San Diego County Department of Env Health

CVS PHARMACY #7127 (Continued) **S111858020**

Eval Program: HW
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 11-01-2019
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Inspector: Shaker Mirna Inspection ID:6191492
Eval Division: San Diego County Department of Env Health
Eval Program: HWLQG
Eval Source: CERS

Coordinates:
Site ID: 109434
Facility Name: CVS Pharmacy #7127
Env Int Type Code: HWG
Program ID: 10376482
Coord Name: Not reported
Ref Point Type Desc: Center of a facility or station.
Latitude: 33.149120
Longitude: -117.189240

Affiliation:
Affiliation Type Desc: Document Preparer
Entity Name: Melissa Vales, Agent for Garfield Beach CVS, L.L.C.
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: Property Owner
Entity Name: Buckwhite Properties
Entity Title: Not reported
Affiliation Address: 2 Jade Cove
Affiliation City: Corona Del Mar
Affiliation State: CA
Affiliation Country: United States
Affiliation Zip: 92625
Affiliation Phone: (949) 720-7446

Affiliation Type Desc: CUPA District
Entity Name: San Diego County Env Health
Entity Title: Not reported
Affiliation Address: PO Box 129261
Affiliation City: San Diego
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 92112-9261
Affiliation Phone: (858) 505-6880

Affiliation Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title: Not reported

CVS PHARMACY #7127 (Continued) **S111858020**

Affiliation Address:	CVS Health, Attn: Dianne E. Durand, Licensing, One CVS Drive G MC 1160
Affiliation City:	Woonsocket
Affiliation State:	RI
Affiliation Country:	Not reported
Affiliation Zip:	02895
Affiliation Phone:	Not reported
Affiliation Type Desc:	Identification Signer
Entity Name:	Melissa Vales, Agent for Garfield Beach CVS, L.L.C.
Entity Title:	Regulatory Compliance Specialist, Verisk 3E
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported
Affiliation Type Desc:	Legal Owner
Entity Name:	Garfield Beach CVS, L.L.C.
Entity Title:	Not reported
Affiliation Address:	One CVS Drive
Affiliation City:	Woonsocket
Affiliation State:	RI
Affiliation Country:	United States
Affiliation Zip:	02895
Affiliation Phone:	(401) 765-1500
Affiliation Type Desc:	Environmental Contact
Entity Name:	Verisk 3E, Regulatory Services/CVS
Entity Title:	Not reported
Affiliation Address:	3207 Grey Hawk Ct., Ste. 200
Affiliation City:	Carlsbad
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	92010
Affiliation Phone:	Not reported
Affiliation Type Desc:	Operator
Entity Name:	Garfield Beach CVS, L.L.C.
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(401) 765-1500
Affiliation Type Desc:	Parent Corporation
Entity Name:	CVS Health
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

5
South
< 1/8
0.037 mi.
196 ft.

PIONEER MILLS — **LUST** — **S105033851** / **N/A**
1329 MISSION RD W
SAN MARCOS, CA 92069

Relative: Lower
Actual: 571 ft.

LUST:
No Details: No Details

A6
SSW
< 1/8
0.056 mi.
295 ft.

PADILLA CONSTRUCTION DBA GARRIS PLASTERING — **RCRA NonGen / NLR** — **1024822404** / **CAL000340416**
1390 ARMORLITE DR
SAN MARCOS, CA 92069
Site 5 of 5 in cluster A

Relative: Lower
Actual: 561 ft.

RCRA NonGen / NLR:

Date Form Received by Agency:	2009-02-09 00:00:00.0
Handler Name:	PADILLA CONSTRUCTION DBA GARRIS PLASTERING
Handler Address:	1390 ARMORLITE DR
Handler City,State,Zip:	SAN MARCOS, CA 92069-1342
EPA ID:	CAL000340416
Contact Name:	KRISTINA PADILLA
Contact Address:	PO BOX 2847
Contact City,State,Zip:	ORANGE, CA 92859
Contact Telephone:	714-685-8500
Contact Fax:	714-685-8501
Contact Email:	KPADILLA@PADILLACONSTRUCTION.COM
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	PO BOX 2847
Mailing City,State,Zip:	ORANGE, CA 92859-0000
Owner Name:	PADILLA CONSTRUCTION
Owner Type:	Other
Operator Name:	KRISTINA PADILLA
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported

PADILLA CONSTRUCTION DBA GARRIS PLASTERING (Continued) **1024822404**

Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2018-09-05 20:31:05.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Operator
Owner/Operator Name:	KRISTINA PADILLA
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	PO BOX 2847
Owner/Operator City,State,Zip:	ORANGE, CA 92859
Owner/Operator Telephone:	714-685-8500
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Owner
Owner/Operator Name:	PADILLA CONSTRUCTION

PADILLA CONSTRUCTION DBA GARRIS PLASTERING (Continued) **1024822404**

Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1390 ARMORLITE DR
Owner/Operator City,State,Zip:	SAN MARCOS, CA 92069-1342
Owner/Operator Telephone:	760-291-1117
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	2009-02-09 00:00:00.0
Handler Name:	PADILLA CONSTRUCTION DBA GARRIS PLASTERING
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

List of NAICS Codes and Descriptions:

NAICS Code:	23542
NAICS Description:	DRYWALL, PLASTERING, ACOUSTICAL, AND INSULATION CONTRACTORS
NAICS Code:	23571
NAICS Description:	CONCRETE CONTRACTORS
NAICS Code:	811111
NAICS Description:	GENERAL AUTOMOTIVE REPAIR

Facility Has Received Notices of Violations:

Violations:	No Violations Found

Evaluation Action Summary:

Evaluations:	No Evaluations Found

B7 **LAS POSAS VENTURE INC** **RCRA NonGen / NLR** **1024834621**
SSE **1290 W MISSION RD** **CAL000375415**
< 1/8 **SAN MARCOS, CA 92069**
0.072 mi.
382 ft. **Site 1 of 6 in cluster B**

Relative:
Higher

Actual:
581 ft.

RCRA NonGen / NLR:

Date Form Received by Agency:		2012-06-19 00:00:00.0
Handler Name:	LAS POSAS VENTURE INC	
Handler Address:		1290 W MISSION RD
Handler City,State,Zip:		SAN MARCOS, CA 92069-1416
EPA ID:		CAL000375415
Contact Name:		PHILIP MOORE
Contact Address:		1290 W MISSION RD.
Contact City,State,Zip:		SAN MARCOS, CA 92069

LAS POSAS VENTURE INC (Continued) **1024834621**

Contact Telephone:	760-224-2890
Contact Fax:	Not reported
Contact Email:	INFO@RELYENVIRONMENTAL.COM
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	5505 CANCHA DE GOLF
Mailing City,State,Zip:	RANCHO SANTA FE, CA 92091-0000
Owner Name:	LAS POSAS VENTURE, INC
Owner Type:	Other
Operator Name:	PHILIP MOORE
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No

LAS POSAS VENTURE INC (Continued) **1024834621**

Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2018-09-06 17:00:57.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Operator
Owner/Operator Name:	PHILIP MOORE
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1290 W MISSION RD.
Owner/Operator City,State,Zip:	SAN MARCOS, CA 92069
Owner/Operator Telephone:	760-224-2890
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name:	LAS POSAS VENTURE, INC
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	5505 CANCHA DE GOLF
Owner/Operator City,State,Zip:	RANCHO SANTA FE, CA 92091-0000
Owner/Operator Telephone:	858-755-0216
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	2012-06-19 00:00:00.0
Handler Name: LAS POSAS VENTURE INC	
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	Not reported

LAS POSAS VENTURE INC (Continued) **1024834621**

Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 44719
NAICS Description: OTHER GASOLINE STATIONS

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

B8 **HARMS DON INC** **EDR Hist Auto** **1020311261**
SSE **1290 W MISSION RD** **N/A**
< 1/8 **SAN MARCOS, CA 92069**
0.072 mi.
382 ft. **Site 2 of 6 in cluster B**

Relative: EDR Hist Auto
Higher

Actual:
581 ft.

Year:	Name:	Type:
1994	MOBIL OIL CORP	Gasoline Service Stations
1995	MOBIL OIL CORP	Gasoline Service Stations
1996	MOBIL OIL CORP	Gasoline Service Stations
1997	MOBIL OIL CORP	Gasoline Service Stations
1998	MOBIL OIL CORP	Gasoline Service Stations
1999	MOBIL OIL CORP	Gasoline Service Stations
2000	MOBIL OIL CORPORATION	Gasoline Service Stations
2001	EXXONMOBIL OIL CORPORATION	Gasoline Service Stations
2002	HARMS DON INC	Gasoline Service Stations
2003	HARMS DON INC	Gasoline Service Stations
2004	HARMS DON INC	Gasoline Service Stations
2005	HARMS DON INC	Gasoline Service Stations
2006	HARMS DON INC	Gasoline Service Stations
2007	HARMS DON INC	Gasoline Service Stations, NEC
2008	HARMS DON INC	Gasoline Service Stations, NEC
2009	DON HARMS INC	Gasoline Service Stations, NEC
2010	HARMS & NAPIER INC	Gasoline Service Stations, NEC
2010	HARMS & NAPIER INC	Gasoline Service Stations
2011	HARMS & NAPIER INC	Gasoline Service Stations
2012	CHEVRON GAS STATION	Gasoline Service Stations
2012	HARMS & NAPIER INC	Gasoline Service Stations
2013	CHEVRON GAS STATION	Gasoline Service Stations, NEC
2013	HARMS & NAPIER INC	Gasoline Service Stations
2014	CHEVRON GAS STATION	Gasoline Service Stations, NEC
2014	HARMS & NAPIER INC	Gasoline Service Stations

B9 **EXXONMOBIL OIL CORP.** **RCRA-LQG** **1007200263**
SSE **1290 W MISSION RD** **FINDS** **CAL000098361**
< 1/8 **SAN MARCOS, CA 92069** **ECHO**
0.072 mi.
382 ft. **Site 3 of 6 in cluster B**

Relative: **Higher**
Actual: **581 ft.**

RCRA-LQG:

Date Form Received by Agency:		2002-02-28 00:00:00.0
Handler Name:	EXXONMOBIL OIL CORP.	
Handler Address:		1290 W MISSION RD
Handler City,State,Zip:		SAN MARCOS, CA 92069
EPA ID:		CAL000098361
Contact Name:		JOHN HOOVER
Contact Address:		Not reported
Contact City,State,Zip:		Not reported
Contact Telephone:		800-253-8054
Contact Fax:		Not reported
Contact Email:		Not reported
Contact Title:		Not reported
EPA Region:		09
Land Type:		Private
Federal Waste Generator Description:		Large Quantity Generator
Non-Notifier:		Not reported
Biennial Report Cycle:		2001
Accessibility:		Not reported
Active Site Indicator:		Handler Activities
State District Owner:		Not reported
State District:		Not reported
Mailing Address:		WEST BAYAUD AVE.
Mailing City,State,Zip:		LAKEWOOD, CO 80228
Owner Name:		EXXONMOBIL OIL CORP.
Owner Type:		Private
Operator Name:		Not reported
Operator Type:		Not reported
Short-Term Generator Activity:		No
Importer Activity:		No
Mixed Waste Generator:		No
Transporter Activity:		No
Transfer Facility Activity:		No
Recycler Activity with Storage:		No
Small Quantity On-Site Burner Exemption:		No
Smelting Melting and Refining Furnace Exemption:		No
Underground Injection Control:		No
Off-Site Waste Receipt:		No
Universal Waste Indicator:		No
Universal Waste Destination Facility:		No
Federal Universal Waste:		No
Active Site Fed-Reg Treatment Storage and Disposal Facility:		Not reported
Active Site Converter Treatment storage and Disposal Facility:		Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:		Not reported
Active Site State-Reg Handler:		---
Federal Facility Indicator:		Not reported
Hazardous Secondary Material Indicator:		N
Sub-Part K Indicator:		Not reported
Commercial TSD Indicator:		No
Treatment Storage and Disposal Type:		Not reported
2018 GPRA Permit Baseline:		Not on the Baseline
2018 GPRA Renewals Baseline:		Not on the Baseline
Permit Renewals Workload Universe:		Not reported

EXXONMOBIL OIL CORP. (Continued) **1007200263**

Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2003-10-06 09:42:43.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Biennial: List of Years
Year: 2001

Click Here for Biennial Reporting System Data:

Hazardous Waste Summary:
Waste Code: D001
Waste Description: IGNITABLE WASTE

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	EXXONMOBIL OIL CORP.
Legal Status:	Private
Date Became Current:	2002-05-31 00:00:00.
Date Ended Current:	Not reported
Owner/Operator Address:	Not reported
Owner/Operator City,State,Zip:	Not reported
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:
Receive Date: 2002-02-28 00:00:00.0

EXXONMOBIL OIL CORP. (Continued) **1007200263**

Handler Name: EXXONMOBIL OIL CORP.
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 44711
NAICS Description: GASOLINE STATIONS WITH CONVENIENCE STORES

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

FINDS:
Registry ID: 110055736351

Click Here:

Environmental Interest/Information System:
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.
STATE MASTER

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1007200263
Registry ID: 110055736351
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110055736351
Name: LAS POSAS VENTURE INC
Address: 1290 W MISSION RD
City,State,Zip: SAN MARCOS, CA 92069

B10 **SAN MARCOS GAS** **Cortese** **S113126298**
SSE **1290 W MISSION RD** **HAZNET** **N/A**
< 1/8 **SAN MARCOS, CA 92069** **HWTS**
0.072 mi.
382 ft. **Site 4 of 6 in cluster B**

Relative:
Higher

Actual:
581 ft.

CORTESE:

Name:	SAN MARCOS GAS
Address:	1290 W MISSION RD
City,State,Zip:	SAN MARCOS, CA 92069
Region:	CORTESE
Envirostor Id:	Not reported
Global ID:	T0607383730
Site/Facility Type:	LUST CLEANUP SITE
Cleanup Status:	COMPLETED - CASE CLOSED
Status Date:	Not reported
Site Code:	Not reported
Latitude:	Not reported
Longitude:	Not reported
Owner:	Not reported
Enf Type:	Not reported
Swat R:	Not reported
Flag:	active
Order No:	Not reported
Waste Discharge System No:	Not reported
Effective Date:	Not reported
Region 2:	Not reported
WID Id:	Not reported
Solid Waste Id No:	Not reported
Waste Management Uit Name:	Not reported
File Name:	Active Open

HAZNET:

Name:	SAN MARCOS GAS
Address:	1290 W MISSION RD
Address 2:	Not reported
City,State,Zip:	SAN MARCOS, CA 92069
Contact:	BRAD NAPIER
Telephone:	7607527082
Mailing Name:	Not reported
Mailing Address:	1290 W MISSION RD
Year:	2011
Gepaid:	CAL000269947
TSD EPA ID:	CAT080013352
CA Waste Code:	241 - Tank bottom waste
Disposal Method:	H039 - Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Tons:	2.085
Year:	2006
Gepaid:	CAL000269947
TSD EPA ID:	AZR000035915
CA Waste Code:	134 - Aqueous solution with total organic residues less than 10 percent
Disposal Method:	01 -
Tons:	6.3
Year:	2004

SAN MARCOS GAS (Continued) **S113126298**

Gepaid: CAL000269947
TSD EPA ID: KYD053348108
CA Waste Code: 213 - Hydrocarbon solvents (benzene, hexane, Stoddard, Etc.)
Disposal Method: -
Tons: 0.0375

Year: 2003
Gepaid: CAL000269947
TSD EPA ID: CAT080013352
CA Waste Code: 135 - Unspecified aqueous solution
Disposal Method: R01 - Recycler
Tons: 0.84

Year: 2003
Gepaid: CAL000269947
TSD EPA ID: CAT080033681
CA Waste Code: 352 - Other organic solids
Disposal Method: R01 - Recycler
Tons: 0.0015

Additional Info:
Year: 2003
Gen EPA ID: CAL000269947

Shipment Date: 20030519
Creation Date: 7/20/2004 10:01:52
Receipt Date: 20030527
Manifest ID: 22453110
Trans EPA ID: CAD028277036
Trans Name: Not reported
Trans 2 EPA ID: Not reported
Trans 2 Name: Not reported
TSDF EPA ID: CAT080033681
Trans Name: Not reported
TSDF Alt EPA ID: CAT080033681
TSDF Alt Name: Not reported
Waste Code Description: 352 - Other organic solids
RCRA Code: Not reported
Meth Code: R01 - Recycler
Quantity Tons: 0.0015
Waste Quantity: 3
Quantity Unit: P
Additional Code 1: Not reported
Additional Code 2: Not reported
Additional Code 3: Not reported
Additional Code 4: Not reported
Additional Code 5: Not reported

Shipment Date: 20030519
Creation Date: 7/20/2004 12:52:41
Receipt Date: 20030530
Manifest ID: 22453109
Trans EPA ID: CAD028277036
Trans Name: Not reported
Trans 2 EPA ID: Not reported
Trans 2 Name: Not reported

SAN MARCOS GAS (Continued) **S113126298**

TSDF EPA ID:	CAT080013352
Trans Name:	Not reported
TSDF Alt EPA ID:	CAT080013352
TSDF Alt Name:	Not reported
Waste Code Description:	135 - Unspecified aqueous solution
RCRA Code:	Not reported
Meth Code:	R01 - Recycler
Quantity Tons:	0.84
Waste Quantity:	200
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Additional Info:

Year:	2011
Gen EPA ID:	CAL000269947
Shipment Date:	20110930
Creation Date:	12/27/2011 18:30:48
Receipt Date:	20111010
Manifest ID:	002144765FLE
Trans EPA ID:	CAT080016116
Trans Name:	NIETO AND SONS TRUCKING INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAT080013352
Trans Name:	DEMENNO KERDOON
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	241 - Tank bottom waste 251 Still bottoms with halogenated organics
RCRA Code:	Not reported
Meth Code:	H039 - Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Quantity Tons:	2.085
Waste Quantity:	500
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Additional Info:

Year:	2004
Gen EPA ID:	CAL000269947
Shipment Date:	20041203
Creation Date:	2/16/2005 18:32:45
Receipt Date:	Not reported
Manifest ID:	22959349
Trans EPA ID:	TXR000050930
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	NED986382133

SAN MARCOS GAS (Continued) **S113126298**

Trans 2 Name:	SMITH SYSTEMS TRANSPORTAT
TSDF EPA ID:	KYD053348108
Trans Name:	SAFETY-KLEEN SYSTEMS INC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	213 - Hydrocarbon solvents (benzene, hexane, Stoddard, etc.
RCRA Code:	D001
Meth Code:	- Not reported
Quantity Tons:	0.0375
Waste Quantity:	75
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Additional Info:

Year:	2006
Gen EPA ID:	CAL000269947
Shipment Date:	20061128
Creation Date:	7/11/2007 18:30:11
Receipt Date:	20061130
Manifest ID:	000102884FLE
Trans EPA ID:	CAR000011205
Trans Name:	EFR ENVIRONMENTAL SERVICES INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	AZR000035915
Trans Name:	DOME ROCK INDUSTRIES INC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	134 - Aqueous solution with <10% total organic residues
RCRA Code:	Not reported
Meth Code:	01 - Not reported
Quantity Tons:	6.3
Waste Quantity:	1500
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

HWTS:

Name:	SAN MARCOS GAS
Address:	1290 W MISSION RD
Address 2:	Not reported
City,State,Zip:	SAN MARCOS, CA 92069
EPA ID:	CAL000269947
Inactive Date:	06/30/2011
Create Date:	05/02/2003
Last Act Date:	04/02/2013
Mailing Name:	Not reported
Mailing Address:	1290 W MISSION RD

SAN MARCOS GAS (Continued) **S113126298**

Mailing Address 2:	Not reported
Mailing City,State,Zip:	SAN MARCOS, CA 920690000
Owner Name:	HARMS & NAPIER INC
Owner Address:	1290 W MISSION RD
Owner Address 2:	Not reported
Owner City,State,Zip:	SAN MARCOS, CA 920690000
Contact Name:	BRAD NAPIER
Contact Address:	1290 W MISSION RD
Contact Address 2:	Not reported
City,State,Zip:	SAN MARCOS, CA 920690000

NAICS:

EPA ID:	CAL000269947
Create Date:	2003-05-02 15:24:04.670
NAICS Code:	44719
NAICS Description:	Other Gasoline Stations
Issued EPA ID Date:	2003-05-02 15:24:04.62300
Inactive Date:	2011-06-30 00:00:00
Facility Name:	SAN MARCOS GAS
Facility Address:	1290 W MISSION RD
Facility Address 2:	Not reported
Facility City:	SAN MARCOS
Facility County:	Not reported
Facility State:	CA
Facility Zip:	92069

B11 **SAN MARCOS GAS** **LUST** **S106071324**
SSE **1290 W MISSION RD** **SAN DIEGO CO. SAM** **N/A**
< 1/8 **SAN MARCOS, CA 92069** **San Diego Co. HMMD**
0.072 mi. **CERS HAZ WASTE**
382 ft. **Site 5 of 6 in cluster B** **CERS TANKS**
SAN DIEGO CO LOP
Relative: Higher **CERS**

Actual: 581 ft.

LUST:

Name:	SAN MARCOS GAS
Address:	1290 W MISSION RD
City,State,Zip:	SAN MARCOS, CA 92069
Lead Agency:	SAN DIEGO COUNTY LOP
Case Type:	LUST Cleanup Site
Geo Track:	http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0607383730
Global Id:	T0607383730
Latitude:	33.148608
Longitude:	-117.188192
Status:	Completed - Case Closed
Status Date:	07/15/2013
Case Worker:	TVS
RB Case Number:	Not reported
Local Agency:	SAN DIEGO COUNTY LOP
File Location:	Local Agency
Local Case Number:	H25233-001
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Diesel, Ethylbenzene, Gasoline, MTBE / TBA / Other Fuel Oxygenates, Toluene, Xylene
Site History:	Refer to "Site Maps/Documents" tab for Closure Letter/Summary

LUST:

Global Id:	T0607383730

SAN MARCOS GAS (Continued) **S106071324**

Contact Type: Local Agency Caseworker
Contact Name: TONY SAWYER
Organization Name: SAN DIEGO COUNTY LOP
Address: P.O. Box 129261
City: San Diego
Email: tony.sawyer@sdcounty.ca.gov
Phone Number: Not reported

LUST:

Global Id: T0607383730
Action Type: ENFORCEMENT
Date: 07/09/2009
Action: Letter - Notice

Global Id: T0607383730
Action Type: ENFORCEMENT
Date: 05/21/2010
Action: Letter - Notice

Global Id: T0607383730
Action Type: ENFORCEMENT
Date: 05/10/2011
Action: Warning Letter

Global Id: T0607383730
Action Type: RESPONSE
Date: 12/05/2006
Action: Preliminary Site Assessment Report - Regulator Responded

Global Id: T0607383730
Action Type: RESPONSE
Date: 12/05/2006
Action: Preliminary Site Assessment Report - Regulator Responded

Global Id: T0607383730
Action Type: ENFORCEMENT
Date: 04/15/2003
Action: Notice of Responsibility

Global Id: T0607383730
Action Type: ENFORCEMENT
Date: 01/20/2012
Action: Notification - Preclosure

Global Id: T0607383730
Action Type: Other
Date: 03/18/2003
Action: Leak Began

Global Id: T0607383730
Action Type: Other
Date: 03/18/2003
Action: Leak Discovery

Global Id: T0607383730
Action Type: Other
Date: 03/18/2003

SAN MARCOS GAS (Continued) **S106071324**

Action: Leak Stopped

Global Id: T0607383730
Action Type: Other
Date: 04/03/2003
Action: Leak Reported

Global Id: T0607383730
Action Type: ENFORCEMENT
Date: 07/15/2013
Action: Closure/No Further Action Letter

LUST:
Global Id: T0607383730
Status: Open - Case Begin Date
Status Date: 03/18/2003

Global Id: T0607383730
Status: Open - Site Assessment
Status Date: 04/15/2003

Global Id: T0607383730
Status: Open - Eligible for Closure
Status Date: 06/01/2013

Global Id: T0607383730
Status: Completed - Case Closed
Status Date: 07/15/2013

SAN DIEGO CO. SAM:
Name: SAN MARCOS GAS
Address: 1290 W MISSION RD
City,State,Zip: SAN MARCOS, CA 92069
Case Number: H25233-001
Agency: DEH Site Assessment & Mitigation
Funding: **LOP - State Fund**
Facility Type: GW With No Beneficial Use Designation
Facility Status: Preliminary Assessment
Date: 4/3/2003
Date Began: 3/18/2003

HMMD SAN DIEGO:
Name: LAS POSAS VENTURE, INC
Address: 1290 W MISSION RD
City,State,Zip: SAN MARCOS, CA 92069
Permit Number: Not reported
Business Type: Not reported
EPA Id Number: CAL000375415
APN: Not reported
Last HMMD Inspection: Not reported
Facility Telephone: 760-224-2890
Permit Status: Permit Renewed
Permit Expiration: Not reported
Date Last Updated: 10/22/2020
Facility Owner: Not reported

SAN MARCOS GAS (Continued) **S106071324**

Facility Mailing Address:	5505 Cancha De Golf, Rancho Santa Fe, CA 92091
Facility Mailing City:	Not reported
Facility Mailing State:	Not reported
Facility Mailing Zip:	Not reported
UST Owner:	Y
Handle Regulated Hazmat:	Not reported
Own Or Operate UST:	Not reported
Subject To APSA:	Not reported
Generate Haz Waste:	Y
Treat Haz Waste:	N
Generate Medical Waste:	Not reported

Inspection Violation:

Record ID:	DEH2011-HUPFP-215691
Permit Status:	Permit Renewed
Active Permit:	Y
Facility Id Number:	37-000-215691
Program Element:	Underground Storage Tank
Inspection Type:	Routine
Inspection Number:	4977960
Return To Compliance Date:	2014-04-07T00:00:00.000
Nov:	Not reported
Violation Classification:	Not reported
Underground Storage Tank Id:	87
Container/Tank Id:	Not reported
Last Update:	2020-10-22T00:00:00.000
Inspection Date:	2014-04-07T07:37:00.000
Violation Code:	2030025 Failure of the pressurized piping to meet one or more of the following requirements: monitored at least hourly with the capability of detecting a release of 3.0 gallons per hour, and will restrict the flow of product through the piping or trigger an alarm when a release occurs. 23 CCR 16 2636(f)(2).

Record ID:	DEH2011-HUPFP-215691
Permit Status:	Permit Renewed
Active Permit:	Y
Facility Id Number:	37-000-215691
Program Element:	Underground Storage Tank
Inspection Type:	Routine
Inspection Number:	5104899
Return To Compliance Date:	2015-04-17T00:00:00.000
Nov:	No
Violation Classification:	Not reported
Underground Storage Tank Id:	00
Container/Tank Id:	Not reported
Last Update:	2020-10-22T00:00:00.000
Inspection Date:	2015-04-17T00:00:00.000
Violation Code:	2060020 Failure to comply with one or more of the following: failure to install a spill bucket, have a functional drain valve or other method for the removal of liquid from the spill bucket/spill container, and/or be resistant to galvanic corrosion.

Record ID:	DEH2011-HUPFP-215691
Permit Status:	Permit Renewed
Active Permit:	Y
Facility Id Number:	37-000-215691
Program Element:	Underground Storage Tank
Inspection Type:	Routine

SAN MARCOS GAS (Continued) **S106071324**

Inspection Number:	5104899
Return To Compliance Date:	2015-04-17T00:00:00.000
Nov:	No
Violation Classification:	Not reported
Underground Storage Tank Id:	87
Container/Tank Id:	Not reported
Last Update:	2020-10-22T00:00:00.000
Inspection Date:	2015-04-17T00:00:00.000
Violation Code:	2030036 Failure of the overfill prevention system to meet one of the following requirements: 1. Alert the transfer operator when the tank is 90 percent full by restricting the flow into the tank or triggering an audible and visual alarm; or 2. Restrict delivery of flow to the tank at least 30 minutes before the tank overfills, provided the restriction occurs when the tank is filled to no more than 95 percent of capacity; and activate an audible alarm at least five minutes before the tank overfills; or 3. Provide positive shut-off of flow to the tank when the tank is filled to no more than 95 percent of capacity; or 4. Provide positive shut-off of flow to the tank so that none of the fittings located on the top of the tank are exposed to product due to overfilling. 23 CCR 16 2635(b)(2), 2665.
Record ID:	DEH2011-HUPFP-215691
Permit Status:	Permit Renewed
Active Permit:	Y
Facility Id Number:	37-000-215691
Program Element:	Underground Storage Tank
Inspection Type:	Routine
Inspection Number:	5869383
Return To Compliance Date:	2018-04-11T00:00:00.000
Nov:	No
Violation Classification:	Class II
Underground Storage Tank Id:	27763
Container/Tank Id:	Not reported
Last Update:	2020-10-22T00:00:00.000
Inspection Date:	2018-04-11T15:38:31.000
Violation Code:	2060020 (RP) Failure to comply with one or more of the following: Failure to install or maintain a liquid-tight spill bucket, have a minimum capacity of 5 gallons, have a functional drain valve or other method for the removal of liquid from the spill bucket/spill container, and/or be resistant to galvanic corrosion. 23 CCR 2635(b), 2665
Record ID:	DEH2011-HUPFP-215691
Permit Status:	Permit Renewed
Active Permit:	Y
Facility Id Number:	37-000-215691
Program Element:	Underground Storage Tank
Inspection Type:	Routine
Inspection Number:	6126000
Return To Compliance Date:	2019-04-10T00:00:00.000
Nov:	No
Violation Classification:	Not reported
Underground Storage Tank Id:	27761
Container/Tank Id:	Not reported
Last Update:	2020-10-22T00:00:00.000
Inspection Date:	2019-04-10T00:00:00.000
Violation Code:	2060020 (TCR 9a) Failure to meet one or more of the following

SAN MARCOS GAS (Continued) **S106071324**

requirements: Install or maintain a liquid-tight spill container. Have a minimum capacity of 5 gallons. Have a functional drain valve or other method for the removal of liquid from the spill container. Be resistant to galvanic corrosion. Perform a tightness test at installation, every 12 months thereafter, or within 30 days after a repair to the spill container, tested using applicable manufacturer guidelines, industry codes, engineering standards, or a method approved by a professional engineer. Tested by a certified UST service technician. Maintain records of spill containment testing for 36 months. 23 CCR 2635(b), 2637.1(a-c), 2665(a-b), 2712(b)(1)(F); HSC 25284.2

Record ID:	DEH2011-HUPFP-215691
Permit Status:	Permit Renewed
Active Permit:	Y
Facility Id Number:	37-000-215691
Program Element:	Underground Storage Tank
Inspection Type:	Routine
Inspection Number:	5869383
Return To Compliance Date:	2018-04-11T00:00:00.000
Nov:	No
Violation Classification:	Class II
Underground Storage Tank Id:	27762
Container/Tank Id:	Not reported
Last Update:	2020-10-22T00:00:00.000
Inspection Date:	2018-04-11T15:38:31.000
Violation Code:	2030018 (RD) Failure of the double-walled pressurized piping to be continuously monitored with a system that activates an audible and visual alarm or stops flow at dispenser when a leak is detected. 23 CCR 2636(f)(1)

Record ID:	DEH2011-HUPFP-215691
Permit Status:	Permit Renewed
Active Permit:	Y
Facility Id Number:	37-000-215691
Program Element:	Underground Storage Tank
Inspection Type:	Routine
Inspection Number:	6126000
Return To Compliance Date:	2019-05-10T00:00:00.000
Nov:	No
Violation Classification:	Not reported
Underground Storage Tank Id:	27761
Container/Tank Id:	Not reported
Last Update:	2020-10-22T00:00:00.000
Inspection Date:	2019-04-10T00:00:00.000
Violation Code:	2030013 (TCR 12) Failure to comply with one or more of the following designated operator (DO) monthly inspection requirements: For designated operator (DO) monthly inspections conducted before October 1, 2018, failure to comply with one or more of the following requirements: Be performed by an ICC certified DO. Inspect monthly alarm history report, check that alarms are documented and responded to appropriately, and attach a copy. Inspect for the presence of liquid/debris in spill containers. Inspect for the presence of liquid/debris in under dispenser containment (UDC) and ensure that the monitoring equipment is positioned correctly. Inspect for liquid or debris in containment sumps where an alarm occurred with no service visit. Check that all testing and maintenance has been completed and

SAN MARCOS GAS (Continued) **S106071324**

documented. Verify that all facility employees have been trained in accordance with 23 CCR, 2715(c). For designated operator (DO) 30 day inspections conducted on and after October 1, 2018, failure to conduct the designated UST operator visual inspection at least once every 30 days. 23CCR 2716 (a-e)

Record ID:	DEH2011-HUPFP-215691
Permit Status:	Permit Renewed
Active Permit:	Y
Facility Id Number:	37-000-215691
Program Element:	Underground Storage Tank
Inspection Type:	Routine
Inspection Number:	5403974
Return To Compliance Date:	2016-04-18T00:00:00.000
Nov:	No
Violation Classification:	Class II
Underground Storage Tank Id:	27761
Container/Tank Id:	Not reported
Last Update:	2020-10-22T00:00:00.000
Inspection Date:	2016-04-18T14:37:50.000
Violation Code:	2060019 Failure of the spill bucket to have a minimum capacity of five gallons. 23 CCR 2635(b), 2665

Record ID:	DEH2011-HUPFP-215691
Permit Status:	Permit Renewed
Active Permit:	Y
Facility Id Number:	37-000-215691
Program Element:	Underground Storage Tank
Inspection Type:	Routine
Inspection Number:	5646823
Return To Compliance Date:	2017-05-17T00:00:00.000
Nov:	No
Violation Classification:	Not reported
Underground Storage Tank Id:	27764
Container/Tank Id:	Not reported
Last Update:	2020-10-22T00:00:00.000
Inspection Date:	2017-04-17T08:09:00.000
Violation Code:	2010010 Failure to prepare, maintain, and submit accurate CUPA UST Operating Permit Application for Facility information and/or Tank information. HSC 25286(a); 23 CCR 2711

Record ID:	DEH2011-HUPFP-215691
Permit Status:	Permit Renewed
Active Permit:	Y
Facility Id Number:	37-000-215691
Program Element:	Underground Storage Tank
Inspection Type:	Routine
Inspection Number:	5869383
Return To Compliance Date:	2018-04-11T00:00:00.000
Nov:	No
Violation Classification:	Class II
Underground Storage Tank Id:	27763
Container/Tank Id:	Not reported
Last Update:	2020-10-22T00:00:00.000
Inspection Date:	2018-04-11T15:38:31.000
Violation Code:	2030016 (RD) Failure to continuously monitor the interstitial space of a double-walled tank with an audible and visual alarm system. 23

SAN MARCOS GAS (Continued) **S106071324**

CCR 2631(g), 2632(c)(2)(A-B)

UST DTL:

Record ID:	DEH2011-HUPFP-215691
Permit Status:	Permit Renewed
Active Permit:	Y
Facility Id Number:	37-000-215691
Facility Type (Ust Facility):	Motor Vehicle Fueling
Tank Owner Name:	Las Posas Venture, Inc.
Tankid:	27762
Tank Status:	Active
Date Ust Permanently Closed:	Not reported
Tank Use:	Motor Vehicle Fueling
Piping System Type:	Pressure
Last Updated:	2020-10-22T02:32:41.000
Tank Capacityin Gallons:	10000
Tank Contents:	Premium Unleaded
Type Of Tank:	Double Wall

Record ID:	DEH2011-HUPFP-215691
Permit Status:	Permit Renewed
Active Permit:	Y
Facility Id Number:	37-000-215691
Facility Type (Ust Facility):	Motor Vehicle Fueling
Tank Owner Name:	Las Posas Venture, Inc.
Tankid:	27761
Tank Status:	Active
Date Ust Permanently Closed:	Not reported
Tank Use:	Motor Vehicle Fueling
Piping System Type:	Pressure
Last Updated:	2020-10-22T02:32:41.000
Tank Capacityin Gallons:	10000
Tank Contents:	Diesel
Type Of Tank:	Double Wall

Record ID:	DEH2011-HUPFP-215691
Permit Status:	Permit Renewed
Active Permit:	Y
Facility Id Number:	37-000-215691
Facility Type (Ust Facility):	Motor Vehicle Fueling
Tank Owner Name:	Las Posas Venture, Inc.
Tankid:	27763
Tank Status:	Active
Date Ust Permanently Closed:	Not reported
Tank Use:	Motor Vehicle Fueling
Piping System Type:	Pressure
Last Updated:	2020-10-22T02:32:41.000
Tank Capacityin Gallons:	10000
Tank Contents:	Regular Unleaded
Type Of Tank:	Double Wall

Record ID:	DEH2011-HUPFP-215691
Permit Status:	Permit Renewed
Active Permit:	Y
Facility Id Number:	37-000-215691
Facility Type (Ust Facility):	Motor Vehicle Fueling
Tank Owner Name:	Las Posas Venture, Inc.

SAN MARCOS GAS (Continued) **S106071324**

Tankid:	27764
Tank Status:	Active
Date Ust Permanently Closed:	Not reported
Tank Use:	Motor Vehicle Fueling
Piping System Type:	Pressure
Last Updated:	2020-10-22T02:32:41.000
Tank Capacityin Gallons:	10000
Tank Contents:	Regular Unleaded
Type Of Tank:	Double Wall

Waste and Materials:

Record ID:	DEH2011-HUPFP-215691
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2017-HCHEM-0139350
Trade Secret:	N
Hazardous Material Type:	Pure
Last Updated:	2017-10-23T17:08:07.000
Chemical Name:	Gasoline (87)
Common Name:	Gasoline - UST (87 Octane)
Case Number:	86290-81-5

Record ID:	DEH2011-HUPFP-215691
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2017-HCHEM-0139354
Trade Secret:	N
Hazardous Material Type:	Pure
Last Updated:	2017-10-23T17:08:07.000
Chemical Name:	Liquefied Propane Gas
Common Name:	Propane
Case Number:	74-98-6

Record ID:	DEH2011-HUPFP-215691
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2017-HCHEM-0139355
Trade Secret:	N
Hazardous Material Type:	Mixture
Last Updated:	2017-10-23T17:08:07.000
Chemical Name:	Car Wash Soap
Common Name:	Car Wash Soap
Case Number:	Not reported

Record ID:	DEH2011-HUPFP-215691
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2017-HWAST-0118087
Trade Secret:	N
Hazardous Material Type:	Not reported
Last Updated:	2017-10-23T17:08:07.000
Chemical Name:	Used Spill Kit and Used Fuel Filters
Common Name:	Fuel Contaminated Waste Absorbent & Used Fuel Filters (HAZWASTE)
Case Number:	Not reported

Record ID:	DEH2011-HUPFP-215691
Permit Status:	Permit Renewed

SAN MARCOS GAS (Continued) **S106071324**

Active Permit:	Y
Child Record Id:	DEH2017-HWAST-0118088
Trade Secret:	N
Hazardous Material Type:	Not reported
Last Updated:	2017-10-23T17:08:07.000
Chemical Name:	Gasoline Contaminated Liquids
Common Name:	Sump Water, Spill Bucket Water, SB989 Testing Water (HAZWASTE)
Case Number:	Not reported
Record ID:	DEH2011-HUPFP-215691
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2020-HCHEM-0264989
Trade Secret:	N
Hazardous Material Type:	Pure
Last Updated:	2020-05-22T01:22:21.000
Chemical Name:	Unleaded Gasoline
Common Name:	Gasoline - USTs
Case Number:	86290-81-5
Record ID:	DEH2011-HUPFP-215691
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2020-HCHEM-0264990
Trade Secret:	N
Hazardous Material Type:	Pure
Last Updated:	2020-05-22T01:22:21.000
Chemical Name:	Diesel Fuel
Common Name:	Diesel Fuel - UST
Case Number:	68334-30-5
Record ID:	DEH2011-HUPFP-215691
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2020-HCHEM-0264991
Trade Secret:	N
Hazardous Material Type:	Pure
Last Updated:	2020-05-22T01:22:21.000
Chemical Name:	Liquefied Propane Gas
Common Name:	Propane
Case Number:	74-98-6
Record ID:	DEH2011-HUPFP-215691
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2020-HCHEM-0264992
Trade Secret:	N
Hazardous Material Type:	Mixture
Last Updated:	2020-05-22T01:22:21.000
Chemical Name:	Car Wash Soap
Common Name:	Car Wash Soap
Case Number:	Not reported
Record ID:	DEH2011-HUPFP-215691
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2020-HWAST-0235415

SAN MARCOS GAS (Continued) **S106071324**

Trade Secret: N
Hazardous Material Type: Not reported
Last Updated: 2020-05-22T01:22:22.000
Chemical Name: Used Spill Kit and Used Fuel Filters
Common Name: Fuel Contaminated Waste Absorbent & Used Fuel Filters (HAZWASTE)
Case Number: Not reported

Record ID: DEH2011-HUPFP-215691
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2020-HWAST-0235416
Trade Secret: N
Hazardous Material Type: Not reported
Last Updated: 2020-05-22T01:22:22.000
Chemical Name: Gasoline Contaminated Liquids
Common Name: Sump Water, Spill Bucket Water, SB989 Testing Water (HAZWASTE)
Case Number: Not reported

Record ID: DEH2011-HUPFP-215691
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2020-HCHEM-0275340
Trade Secret: N
Hazardous Material Type: Pure
Last Updated: 2020-10-22T02:32:41.000
Chemical Name: Liquefied Propane Gas
Common Name: Propane
Case Number: 74-98-6

Record ID: DEH2011-HUPFP-215691
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2020-HCHEM-0275341
Trade Secret: N
Hazardous Material Type: Mixture
Last Updated: 2020-10-22T02:32:41.000
Chemical Name: Car Wash Soap
Common Name: Car Wash Soap
Case Number: Not reported

Record ID: DEH2011-HUPFP-215691
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2020-HWAST-0243858
Trade Secret: N
Hazardous Material Type: Not reported
Last Updated: 2020-10-22T02:32:41.000
Chemical Name: Used Spill Kit and Used Fuel Filters
Common Name: Fuel Contaminated Waste Absorbent & Used Fuel Filters (HAZWASTE)
Case Number: Not reported

Record ID: DEH2011-HUPFP-215691
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2020-HWAST-0243859
Trade Secret: N
Hazardous Material Type: Not reported

SAN MARCOS GAS (Continued) **S106071324**

Last Updated: 2020-10-22T02:32:41.000
Chemical Name: Gasoline Contaminated Liquids
Common Name: Sump Water, Spill Bucket Water, SB989 Testing Water (HAZWASTE)
Case Number: Not reported

Record ID: DEH2011-HUPFP-215691
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2017-HCHEM-0139351
Trade Secret: N
Hazardous Material Type: Pure
Last Updated: 2017-10-23T17:08:07.000
Chemical Name: Gasoline (87)
Common Name: Gasoline - UST (87 Octane)
Case Number: 86290-81-5

Record ID: DEH2011-HUPFP-215691
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2017-HCHEM-0139352
Trade Secret: N
Hazardous Material Type: Pure
Last Updated: 2017-10-23T17:08:07.000
Chemical Name: Gasoline (91)
Common Name: Gasoline - UST (91 Octane)
Case Number: 86290-81-5

Record ID: DEH2011-HUPFP-215691
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2017-HCHEM-0139353
Trade Secret: N
Hazardous Material Type: Pure
Last Updated: 2017-10-23T17:08:07.000
Chemical Name: Diesel Fuel
Common Name: Diesel Fuel - UST
Case Number: 68334-30-5

Record ID: DEH2011-HUPFP-215691
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2019-HCHEM-0216397
Trade Secret: N
Hazardous Material Type: Mixture
Last Updated: 2019-09-19T02:36:05.000
Chemical Name: Car Wash Soap
Common Name: Car Wash Soap
Case Number: Not reported

Record ID: DEH2011-HUPFP-215691
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2019-HCHEM-0216392
Trade Secret: N
Hazardous Material Type: Pure
Last Updated: 2019-09-19T02:36:05.000
Chemical Name: Gasoline (87)

SAN MARCOS GAS (Continued) **S106071324**

Common Name: Gasoline - UST (87 Octane)
Case Number: 86290-81-5

Record ID: DEH2011-HUPFP-215691
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2019-HCHEM-0216393
Trade Secret: N
Hazardous Material Type: Pure
Last Updated: 2019-09-19T02:36:05.000
Chemical Name: Gasoline (87)
Common Name: Gasoline - UST (87 Octane)
Case Number: 86290-81-5

Record ID: DEH2011-HUPFP-215691
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2019-HCHEM-0216394
Trade Secret: N
Hazardous Material Type: Pure
Last Updated: 2019-09-19T02:36:05.000
Chemical Name: Gasoline (91)
Common Name: Gasoline - UST (91 Octane)
Case Number: 86290-81-5

Record ID: DEH2011-HUPFP-215691
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2019-HCHEM-0216395
Trade Secret: N
Hazardous Material Type: Pure
Last Updated: 2019-09-19T02:36:05.000
Chemical Name: Diesel Fuel
Common Name: Diesel Fuel - UST
Case Number: 68334-30-5

Record ID: DEH2011-HUPFP-215691
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2019-HCHEM-0216396
Trade Secret: N
Hazardous Material Type: Pure
Last Updated: 2019-09-19T02:36:05.000
Chemical Name: Liquefied Propane Gas
Common Name: Propane
Case Number: 74-98-6

Record ID: DEH2011-HUPFP-215691
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2019-HWAST-0186598
Trade Secret: N
Hazardous Material Type: Not reported
Last Updated: 2019-09-19T02:36:05.000
Chemical Name: Used Spill Kit and Used Fuel Filters
Common Name: Fuel Contaminated Waste Absorbent & Used Fuel Filters (HAZWASTE)
Case Number: Not reported

SAN MARCOS GAS (Continued) **S106071324**

Record ID: DEH2011-HUPFP-215691
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2019-HWAST-0186599
Trade Secret: N
Hazardous Material Type: Not reported
Last Updated: 2019-09-19T02:36:05.000
Chemical Name: Gasoline Contaminated Liquids
Common Name: Sump Water, Spill Bucket Water, SB989 Testing Water (HAZWASTE)
Case Number: Not reported

Record ID: DEH2011-HUPFP-215691
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2020-HCHEM-0275338
Trade Secret: N
Hazardous Material Type: Pure
Last Updated: 2020-10-22T02:32:41.000
Chemical Name: Unleaded Gasoline
Common Name: Gasoline - USTs
Case Number: 86290-81-5

Record ID: DEH2011-HUPFP-215691
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2020-HCHEM-0275339
Trade Secret: N
Hazardous Material Type: Pure
Last Updated: 2020-10-22T02:32:41.000
Chemical Name: Diesel Fuel
Common Name: Diesel Fuel - UST
Case Number: 68334-30-5

Record ID: DEH2011-HUPFP-215691
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2018-HCHEM-0184793
Trade Secret: N
Hazardous Material Type: Pure
Last Updated: 2018-10-25T14:28:45.000
Chemical Name: Gasoline (87)
Common Name: Gasoline - UST (87 Octane)
Case Number: 86290-81-5

Record ID: DEH2011-HUPFP-215691
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2018-HCHEM-0184794
Trade Secret: N
Hazardous Material Type: Pure
Last Updated: 2018-10-25T14:28:45.000
Chemical Name: Gasoline (87)
Common Name: Gasoline - UST (87 Octane)
Case Number: 86290-81-5

Record ID: DEH2011-HUPFP-215691
Permit Status: Permit Renewed

SAN MARCOS GAS (Continued) **S106071324**

Active Permit:	Y
Child Record Id:	DEH2018-HCHEM-0184795
Trade Secret:	N
Hazardous Material Type:	Pure
Last Updated:	2018-10-25T14:28:45.000
Chemical Name:	Gasoline (91)
Common Name:	Gasoline - UST (91 Octane)
Case Number:	86290-81-5
Record ID:	DEH2011-HUPFP-215691
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2018-HCHEM-0184796
Trade Secret:	N
Hazardous Material Type:	Pure
Last Updated:	2018-10-25T14:28:45.000
Chemical Name:	Diesel Fuel
Common Name:	Diesel Fuel - UST
Case Number:	68334-30-5
Record ID:	DEH2011-HUPFP-215691
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2018-HCHEM-0184797
Trade Secret:	N
Hazardous Material Type:	Pure
Last Updated:	2018-10-25T14:28:45.000
Chemical Name:	Liquefied Propane Gas
Common Name:	Propane
Case Number:	74-98-6
Record ID:	DEH2011-HUPFP-215691
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2018-HCHEM-0184798
Trade Secret:	N
Hazardous Material Type:	Mixture
Last Updated:	2018-10-25T14:28:45.000
Chemical Name:	Car Wash Soap
Common Name:	Car Wash Soap
Case Number:	Not reported
Record ID:	DEH2011-HUPFP-215691
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2018-HWAST-0159291
Trade Secret:	N
Hazardous Material Type:	Not reported
Last Updated:	2018-10-25T14:28:45.000
Chemical Name:	Used Spill Kit and Used Fuel Filters
Common Name:	Fuel Contaminated Waste Absorbent & Used Fuel Filters (HAZWASTE)
Case Number:	Not reported
Record ID:	DEH2011-HUPFP-215691
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2018-HWAST-0159292

SAN MARCOS GAS (Continued) **S106071324**

Trade Secret: N
Hazardous Material Type: Not reported
Last Updated: 2018-10-25T14:28:45.000
Chemical Name: Gasoline Contaminated Liquids
Common Name: Sump Water, Spill Bucket Water, SB989 Testing Water (HAZWASTE)
Case Number: Not reported

Record ID: DEH2011-HUPFP-215691
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2016-HCHEM-0111126
Trade Secret: N
Hazardous Material Type: Pure
Last Updated: 2016-10-13T02:34:41.000
Chemical Name: Gasoline (87)
Common Name: Gasoline - UST (87 Octane)
Case Number: 86290-81-5

Record ID: DEH2011-HUPFP-215691
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2016-HCHEM-0111127
Trade Secret: N
Hazardous Material Type: Pure
Last Updated: 2016-10-13T02:34:41.000
Chemical Name: Gasoline (87)
Common Name: Gasoline - UST (87 Octane)
Case Number: 86290-81-5

Record ID: DEH2011-HUPFP-215691
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2016-HCHEM-0111128
Trade Secret: N
Hazardous Material Type: Pure
Last Updated: 2016-10-13T02:34:41.000
Chemical Name: Gasoline (91)
Common Name: Gasoline - UST (91 Octane)
Case Number: 86290-81-5

Record ID: DEH2011-HUPFP-215691
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2016-HCHEM-0111129
Trade Secret: N
Hazardous Material Type: Pure
Last Updated: 2016-10-13T02:34:41.000
Chemical Name: Diesel Fuel
Common Name: Diesel Fuel - UST
Case Number: 68334-30-5

Record ID: DEH2011-HUPFP-215691
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2016-HCHEM-0111130
Trade Secret: N
Hazardous Material Type: Pure

SAN MARCOS GAS (Continued) **S106071324**

Last Updated: 2016-10-13T02:34:41.000
Chemical Name: Liquefied Propane Gas
Common Name: Propane
Case Number: 74-98-6

Record ID: DEH2011-HUPFP-215691
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2016-HCHEM-0111131
Trade Secret: N
Hazardous Material Type: Mixture
Last Updated: 2016-10-13T02:34:41.000
Chemical Name: Car Wash Soap
Common Name: Car Wash Soap
Case Number: Not reported

Record ID: DEH2011-HUPFP-215691
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2016-HWAST-0092921
Trade Secret: N
Hazardous Material Type: Not reported
Last Updated: 2016-10-13T02:34:41.000
Chemical Name: Used Spill Kit and Used Fuel Filters
Common Name: Fuel Contaminated Waste Absorbent & Used Fuel Filters (HAZWASTE)
Case Number: Not reported

Record ID: DEH2011-HUPFP-215691
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2016-HWAST-0092922
Trade Secret: N
Hazardous Material Type: Not reported
Last Updated: 2016-10-13T02:34:41.000
Chemical Name: Gasoline Contaminated Liquids
Common Name: Sump Water, Spill Bucket Water, SB989 Testing Water (HAZWASTE)
Case Number: Not reported

Name: LAS POSAS VENTURE, INC
Address: 1290 W MISSION RD
City,State,Zip: SAN MARCOS, CA 92069
Permit Number: 215691
Business Type: 6HK28
EPA Id Number: Not reported
APN: 219-161-20-00
Last HMMD Inspection: 04/18/2012
Facility Telephone: 760-224-2890
Permit Status: OPEN
Permit Expiration: 10/31/2013
Date Last Updated: 11/02/2012
Facility Owner: LAS POSAS VENTURE, INC
Facility Mailing Address: 5505 CANCHA DE GOLF
Facility Mailing City: RANCHO SANTA FE
Facility Mailing State: CA
Facility Mailing Zip: 92091
UST Owner: LAS POSAS PARTNERS, LP

SAN MARCOS GAS (Continued) **S106071324**

Handle Regulated Hazmat: Y
Own Or Operate UST: Y
Subject To APSA: Not reported
Generate Haz Waste: Y
Treat Haz Waste: Not reported
Generate Medical Waste: Not reported

Inventory Active Permits (not SQG Medical):
Permit Number: 215691
Update Date: 11/02/2012
Case Number: Not reported
Name: DIESEL
Other Information: UNDERGROUND TANK 125233 T001 DIESEL
Material Waste: Material
Hazardous Categories 1: FIRE
Hazardous Categories 2: Not reported

Permit Number: 215691
Update Date: 11/02/2012
Case Number: 111-76-2
Name: ETHYLENE GLYCOL BUTYL ETHER 3% WAX & SOAP
Other Information: Not reported
Material Waste: Material
Hazardous Categories 1: ACUTE
Hazardous Categories 2: Not reported

Permit Number: 215691
Update Date: 11/02/2012
Case Number: Not reported
Name: MIDGRADE UNLEADED
Other Information: UNDERGROUND TANK 125233 T003 MIDGRADE UNLEADED
Material Waste: Material
Hazardous Categories 1: FIRE
Hazardous Categories 2: Not reported

Permit Number: 215691
Update Date: 11/02/2012
Case Number: Not reported
Name: PREMIUM UNLEADED
Other Information: UNDERGROUND TANK 125233 T002 PREMIUM UNLEADED
Material Waste: Material
Hazardous Categories 1: FIRE
Hazardous Categories 2: Not reported

Permit Number: 215691
Update Date: 11/02/2012
Case Number: 74-98-6
Name: PROPANE
Other Information: Not reported
Material Waste: Material
Hazardous Categories 1: FIRE
Hazardous Categories 2: PRESSURE RELEASE

Permit Number: 215691
Update Date: 11/02/2012
Case Number: Not reported
Name: REGULAR UNLEADED
Other Information: UNDERGROUND TANK 125233 T004 REGULAR UNLEADED

SAN MARCOS GAS (Continued) **S106071324**

Material Waste: Material
Hazardous Categories 1: FIRE
Hazardous Categories 2: Not reported

Permit Number: 215691
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 888 USED OIL FILTERS
Other Information: WASTE FUEL FILTERS
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

UST:
UST Name: UNDERGROUND TANK 125233 T001
Last Update: 2012-11-02 14:17:38
Permit Number: 215691
Tank Type: DOUBLE WALL
Additional Id: RT1404, RT2169,RT4939
Capacity Gallons: 10000
UST Contents: DIESEL
Other Content Info: DIESEL
Reg Status: ACTIVE
Remove Close Date: Not reported
Year Installed: 1991-01-01 00:00:00
Pipe Type: DOUBLE WALL
Delivery System: PRESSURE
Monitor Code: 31A
UST Monitor Method: DW TANK, DW PRESSURIZED PIPE W/ DRY TANK ANNULAR; POSITIVE SHUT-OFF & FAILSAFE, 3.0LLD; UDC W/ POSITIVE SHUT-OFF

UST Name: UNDERGROUND TANK 125233 T002
Last Update: 2012-11-02 14:17:38
Permit Number: 215691
Tank Type: DOUBLE WALL
Additional Id: RT1043, RT2169,RT4939
Capacity Gallons: 10000
UST Contents: PREMIUM UNLEADED
Other Content Info: PREMIUM UNLEADED
Reg Status: ACTIVE
Remove Close Date: Not reported
Year Installed: 1991-01-01 00:00:00
Pipe Type: DOUBLE WALL
Delivery System: PRESSURE
Monitor Code: 31A
UST Monitor Method: DW TANK, DW PRESSURIZED PIPE W/ DRY TANK ANNULAR; POSITIVE SHUT-OFF & FAILSAFE, 3.0LLD; UDC W/ POSITIVE SHUT-OFF

UST Name: UNDERGROUND TANK 125233 T003
Last Update: 2012-11-02 14:17:38
Permit Number: 215691
Tank Type: DOUBLE WALL
Additional Id: RT1043, RT2169,RT4939
Capacity Gallons: 10000
UST Contents: REGULAR UNLEADED
Other Content Info: REGULAR UNLEADED
Reg Status: ACTIVE

SAN MARCOS GAS (Continued) **S106071324**

Remove Close Date:	Not reported
Year Installed:	1991-01-01 00:00:00
Pipe Type:	DOUBLE WALL
Delivery System:	PRESSURE
Monitor Code:	31A
UST Monitor Method:	DW TANK, DW PRESSURIZED PIPE W/ DRY TANK ANNULAR; POSITIVE SHUT-OFF & FAILSAFE, 3.0LLD; UDC W/ POSITIVE SHUT-OFF

UST Name:	UNDERGROUND TANK 125233 T004
Last Update:	2012-11-02 14:17:38
Permit Number:	215691
Tank Type:	DOUBLE WALL
Additional Id:	RT1043, RT2169,RT4939
Capacity Gallons:	10000
UST Contents:	REGULAR UNLEADED
Other Content Info:	REGULAR UNLEADED
Reg Status:	ACTIVE
Remove Close Date:	Not reported
Year Installed:	1991-01-01 00:00:00
Pipe Type:	DOUBLE WALL
Delivery System:	PRESSURE
Monitor Code:	31A
UST Monitor Method:	DW TANK, DW PRESSURIZED PIPE W/ DRY TANK ANNULAR; POSITIVE SHUT-OFF & FAILSAFE, 3.0LLD; UDC W/ POSITIVE SHUT-OFF

Name:	LAS POSAS VENTURE, INC
Address:	1290 W MISSION RD
City,State,Zip:	SAN MARCOS, CA 92069
Permit Number:	215691
Business Type:	6HK28
EPA Id Number:	Not reported
APN:	219-161-20-00
Last HMMD Inspection:	04/18/2012
Facility Telephone:	760-224-2890
Permit Status:	OPEN
Permit Expiration:	10/31/2013
Date Last Updated:	11/02/2012
Facility Owner:	LAS POSAS VENTURE, INC
Facility Mailing Address:	5505 CANCHA DE GOLF
Facility Mailing City:	RANCHO SANTA FE
Facility Mailing State:	CA
Facility Mailing Zip:	92091
UST Owner:	LAS POSAS PARTNERS, LP
Handle Regulated Hazmat:	Y
Own Or Operate UST:	Y
Subject To APSA:	Not reported
Generate Haz Waste:	Y
Treat Haz Waste:	Not reported
Generate Medical Waste:	Not reported

Inventory Active Permits (not SQG Medical):

Permit Number:	215691
Update Date:	11/02/2012
Case Number:	Not reported
Name:	DIESEL
Other Information:	UNDERGROUND TANK 125233 T001 DIESEL
Material Waste:	Material

SAN MARCOS GAS (Continued) **S106071324**

Hazardous Categories 1: FIRE
Hazardous Categories 2: Not reported

Permit Number: 215691
Update Date: 11/02/2012
Case Number: 111-76-2
Name: ETHYLENE GLYCOL BUTYL ETHER 3% WAX & SOAP
Other Information: Not reported
Material Waste: Material
Hazardous Categories 1: ACUTE
Hazardous Categories 2: Not reported

Permit Number: 215691
Update Date: 11/02/2012
Case Number: Not reported
Name: MIDGRADE UNLEADED
Other Information: UNDERGROUND TANK 125233 T003 MIDGRADE UNLEADED
Material Waste: Material
Hazardous Categories 1: FIRE
Hazardous Categories 2: Not reported

Permit Number: 215691
Update Date: 11/02/2012
Case Number: Not reported
Name: PREMIUM UNLEADED
Other Information: UNDERGROUND TANK 125233 T002 PREMIUM UNLEADED
Material Waste: Material
Hazardous Categories 1: FIRE
Hazardous Categories 2: Not reported

Permit Number: 215691
Update Date: 11/02/2012
Case Number: 74-98-6
Name: PROPANE
Other Information: Not reported
Material Waste: Material
Hazardous Categories 1: FIRE
Hazardous Categories 2: PRESSURE RELEASE

Permit Number: 215691
Update Date: 11/02/2012
Case Number: Not reported
Name: REGULAR UNLEADED
Other Information: UNDERGROUND TANK 125233 T004 REGULAR UNLEADED
Material Waste: Material
Hazardous Categories 1: FIRE
Hazardous Categories 2: Not reported

Permit Number: 215691
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 888 USED OIL FILTERS
Other Information: WASTE FUEL FILTERS
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

SAN MARCOS GAS (Continued) **S106071324**

UST:

UST Name:	UNDERGROUND TANK 125233 T001
Last Update:	2012-11-02 14:17:38
Permit Number:	215691
Tank Type:	DOUBLE WALL
Additional Id:	RT1404, RT2169,RT4939
Capacity Gallons:	10000
UST Contents:	DIESEL
Other Content Info:	DIESEL
Reg Status:	ACTIVE
Remove Close Date:	Not reported
Year Installed:	1991-01-01 00:00:00
Pipe Type:	DOUBLE WALL
Delivery System:	PRESSURE
Monitor Code:	31A
UST Monitor Method:	DW TANK, DW PRESSURIZED PIPE W/ DRY TANK ANNULAR; POSITIVE SHUT-OFF & FAILSAFE, 3.0LLD; UDC W/ POSITIVE SHUT-OFF

UST Name:	UNDERGROUND TANK 125233 T002
Last Update:	2012-11-02 14:17:38
Permit Number:	215691
Tank Type:	DOUBLE WALL
Additional Id:	RT1043, RT2169,RT4939
Capacity Gallons:	10000
UST Contents:	PREMIUM UNLEADED
Other Content Info:	PREMIUM UNLEADED
Reg Status:	ACTIVE
Remove Close Date:	Not reported
Year Installed:	1991-01-01 00:00:00
Pipe Type:	DOUBLE WALL
Delivery System:	PRESSURE
Monitor Code:	31A
UST Monitor Method:	DW TANK, DW PRESSURIZED PIPE W/ DRY TANK ANNULAR; POSITIVE SHUT-OFF & FAILSAFE, 3.0LLD; UDC W/ POSITIVE SHUT-OFF

UST Name:	UNDERGROUND TANK 125233 T003
Last Update:	2012-11-02 14:17:38
Permit Number:	215691
Tank Type:	DOUBLE WALL
Additional Id:	RT1043, RT2169,RT4939
Capacity Gallons:	10000
UST Contents:	REGULAR UNLEADED
Other Content Info:	REGULAR UNLEADED
Reg Status:	ACTIVE
Remove Close Date:	Not reported
Year Installed:	1991-01-01 00:00:00
Pipe Type:	DOUBLE WALL
Delivery System:	PRESSURE
Monitor Code:	31A
UST Monitor Method:	DW TANK, DW PRESSURIZED PIPE W/ DRY TANK ANNULAR; POSITIVE SHUT-OFF & FAILSAFE, 3.0LLD; UDC W/ POSITIVE SHUT-OFF

UST Name:	UNDERGROUND TANK 125233 T004
Last Update:	2012-11-02 14:17:38
Permit Number:	215691
Tank Type:	DOUBLE WALL
Additional Id:	RT1043, RT2169,RT4939

SAN MARCOS GAS (Continued) **S106071324**

Capacity Gallons:	10000
UST Contents:	REGULAR UNLEADED
Other Content Info:	REGULAR UNLEADED
Reg Status:	ACTIVE
Remove Close Date:	Not reported
Year Installed:	1991-01-01 00:00:00
Pipe Type:	DOUBLE WALL
Delivery System:	PRESSURE
Monitor Code:	31A
UST Monitor Method:	DW TANK, DW PRESSURIZED PIPE W/ DRY TANK ANNULAR; POSITIVE SHUT-OFF & FAILSAFE, 3.0LLD; UDC W/ POSITIVE SHUT-OFF

Name:	SAN MARCOS GAS
Address:	1290 W MISSION RD
City,State,Zip:	SAN MARCOS, CA 92069
Permit Number:	201278
Business Type:	6HK28
EPA Id Number:	CAL000269947
APN:	219-161-20-00
Last HMMD Inspection:	09/03/2010
Facility Telephone:	760-752-7082
Permit Status:	CHNG
Permit Expiration:	09/30/2010
Date Last Updated:	11/02/2012
Facility Owner:	DON HARMS INC.
Facility Mailing Address:	1290 W MISSION RD
Facility Mailing City:	SAN MARCOS
Facility Mailing State:	CA
Facility Mailing Zip:	92069-3036
UST Owner:	DON HARMS
Handle Regulated Hazmat:	Not reported
Own Or Operate UST:	Not reported
Subject To APSA:	Not reported
Generate Haz Waste:	Not reported
Treat Haz Waste:	Not reported
Generate Medical Waste:	Not reported

UST:

UST Name:	UNDERGROUND TANK 125233 T001
Last Update:	2012-11-02 14:17:38
Permit Number:	201278
Tank Type:	DOUBLE WALL
Additional Id:	RT1404, RT2169,RT4939
Capacity Gallons:	10000
UST Contents:	DIESEL
Other Content Info:	DIESEL
Reg Status:	ACTIVE
Remove Close Date:	Not reported
Year Installed:	1991-01-01 00:00:00
Pipe Type:	DOUBLE WALL
Delivery System:	PRESSURE
Monitor Code:	31A
UST Monitor Method:	DW TANK, DW PRESSURIZED PIPE W/ DRY TANK ANNULAR; POSITIVE SHUT-OFF & FAILSAFE, 3.0LLD; UDC W/ POSITIVE SHUT-OFF

UST Name:	UNDERGROUND TANK 125233 T002
Last Update:	2012-11-02 14:17:38

SAN MARCOS GAS (Continued) **S106071324**

Permit Number:	201278
Tank Type:	DOUBLE WALL
Additional Id:	RT1043, RT2169,RT4939
Capacity Gallons:	10000
UST Contents:	PREMIUM UNLEADED
Other Content Info:	PREMIUM UNLEADED
Reg Status:	ACTIVE
Remove Close Date:	Not reported
Year Installed:	1991-01-01 00:00:00
Pipe Type:	DOUBLE WALL
Delivery System:	PRESSURE
Monitor Code:	31A
UST Monitor Method:	DW TANK, DW PRESSURIZED PIPE W/ DRY TANK ANNULAR; POSITIVE SHUT-OFF & FAILSAFE, 3.0LLD; UDC W/ POSITIVE SHUT-OFF

UST Name:	UNDERGROUND TANK 125233 T003
Last Update:	2012-11-02 14:17:38
Permit Number:	201278
Tank Type:	DOUBLE WALL
Additional Id:	RT1043, RT2169,RT4939
Capacity Gallons:	10000
UST Contents:	REGULAR UNLEADED
Other Content Info:	REGULAR UNLEADED
Reg Status:	ACTIVE
Remove Close Date:	Not reported
Year Installed:	1991-01-01 00:00:00
Pipe Type:	DOUBLE WALL
Delivery System:	PRESSURE
Monitor Code:	31A
UST Monitor Method:	DW TANK, DW PRESSURIZED PIPE W/ DRY TANK ANNULAR; POSITIVE SHUT-OFF & FAILSAFE, 3.0LLD; UDC W/ POSITIVE SHUT-OFF

UST Name:	UNDERGROUND TANK 125233 T004
Last Update:	2012-11-02 14:17:38
Permit Number:	201278
Tank Type:	DOUBLE WALL
Additional Id:	RT1043, RT2169,RT4939
Capacity Gallons:	10000
UST Contents:	REGULAR UNLEADED
Other Content Info:	REGULAR UNLEADED
Reg Status:	ACTIVE
Remove Close Date:	Not reported
Year Installed:	1991-01-01 00:00:00
Pipe Type:	DOUBLE WALL
Delivery System:	PRESSURE
Monitor Code:	31A
UST Monitor Method:	DW TANK, DW PRESSURIZED PIPE W/ DRY TANK ANNULAR; POSITIVE SHUT-OFF & FAILSAFE, 3.0LLD; UDC W/ POSITIVE SHUT-OFF

Name:	SAN MARCOS GAS
Address:	1290 W MISSION RD
City,State,Zip:	SAN MARCOS, CA 92069
Permit Number:	201278
Business Type:	6HK28
EPA Id Number:	CAL000269947
APN:	219-161-20-00

SAN MARCOS GAS (Continued) **S106071324**

Last HMMD Inspection:	09/03/2010
Facility Telephone:	760-752-7082
Permit Status:	CHNG
Permit Expiration:	09/30/2010
Date Last Updated:	11/02/2012
Facility Owner:	DON HARMS INC.
Facility Mailing Address:	1290 W MISSION RD
Facility Mailing City:	SAN MARCOS
Facility Mailing State:	CA
Facility Mailing Zip:	92069-3036
UST Owner:	DON HARMS
Handle Regulated Hazmat:	Y
Own Or Operate UST:	Y
Subject To APSA:	Not reported
Generate Haz Waste:	Not reported
Treat Haz Waste:	Not reported
Generate Medical Waste:	Not reported

UST:

UST Name:	UNDERGROUND TANK 125233 T001
Last Update:	2012-11-02 14:17:38
Permit Number:	201278
Tank Type:	DOUBLE WALL
Additional Id:	RT1404, RT2169,RT4939
Capacity Gallons:	10000
UST Contents:	DIESEL
Other Content Info:	DIESEL
Reg Status:	ACTIVE
Remove Close Date:	Not reported
Year Installed:	1991-01-01 00:00:00
Pipe Type:	DOUBLE WALL
Delivery System:	PRESSURE
Monitor Code:	31A
UST Monitor Method:	DW TANK, DW PRESSURIZED PIPE W/ DRY TANK ANNULAR; POSITIVE SHUT-OFF & FAILSAFE, 3.0LLD; UDC W/ POSITIVE SHUT-OFF

UST Name:	UNDERGROUND TANK 125233 T002
Last Update:	2012-11-02 14:17:38
Permit Number:	201278
Tank Type:	DOUBLE WALL
Additional Id:	RT1043, RT2169,RT4939
Capacity Gallons:	10000
UST Contents:	PREMIUM UNLEADED
Other Content Info:	PREMIUM UNLEADED
Reg Status:	ACTIVE
Remove Close Date:	Not reported
Year Installed:	1991-01-01 00:00:00
Pipe Type:	DOUBLE WALL
Delivery System:	PRESSURE
Monitor Code:	31A
UST Monitor Method:	DW TANK, DW PRESSURIZED PIPE W/ DRY TANK ANNULAR; POSITIVE SHUT-OFF & FAILSAFE, 3.0LLD; UDC W/ POSITIVE SHUT-OFF

UST Name:	UNDERGROUND TANK 125233 T003
Last Update:	2012-11-02 14:17:38
Permit Number:	201278
Tank Type:	DOUBLE WALL
Additional Id:	RT1043, RT2169,RT4939

SAN MARCOS GAS (Continued) **S106071324**

Capacity Gallons:	10000
UST Contents:	REGULAR UNLEADED
Other Content Info:	REGULAR UNLEADED
Reg Status:	ACTIVE
Remove Close Date:	Not reported
Year Installed:	1991-01-01 00:00:00
Pipe Type:	DOUBLE WALL
Delivery System:	PRESSURE
Monitor Code:	31A
UST Monitor Method:	DW TANK, DW PRESSURIZED PIPE W/ DRY TANK ANNULAR; POSITIVE SHUT-OFF & FAILSAFE, 3.0LLD; UDC W/ POSITIVE SHUT-OFF

UST Name:	UNDERGROUND TANK 125233 T004
Last Update:	2012-11-02 14:17:38
Permit Number:	201278
Tank Type:	DOUBLE WALL
Additional Id:	RT1043, RT2169,RT4939
Capacity Gallons:	10000
UST Contents:	REGULAR UNLEADED
Other Content Info:	REGULAR UNLEADED
Reg Status:	ACTIVE
Remove Close Date:	Not reported
Year Installed:	1991-01-01 00:00:00
Pipe Type:	DOUBLE WALL
Delivery System:	PRESSURE
Monitor Code:	31A
UST Monitor Method:	DW TANK, DW PRESSURIZED PIPE W/ DRY TANK ANNULAR; POSITIVE SHUT-OFF & FAILSAFE, 3.0LLD; UDC W/ POSITIVE SHUT-OFF

Name:	SAN MARCOS GAS
Address:	1290 W MISSION RD
City,State,Zip:	SAN MARCOS, CA 92069
Permit Number:	201278
Business Type:	6HK28
EPA Id Number:	CAL000269947
APN:	219-161-20-00
Last HMMD Inspection:	09/03/2010
Facility Telephone:	760-752-7082
Permit Status:	CHNG
Permit Expiration:	09/30/2010
Date Last Updated:	11/02/2012
Facility Owner:	DON HARMS INC.
Facility Mailing Address:	1290 W MISSION RD
Facility Mailing City:	SAN MARCOS
Facility Mailing State:	CA
Facility Mailing Zip:	92069-3036
UST Owner:	DON HARMS
Handle Regulated Hazmat:	Y
Own Or Operate UST:	Y
Subject To APSA:	Not reported
Generate Haz Waste:	Not reported
Treat Haz Waste:	Not reported
Generate Medical Waste:	Not reported

UST:

UST Name:	UNDERGROUND TANK 125233 T001
Last Update:	2012-11-02 14:17:38

SAN MARCOS GAS (Continued) **S106071324**

Permit Number:	201278
Tank Type:	DOUBLE WALL
Additional Id:	RT1404, RT2169,RT4939
Capacity Gallons:	10000
UST Contents:	DIESEL
Other Content Info:	DIESEL
Reg Status:	ACTIVE
Remove Close Date:	Not reported
Year Installed:	1991-01-01 00:00:00
Pipe Type:	DOUBLE WALL
Delivery System:	PRESSURE
Monitor Code:	31A
UST Monitor Method:	DW TANK, DW PRESSURIZED PIPE W/ DRY TANK ANNULAR; POSITIVE SHUT-OFF & FAILSAFE, 3.0LLD; UDC W/ POSITIVE SHUT-OFF

UST Name:	UNDERGROUND TANK 125233 T002
Last Update:	2012-11-02 14:17:38
Permit Number:	201278
Tank Type:	DOUBLE WALL
Additional Id:	RT1043, RT2169,RT4939
Capacity Gallons:	10000
UST Contents:	PREMIUM UNLEADED
Other Content Info:	PREMIUM UNLEADED
Reg Status:	ACTIVE
Remove Close Date:	Not reported
Year Installed:	1991-01-01 00:00:00
Pipe Type:	DOUBLE WALL
Delivery System:	PRESSURE
Monitor Code:	31A
UST Monitor Method:	DW TANK, DW PRESSURIZED PIPE W/ DRY TANK ANNULAR; POSITIVE SHUT-OFF & FAILSAFE, 3.0LLD; UDC W/ POSITIVE SHUT-OFF

UST Name:	UNDERGROUND TANK 125233 T003
Last Update:	2012-11-02 14:17:38
Permit Number:	201278
Tank Type:	DOUBLE WALL
Additional Id:	RT1043, RT2169,RT4939
Capacity Gallons:	10000
UST Contents:	REGULAR UNLEADED
Other Content Info:	REGULAR UNLEADED
Reg Status:	ACTIVE
Remove Close Date:	Not reported
Year Installed:	1991-01-01 00:00:00
Pipe Type:	DOUBLE WALL
Delivery System:	PRESSURE
Monitor Code:	31A
UST Monitor Method:	DW TANK, DW PRESSURIZED PIPE W/ DRY TANK ANNULAR; POSITIVE SHUT-OFF & FAILSAFE, 3.0LLD; UDC W/ POSITIVE SHUT-OFF

UST Name:	UNDERGROUND TANK 125233 T004
Last Update:	2012-11-02 14:17:38
Permit Number:	201278
Tank Type:	DOUBLE WALL
Additional Id:	RT1043, RT2169,RT4939
Capacity Gallons:	10000
UST Contents:	REGULAR UNLEADED
Other Content Info:	REGULAR UNLEADED

SAN MARCOS GAS (Continued) **S106071324**

Reg Status:	ACTIVE
Remove Close Date:	Not reported
Year Installed:	1991-01-01 00:00:00
Pipe Type:	DOUBLE WALL
Delivery System:	PRESSURE
Monitor Code:	31A
UST Monitor Method:	DW TANK, DW PRESSURIZED PIPE W/ DRY TANK ANNULAR; POSITIVE SHUT-OFF & FAILSAFE, 3.0LLD; UDC W/ POSITIVE SHUT-OFF

Name:	LAS POSAS VENTURE, INC
Address:	1290 W MISSION RD
City,State,Zip:	SAN MARCOS, CA 92069
Permit Number:	215691
Business Type:	6HK28
EPA Id Number:	Not reported
APN:	219-161-20-00
Last HMMD Inspection:	04/18/2012
Facility Telephone:	760-224-2890
Permit Status:	OPEN
Permit Expiration:	10/31/2013
Date Last Updated:	11/02/2012
Facility Owner:	LAS POSAS VENTURE, INC
Facility Mailing Address:	5505 CANCHA DE GOLF
Facility Mailing City:	RANCHO SANTA FE
Facility Mailing State:	CA
Facility Mailing Zip:	92091
UST Owner:	LAS POSAS PARTNERS, LP
Handle Regulated Hazmat:	Y
Own Or Operate UST:	Y
Subject To APSA:	Not reported
Generate Haz Waste:	Not reported
Treat Haz Waste:	Not reported
Generate Medical Waste:	Not reported

Inventory Active Permits (not SQG Medical):

Permit Number:	215691
Update Date:	11/02/2012
Case Number:	Not reported
Name:	DIESEL
Other Information:	UNDERGROUND TANK 125233 T001 DIESEL
Material Waste:	Material
Hazardous Categories 1:	FIRE
Hazardous Categories 2:	Not reported

Permit Number:	215691
Update Date:	11/02/2012
Case Number:	111-76-2
Name:	ETHYLENE GLYCOL BUTYL ETHER 3% WAX & SOAP
Other Information:	Not reported
Material Waste:	Material
Hazardous Categories 1:	ACUTE
Hazardous Categories 2:	Not reported

Permit Number:	215691
Update Date:	11/02/2012
Case Number:	Not reported
Name:	MIDGRADE UNLEADED

SAN MARCOS GAS (Continued) **S106071324**

Other Information: UNDERGROUND TANK 125233 T003 MIDGRADE UNLEADED
Material Waste: Material
Hazardous Categories 1: FIRE
Hazardous Categories 2: Not reported

Permit Number: 215691
Update Date: 11/02/2012
Case Number: Not reported
Name: PREMIUM UNLEADED
Other Information: UNDERGROUND TANK 125233 T002 PREMIUM UNLEADED
Material Waste: Material
Hazardous Categories 1: FIRE
Hazardous Categories 2: Not reported

Permit Number: 215691
Update Date: 11/02/2012
Case Number: 74-98-6
Name: PROPANE
Other Information: Not reported
Material Waste: Material
Hazardous Categories 1: FIRE
Hazardous Categories 2: PRESSURE RELEASE

Permit Number: 215691
Update Date: 11/02/2012
Case Number: Not reported
Name: REGULAR UNLEADED
Other Information: UNDERGROUND TANK 125233 T004 REGULAR UNLEADED
Material Waste: Material
Hazardous Categories 1: FIRE
Hazardous Categories 2: Not reported

Permit Number: 215691
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 888 USED OIL FILTERS
Other Information: WASTE FUEL FILTERS
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

UST:
UST Name: UNDERGROUND TANK 125233 T001
Last Update: 2012-11-02 14:17:38
Permit Number: 215691
Tank Type: DOUBLE WALL
Additional Id: RT1404, RT2169,RT4939
Capacity Gallons: 10000
UST Contents: DIESEL
Other Content Info: DIESEL
Reg Status: ACTIVE
Remove Close Date: Not reported
Year Installed: 1991-01-01 00:00:00
Pipe Type: DOUBLE WALL
Delivery System: PRESSURE
Monitor Code: 31A
UST Monitor Method: DW TANK, DW PRESSURIZED PIPE W/ DRY TANK ANNULAR; POSITIVE SHUT-OFF &

SAN MARCOS GAS (Continued) **S106071324**

FAILSAFE, 3.0LLD; UDC W/ POSITIVE SHUT-OFF

UST Name:	UNDERGROUND TANK 125233 T002
Last Update:	2012-11-02 14:17:38
Permit Number:	215691
Tank Type:	DOUBLE WALL
Additional Id:	RT1043, RT2169,RT4939
Capacity Gallons:	10000
UST Contents:	PREMIUM UNLEADED
Other Content Info:	PREMIUM UNLEADED
Reg Status:	ACTIVE
Remove Close Date:	Not reported
Year Installed:	1991-01-01 00:00:00
Pipe Type:	DOUBLE WALL
Delivery System:	PRESSURE
Monitor Code:	31A
UST Monitor Method:	DW TANK, DW PRESSURIZED PIPE W/ DRY TANK ANNULAR; POSITIVE SHUT-OFF & FAILSAFE, 3.0LLD; UDC W/ POSITIVE SHUT-OFF

UST Name:	UNDERGROUND TANK 125233 T003
Last Update:	2012-11-02 14:17:38
Permit Number:	215691
Tank Type:	DOUBLE WALL
Additional Id:	RT1043, RT2169,RT4939
Capacity Gallons:	10000
UST Contents:	REGULAR UNLEADED
Other Content Info:	REGULAR UNLEADED
Reg Status:	ACTIVE
Remove Close Date:	Not reported
Year Installed:	1991-01-01 00:00:00
Pipe Type:	DOUBLE WALL
Delivery System:	PRESSURE
Monitor Code:	31A
UST Monitor Method:	DW TANK, DW PRESSURIZED PIPE W/ DRY TANK ANNULAR; POSITIVE SHUT-OFF & FAILSAFE, 3.0LLD; UDC W/ POSITIVE SHUT-OFF

UST Name:	UNDERGROUND TANK 125233 T004
Last Update:	2012-11-02 14:17:38
Permit Number:	215691
Tank Type:	DOUBLE WALL
Additional Id:	RT1043, RT2169,RT4939
Capacity Gallons:	10000
UST Contents:	REGULAR UNLEADED
Other Content Info:	REGULAR UNLEADED
Reg Status:	ACTIVE
Remove Close Date:	Not reported
Year Installed:	1991-01-01 00:00:00
Pipe Type:	DOUBLE WALL
Delivery System:	PRESSURE
Monitor Code:	31A
UST Monitor Method:	DW TANK, DW PRESSURIZED PIPE W/ DRY TANK ANNULAR; POSITIVE SHUT-OFF & FAILSAFE, 3.0LLD; UDC W/ POSITIVE SHUT-OFF

Name:	LAS POSAS VENTURE, INC
Address:	1290 W MISSION RD
City,State,Zip:	SAN MARCOS, CA 92069

SAN MARCOS GAS (Continued) **S106071324**

Permit Number:	215691
Business Type:	6HK28
EPA Id Number:	Not reported
APN:	219-161-20-00
Last HMMD Inspection:	04/18/2012
Facility Telephone:	760-224-2890
Permit Status:	OPEN
Permit Expiration:	10/31/2013
Date Last Updated:	11/02/2012
Facility Owner:	LAS POSAS VENTURE, INC
Facility Mailing Address:	5505 CANCHA DE GOLF
Facility Mailing City:	RANCHO SANTA FE
Facility Mailing State:	CA
Facility Mailing Zip:	92091
UST Owner:	LAS POSAS PARTNERS, LP
Handle Regulated Hazmat:	Not reported
Own Or Operate UST:	Not reported
Subject To APSA:	Not reported
Generate Haz Waste:	Not reported
Treat Haz Waste:	Not reported
Generate Medical Waste:	Not reported

Inventory Active Permits (not SQG Medical):

Permit Number:	215691
Update Date:	11/02/2012
Case Number:	Not reported
Name:	DIESEL
Other Information:	UNDERGROUND TANK 125233 T001 DIESEL
Material Waste:	Material
Hazardous Categories 1:	FIRE
Hazardous Categories 2:	Not reported

Permit Number:	215691
Update Date:	11/02/2012
Case Number:	111-76-2
Name:	ETHYLENE GLYCOL BUTYL ETHER 3% WAX & SOAP
Other Information:	Not reported
Material Waste:	Material
Hazardous Categories 1:	ACUTE
Hazardous Categories 2:	Not reported

Permit Number:	215691
Update Date:	11/02/2012
Case Number:	Not reported
Name:	MIDGRADE UNLEADED
Other Information:	UNDERGROUND TANK 125233 T003 MIDGRADE UNLEADED
Material Waste:	Material
Hazardous Categories 1:	FIRE
Hazardous Categories 2:	Not reported

Permit Number:	215691
Update Date:	11/02/2012
Case Number:	Not reported
Name:	PREMIUM UNLEADED
Other Information:	UNDERGROUND TANK 125233 T002 PREMIUM UNLEADED
Material Waste:	Material
Hazardous Categories 1:	FIRE
Hazardous Categories 2:	Not reported

SAN MARCOS GAS (Continued) **S106071324**

Permit Number:	215691
Update Date:	11/02/2012
Case Number:	74-98-6
Name:	PROPANE
Other Information:	Not reported
Material Waste:	Material
Hazardous Categories 1:	FIRE
Hazardous Categories 2:	PRESSURE RELEASE

Permit Number:	215691
Update Date:	11/02/2012
Case Number:	Not reported
Name:	REGULAR UNLEADED
Other Information:	UNDERGROUND TANK 125233 T004 REGULAR UNLEADED
Material Waste:	Material
Hazardous Categories 1:	FIRE
Hazardous Categories 2:	Not reported

Permit Number:	215691
Update Date:	11/02/2012
Case Number:	Not reported
Name:	WASTE 888 USED OIL FILTERS
Other Information:	WASTE FUEL FILTERS
Material Waste:	Waste
Hazardous Categories 1:	Not reported
Hazardous Categories 2:	Not reported

UST:

UST Name:	UNDERGROUND TANK 125233 T001
Last Update:	2012-11-02 14:17:38
Permit Number:	215691
Tank Type:	DOUBLE WALL
Additional Id:	RT1404, RT2169,RT4939
Capacity Gallons:	10000
UST Contents:	DIESEL
Other Content Info:	DIESEL
Reg Status:	ACTIVE
Remove Close Date:	Not reported
Year Installed:	1991-01-01 00:00:00
Pipe Type:	DOUBLE WALL
Delivery System:	PRESSURE
Monitor Code:	31A
UST Monitor Method:	DW TANK, DW PRESSURIZED PIPE W/ DRY TANK ANNULAR; POSITIVE SHUT-OFF & FAILSAFE, 3.0LLD; UDC W/ POSITIVE SHUT-OFF

UST Name:	UNDERGROUND TANK 125233 T002
Last Update:	2012-11-02 14:17:38
Permit Number:	215691
Tank Type:	DOUBLE WALL
Additional Id:	RT1043, RT2169,RT4939
Capacity Gallons:	10000
UST Contents:	PREMIUM UNLEADED
Other Content Info:	PREMIUM UNLEADED
Reg Status:	ACTIVE
Remove Close Date:	Not reported
Year Installed:	1991-01-01 00:00:00
Pipe Type:	DOUBLE WALL

SAN MARCOS GAS (Continued) **S106071324**

Delivery System:	PRESSURE
Monitor Code:	31A
UST Monitor Method:	DW TANK, DW PRESSURIZED PIPE W/ DRY TANK ANNULAR; POSITIVE SHUT-OFF & FAILSAFE, 3.0LLD; UDC W/ POSITIVE SHUT-OFF
UST Name:	UNDERGROUND TANK 125233 T003
Last Update:	2012-11-02 14:17:38
Permit Number:	215691
Tank Type:	DOUBLE WALL
Additional Id:	RT1043, RT2169,RT4939
Capacity Gallons:	10000
UST Contents:	REGULAR UNLEADED
Other Content Info:	REGULAR UNLEADED
Reg Status:	ACTIVE
Remove Close Date:	Not reported
Year Installed:	1991-01-01 00:00:00
Pipe Type:	DOUBLE WALL
Delivery System:	PRESSURE
Monitor Code:	31A
UST Monitor Method:	DW TANK, DW PRESSURIZED PIPE W/ DRY TANK ANNULAR; POSITIVE SHUT-OFF & FAILSAFE, 3.0LLD; UDC W/ POSITIVE SHUT-OFF
UST Name:	UNDERGROUND TANK 125233 T004
Last Update:	2012-11-02 14:17:38
Permit Number:	215691
Tank Type:	DOUBLE WALL
Additional Id:	RT1043, RT2169,RT4939
Capacity Gallons:	10000
UST Contents:	REGULAR UNLEADED
Other Content Info:	REGULAR UNLEADED
Reg Status:	ACTIVE
Remove Close Date:	Not reported
Year Installed:	1991-01-01 00:00:00
Pipe Type:	DOUBLE WALL
Delivery System:	PRESSURE
Monitor Code:	31A
UST Monitor Method:	DW TANK, DW PRESSURIZED PIPE W/ DRY TANK ANNULAR; POSITIVE SHUT-OFF & FAILSAFE, 3.0LLD; UDC W/ POSITIVE SHUT-OFF

Name:	LAS POSAS VENTURE, INC
Address:	1290 W MISSION RD
City,State,Zip:	SAN MARCOS, CA 92069
Permit Number:	215691
Business Type:	6HK28
EPA Id Number:	Not reported
APN:	219-161-20-00
Last HMMD Inspection:	04/18/2012
Facility Telephone:	760-224-2890
Permit Status:	OPEN
Permit Expiration:	10/31/2013
Date Last Updated:	11/02/2012
Facility Owner:	LAS POSAS VENTURE, INC
Facility Mailing Address:	5505 CANCHA DE GOLF
Facility Mailing City:	RANCHO SANTA FE
Facility Mailing State:	CA
Facility Mailing Zip:	92091

SAN MARCOS GAS (Continued) **S106071324**

UST Owner:	LAS POSAS PARTNERS, LP
Handle Regulated Hazmat:	Y
Own Or Operate UST:	Y
Subject To APSA:	Not reported
Generate Haz Waste:	Not reported
Treat Haz Waste:	Not reported
Generate Medical Waste:	Not reported

Inventory Active Permits (not SQG Medical):

Permit Number:	215691
Update Date:	11/02/2012
Case Number:	Not reported
Name:	DIESEL
Other Information:	UNDERGROUND TANK 125233 T001 DIESEL
Material Waste:	Material
Hazardous Categories 1:	FIRE
Hazardous Categories 2:	Not reported

Permit Number:	215691
Update Date:	11/02/2012
Case Number:	111-76-2
Name:	ETHYLENE GLYCOL BUTYL ETHER 3% WAX & SOAP
Other Information:	Not reported
Material Waste:	Material
Hazardous Categories 1:	ACUTE
Hazardous Categories 2:	Not reported

Permit Number:	215691
Update Date:	11/02/2012
Case Number:	Not reported
Name:	MIDGRADE UNLEADED
Other Information:	UNDERGROUND TANK 125233 T003 MIDGRADE UNLEADED
Material Waste:	Material
Hazardous Categories 1:	FIRE
Hazardous Categories 2:	Not reported

Permit Number:	215691
Update Date:	11/02/2012
Case Number:	Not reported
Name:	PREMIUM UNLEADED
Other Information:	UNDERGROUND TANK 125233 T002 PREMIUM UNLEADED
Material Waste:	Material
Hazardous Categories 1:	FIRE
Hazardous Categories 2:	Not reported

Permit Number:	215691
Update Date:	11/02/2012
Case Number:	74-98-6
Name:	PROPANE
Other Information:	Not reported
Material Waste:	Material
Hazardous Categories 1:	FIRE
Hazardous Categories 2:	PRESSURE RELEASE

Permit Number:	215691
Update Date:	11/02/2012
Case Number:	Not reported
Name:	REGULAR UNLEADED

SAN MARCOS GAS (Continued) **S106071324**

Other Information: UNDERGROUND TANK 125233 T004 REGULAR UNLEADED
Material Waste: Material
Hazardous Categories 1: FIRE
Hazardous Categories 2: Not reported

Permit Number: 215691
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 888 USED OIL FILTERS
Other Information: WASTE FUEL FILTERS
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

UST:
UST Name: UNDERGROUND TANK 125233 T001
Last Update: 2012-11-02 14:17:38
Permit Number: 215691
Tank Type: DOUBLE WALL
Additional Id: RT1404, RT2169,RT4939
Capacity Gallons: 10000
UST Contents: DIESEL
Other Content Info: DIESEL
Reg Status: ACTIVE
Remove Close Date: Not reported
Year Installed: 1991-01-01 00:00:00
Pipe Type: DOUBLE WALL
Delivery System: PRESSURE
Monitor Code: 31A
UST Monitor Method: DW TANK, DW PRESSURIZED PIPE W/ DRY TANK ANNULAR; POSITIVE SHUT-OFF & FAILSAFE, 3.0LLD; UDC W/ POSITIVE SHUT-OFF

UST Name: UNDERGROUND TANK 125233 T002
Last Update: 2012-11-02 14:17:38
Permit Number: 215691
Tank Type: DOUBLE WALL
Additional Id: RT1043, RT2169,RT4939
Capacity Gallons: 10000
UST Contents: PREMIUM UNLEADED
Other Content Info: PREMIUM UNLEADED
Reg Status: ACTIVE
Remove Close Date: Not reported
Year Installed: 1991-01-01 00:00:00
Pipe Type: DOUBLE WALL
Delivery System: PRESSURE
Monitor Code: 31A
UST Monitor Method: DW TANK, DW PRESSURIZED PIPE W/ DRY TANK ANNULAR; POSITIVE SHUT-OFF & FAILSAFE, 3.0LLD; UDC W/ POSITIVE SHUT-OFF

UST Name: UNDERGROUND TANK 125233 T003
Last Update: 2012-11-02 14:17:38
Permit Number: 215691
Tank Type: DOUBLE WALL
Additional Id: RT1043, RT2169,RT4939
Capacity Gallons: 10000
UST Contents: REGULAR UNLEADED
Other Content Info: REGULAR UNLEADED

SAN MARCOS GAS (Continued) **S106071324**

Reg Status: ACTIVE
Remove Close Date: Not reported
Year Installed: 1991-01-01 00:00:00
Pipe Type: DOUBLE WALL
Delivery System: PRESSURE
Monitor Code: 31A
UST Monitor Method: DW TANK, DW PRESSURIZED PIPE W/ DRY TANK ANNULAR; POSITIVE SHUT-OFF & FAILSAFE, 3.0LLD; UDC W/ POSITIVE SHUT-OFF

UST Name: UNDERGROUND TANK 125233 T004
Last Update: 2012-11-02 14:17:38
Permit Number: 215691
Tank Type: DOUBLE WALL
Additional Id: RT1043, RT2169,RT4939
Capacity Gallons: 10000
UST Contents: REGULAR UNLEADED
Other Content Info: REGULAR UNLEADED
Reg Status: ACTIVE
Remove Close Date: Not reported
Year Installed: 1991-01-01 00:00:00
Pipe Type: DOUBLE WALL
Delivery System: PRESSURE
Monitor Code: 31A
UST Monitor Method: DW TANK, DW PRESSURIZED PIPE W/ DRY TANK ANNULAR; POSITIVE SHUT-OFF & FAILSAFE, 3.0LLD; UDC W/ POSITIVE SHUT-OFF

CERS HAZ WASTE:
Name: LAS POSAS VENTURE, INC
Address: 1290 W MISSION RD
City,State,Zip: SAN MARCOS, CA 92069
Site ID: 396300
CERS ID: 10376581
CERS Description: Hazardous Waste Generator

CERS TANKS:
Name: LAS POSAS VENTURE, INC
Address: 1290 W MISSION RD
City,State,Zip: SAN MARCOS, CA 92069
Site ID: 396300
CERS ID: 10376581
CERS Description: Underground Storage Tank

SAN DIEGO CO LOP:
Name: SAN MARCOS GAS
Address: 1290 W MISSION RD
City,State,Zip: SAN MARCOS, CA 92069
Record ID: DEH2003-LSAM-H25233-001
Record Status: Completed
Opened Date: 04/03/2003
Parcel Number: 219-161-20-00
Case Type: LOP - Local Oversight Program
Historical Name: SAN MARCOS GAS
SWRCB Global ID: T0607383730
Funding: S - LOP State Fund
Lead Agency: DEH/SAM

SAN MARCOS GAS (Continued) **S106071324**

Lead Agency Date:	04/03/2003
Census Tract:	200.21
Community:	San Marcos
Jurisdiction:	SAN MARCOS
Watershed Basin Number:	904.52
Water Purveyor:	VALLECITOS WATER DISTRICT
Fire Agency:	SAN MARCOS FIRE PROT DIST
Latitude:	33.1485601
Longitude:	-117.1882259
X MapCoord:	6274508.028
Y MapCoord:	1998963.470

CERS:

Name:	SAN MARCOS GAS
Address:	1290 W MISSION RD
City,State,Zip:	SAN MARCOS, CA 92069
Site ID:	214270
CERS ID:	T0607383730
CERS Description:	Leaking Underground Storage Tank Cleanup Site

Affiliation:

Affiliation Type Desc:	Local Agency Caseworker
Entity Name:	TONY SAWYER - SAN DIEGO COUNTY LOP
Entity Title:	Not reported
Affiliation Address:	P.O. Box 129261
Affiliation City:	San Diego
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

Name:	LAS POSAS VENTURE, INC
Address:	1290 W MISSION RD
City,State,Zip:	SAN MARCOS, CA 92069
Site ID:	396300
CERS ID:	10376581
CERS Description:	Chemical Storage Facilities

Violations:

Site ID:	396300
Site Name:	LAS POSAS VENTURE, INC
Violation Date:	04-11-2018
Citation:	23 CCR 16 2636(f)(1) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2636(f)(1)
Violation Description:	Failure of the double-walled pressurized piping to be continuously monitored with a system that activates an audible and visual alarm or stops flow at the dispenser when a leak is detected.
Violation Notes:	Returned to compliance on 04/11/2018.
Violation Division:	San Diego County Department of Env Health
Violation Program:	UST
Violation Source:	CERS

Site ID:	396300
Site Name:	LAS POSAS VENTURE, INC
Violation Date:	04-18-2016
Citation:	23 CCR 16 2665 - California Code of Regulations, Title 23, Chapter 16, Section(s) 2665

SAN MARCOS GAS (Continued) **S106071324**

Violation Description:	Failure of the spill bucket to have a minimum capacity of five gallons.
Violation Notes:	Returned to compliance on 04/18/2016.
Violation Division:	San Diego County Department of Env Health
Violation Program:	UST
Violation Source:	CERS
Site ID:	396300
Site Name:	LAS POSAS VENTURE, INC
Violation Date:	04-07-2014
Citation:	23 CCR 16 2636(f)(2) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2636(f)(2)
Violation Description:	Failure of the pressurized piping to meet one or more of the following requirements: monitored at least hourly with the capability of detecting a release of 3.0 gallons per hour, and will restrict the flow of product through the piping or trigger an alarm when a release occurs.
Violation Notes:	Returned to compliance on 04/07/2014.
Violation Division:	San Diego County Department of Env Health
Violation Program:	UST
Violation Source:	CERS
Site ID:	396300
Site Name:	LAS POSAS VENTURE, INC
Violation Date:	04-17-2015
Citation:	23 CCR 16 2665 - California Code of Regulations, Title 23, Chapter 16, Section(s) 2665
Violation Description:	Failure to comply with one or more of the following: failure to install a spill bucket, have a functional drain valve or other method for the removal of liquid from the spill bucket/spill container, and/or be resistant to galvanic corrosion.
Violation Notes:	Returned to compliance on 04/17/2015. Inspection Sequence ID:5104899;Tank ID:00;Violation Description: Failure to comply with one or more of the following: failure to install a spill bucket, have a functional drain valve or other method for the removal of liquid from the spill bucket/spill container, and/or be resistant to galvanic corrosion.
Violation Division:	San Diego County Department of Env Health
Violation Program:	UST
Violation Source:	CERS
Site ID:	396300
Site Name:	LAS POSAS VENTURE, INC
Violation Date:	04-17-2015
Citation:	23 CCR 16 2665 - California Code of Regulations, Title 23, Chapter 16, Section(s) 2665
Violation Description:	Failure of the overfill prevention system to meet one of the following requirements: 1. Alert the transfer operator when the tank is 90 percent full by restricting the flow into the tank or triggering an audible and visual alarm; or 2. Restrict delivery of flow to the tank at least 30 minutes before the tank overfills, provided the restriction occurs when the tank is filled to no more than 95 percent of capacity; and activate an audible alarm at least five minutes before the tank overfills; or 3. Provide positive shut-off of flow to the tank when the tank is filled to no more than 95 percent of capacity; or 4. Provide positive shut-off of flow to the tank so that none of the fittings located on the top of the tank are exposed to

SAN MARCOS GAS (Continued) **S106071324**

	product due to overfilling.
Violation Notes:	Returned to compliance on 04/17/2015. Inspection Sequence ID:5104899;Tank ID:87,91;Violation Description:Failure of the overfill prevention system to meet one of the following requirements: 1. Alert the transfer operator when the tank is 90 percent full by restricting the flow into the tank or triggering an audible and visual alarm; or 2. Restrict delivery of flow to the tank at least 30 minutes before the tank overfills, provided the restriction occurs when the tank is filled to no more than 95 percent of capacity; and activate an audible alarm at least five minutes before the tank overfills; or 3. Provide positive shut-off of flow to the tank when the tank is filled to no more than 95 percent of capacity; or 4. Provide positive shut-off of flow to the tank so that none of the fittings located on the top of the tank are exposed to product due to overfilling. 23 CCR 16 2635(b)(2), 2665.
Violation Division:	San Diego County Department of Env Health
Violation Program:	UST
Violation Source:	CERS
Site ID:	396300
Site Name:	LAS POSAS VENTURE, INC
Violation Date:	04-10-2019
Citation:	23 CCR 16 2716(e) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2716(e)
Violation Description:	For designated operator (DO) monthly inspections conducted before October 1, 2018, failure to comply with one or more of the following requirements: Be performed by an ICC certified DO. Inspect monthly alarm history report, check that alarms are documented and responded to appropriately, and attach a copy. Inspect for the presence of liquid/debris in spill containers. Inspect for the presence of liquid/debris in under dispenser containment (UDC) and ensure that the monitoring equipment is positioned correctly. Inspect for liquid or debris in containment sumps where an alarm occurred with no service visit. Check that all testing and maintenance has been completed and documented. Verify that all facility employees have been trained in accordance with 23 CCR 2715(c). For designated operator (DO) 30 day inspections conducted on and after October 1, 2018, failure to conduct the designated UST operator visual inspection at least once every 30 days.
Violation Notes:	Returned to compliance on 05/10/2019. Inspection Sequence ID:6126000;Tank ID:27761,27762,27763,27764;Violation Description:(TCR 12) Failure to comply with one or more of the following designated operator (DO) monthly inspection requirements: For designated operator (DO) monthly inspections conducted before October 1, 2018, failure to comply with one or more of the following requirements: Be performed by an ICC certified DO. Inspect monthly alarm history report, check that alarms are documented and responded to appropriately, and attach a copy. Inspect for the presence of liquid/debris in spill containers. Inspect for the presence of liquid/debris in under dispenser containment (UDC) and ensure that the monitoring equipment is positioned correctly. Inspect for liquid or debris in containment sumps where an alarm occurred with no service visit. Check that all testing and maintenance has been completed and documented. Verify that all facility employees have been trained in accordance with 23 CCR, 2715(c). For designated opera
Violation Division:	San Diego County Department of Env Health
Violation Program:	UST

SAN MARCOS GAS (Continued) **S106071324**

Violation Source: CERS

Site ID: 396300
Site Name: LAS POSAS VENTURE, INC
Violation Date: 04-17-2017
Citation: 23 CCR 6.7 25284, 25286 - California Code of Regulations, Title 23, Chapter 6.7, Section(s) 25284, 25286
Violation Description: Failure to submit a complete and accurate application for a permit to operate a UST, or for renewal of the permit.
Violation Notes: Returned to compliance on 05/17/2017. Inspection Sequence ID:5646823;Tank ID:27764,27763,27762,27761;Violation Description:Failure to prepare, maintain, and submit accurate CUPA UST Operating Permit Application for Facility information and/or Tank information. HSC 25286(a); 23 CCR 2711
Violation Division: San Diego County Department of Env Health
Violation Program: UST
Violation Source: CERS

Site ID: 396300
Site Name: LAS POSAS VENTURE, INC
Violation Date: 04-11-2018
Citation: 23 CCR 16 2665 - California Code of Regulations, Title 23, Chapter 16, Section(s) 2665
Violation Description: Failure to comply with one or more of the following: Failure to install or maintain a liquid-tight spill bucket. Have a minimum capacity of five gallons. Have a functional drain valve or other method for the removal of liquid from the spill bucket/spill container. Be resistant to galvanic corrosion.
Violation Notes: Returned to compliance on 04/11/2018.
Violation Division: San Diego County Department of Env Health
Violation Program: UST
Violation Source: CERS

Site ID: 396300
Site Name: LAS POSAS VENTURE, INC
Violation Date: 04-11-2018
Citation: 23 CCR 16 2632(c)(2)(A)&(B) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2632(c)(2)(A)&(B)
Violation Description: Failure to continuously monitor the interstitial space of a double-walled tank with an audible and visual alarm system.
Violation Notes: Returned to compliance on 04/11/2018.
Violation Division: San Diego County Department of Env Health
Violation Program: UST
Violation Source: CERS

Site ID: 396300
Site Name: LAS POSAS VENTURE, INC
Violation Date: 04-10-2019
Citation: HSC 6.7 25284.2 - California Health and Safety Code, Chapter 6.7, Section(s) 25284.2
Violation Description: "Failure to meet one or more of the following requirements: Install or maintain a liquid-tight spill container. Have a minimum capacity of five gallons. Have a functional drain valve or other method for the removal of liquid from the spill container. Be resistant to galvanic corrosion. Perform a tightness test at installation, every 12 months thereafter, or within 30 days after a repair to the spill container. Tested using applicable manufacturer guidelines, industry codes,

SAN MARCOS GAS (Continued) **S106071324**

engineering standards, or a method approved by a professional engineer. Tested by a certified UST service technician. Maintain records of spill containment testing for 36 months. "

Violation Notes: Returned to compliance on 04/10/2019. Inspection Sequence ID:6126000;Tank ID:27761,27762,27764;Violation Description:(TCR 9a) Failure to meet one or more of the following requirements: Install or maintain a liquid-tight spill container. Have a minimum capacity of 5 gallons. Have a functional drain valve or other method for the removal of liquid from the spill container. Be resistant to galvanic corrosion. Perform a tightness test at installation, every 12 months thereafter, or within 30 days after a repair to the spill container, tested using applicable manufacturer guidelines, industry codes, engineering standards, or a method approved by a professional engineer. Tested by a certified UST service technician. Maintain records of spill containment testing for 36 months. 23 CCR 2635(b), 2637.1(a-c), 2665(a-b), 2712(b)(1)(F); HSC 25284.2
Violation Division: San Diego County Department of Env Health
Violation Program: UST
Violation Source: CERS

Evaluation:
Eval General Type: Compliance Evaluation Inspection
Eval Date: 04-07-2014
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Inspector: Oglesby Margaret Inspection ID:4977960
Eval Division: San Diego County Department of Env Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 04-07-2014
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Inspector: Oglesby Margaret Inspection ID:4977960
Eval Division: San Diego County Department of Env Health
Eval Program: HW
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 04-07-2014
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Inspector: Oglesby Margaret Inspection ID:4977960
Eval Division: San Diego County Department of Env Health
Eval Program: UST
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 04-10-2019
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Inspector: Beacon Ellen Inspection ID:6126000
Eval Division: San Diego County Department of Env Health
Eval Program: HMRRP
Eval Source: CERS

SAN MARCOS GAS (Continued) **S106071324**

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	04-10-2019
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Inspector: Beacon Ellen Inspection ID:6126000
Eval Division:	San Diego County Department of Env Health
Eval Program:	HW
Eval Source:	CERS

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	04-10-2019
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Inspector: Beacon Ellen Inspection ID:6126000
Eval Division:	San Diego County Department of Env Health
Eval Program:	UST
Eval Source:	CERS

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	04-11-2018
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Inspector: Beacon Ellen Inspection ID:5869383
Eval Division:	San Diego County Department of Env Health
Eval Program:	HMRRP
Eval Source:	CERS

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	04-11-2018
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Inspector: Beacon Ellen Inspection ID:5869383
Eval Division:	San Diego County Department of Env Health
Eval Program:	HW
Eval Source:	CERS

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	04-11-2018
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Inspector: Beacon Ellen Inspection ID:5869383
Eval Division:	San Diego County Department of Env Health
Eval Program:	UST
Eval Source:	CERS

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	04-17-2015
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Inspector: Oglesby Margaret Inspection ID:5104899
Eval Division:	San Diego County Department of Env Health
Eval Program:	HMRRP
Eval Source:	CERS

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	04-17-2015
Violations Found:	No

SAN MARCOS GAS (Continued) **S106071324**

Eval Type: Routine done by local agency
Eval Notes: Inspector: Oglesby Margaret Inspection ID:5104899
Eval Division: San Diego County Department of Env Health
Eval Program: HW
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 04-17-2015
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Inspector: Oglesby Margaret Inspection ID:5104899
Eval Division: San Diego County Department of Env Health
Eval Program: UST
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 04-17-2017
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Inspector: Oglesby Margaret Inspection ID:5646823
Eval Division: San Diego County Department of Env Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 04-17-2017
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Inspector: Oglesby Margaret Inspection ID:5646823
Eval Division: San Diego County Department of Env Health
Eval Program: HW
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 04-17-2017
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Inspector: Oglesby Margaret Inspection ID:5646823
Eval Division: San Diego County Department of Env Health
Eval Program: UST
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 04-18-2016
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Inspector: Oglesby Margaret Inspection ID:5403974
Eval Division: San Diego County Department of Env Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 04-18-2016
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Inspector: Oglesby Margaret Inspection ID:5403974
Eval Division: San Diego County Department of Env Health

SAN MARCOS GAS (Continued) **S106071324**

Eval Program: HW
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 04-18-2016
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Inspector: Oglesby Margaret Inspection ID:5403974
Eval Division: San Diego County Department of Env Health
Eval Program: UST
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 05-19-2020
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Inspector: Beacon Ellen Inspection ID:6399095
Eval Division: San Diego County Department of Env Health
Eval Program: UST
Eval Source: CERS

Coordinates:
Site ID: 396300
Facility Name: LAS POSAS VENTURE, INC
Env Int Type Code: HMBP
Program ID: 10376581
Coord Name: Not reported
Ref Point Type Desc: Center of a facility or station.
Latitude: 33.148560
Longitude: -117.188220

Affiliation:
Affiliation Type Desc: Legal Owner
Entity Name: Las Posas Venture, Inc.
Entity Title: Not reported
Affiliation Address: 5505 Cancha De Golf
Affiliation City: Rancho Santa Fe
Affiliation State: CA
Affiliation Country: United States
Affiliation Zip: 92091
Affiliation Phone: (858) 755-0216

Affiliation Type Desc: Property Owner
Entity Name: Las Posas Partners
Entity Title: Not reported
Affiliation Address: 5505 Cancha De Golf
Affiliation City: Rancho Santa Fe
Affiliation State: CA
Affiliation Country: United States
Affiliation Zip: 92091
Affiliation Phone: (858) 755-0216

Affiliation Type Desc: UST Tank Owner
Entity Name: Las Posas Venture, Inc.
Entity Title: Not reported
Affiliation Address: 1290 W Mission Rd.

SAN MARCOS GAS (Continued) **S106071324**

Affiliation City:	San Marcos
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	92069-3036
Affiliation Phone:	(858) 755-0216
Affiliation Type Desc:	UST Property Owner Name
Entity Name:	Las Posas Partners, L.P.
Entity Title:	Not reported
Affiliation Address:	5505 Cancha De Golf
Affiliation City:	Rancho Santa Fe
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	92091
Affiliation Phone:	(858) 755-0216
Affiliation Type Desc:	UST Tank Operator
Entity Name:	Las Posas Venture, Inc.
Entity Title:	Not reported
Affiliation Address:	1290 W Mission Rd
Affiliation City:	San Marcos
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	92069
Affiliation Phone:	(858) 755-0216
Affiliation Type Desc:	Document Preparer
Entity Name:	Gloria Jimenez
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported
Affiliation Type Desc:	Environmental Contact
Entity Name:	Rely Environmental
Entity Title:	Not reported
Affiliation Address:	3941 Mason Street, Suite 4
Affiliation City:	San Diego
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	92110
Affiliation Phone:	Not reported
Affiliation Type Desc:	Facility Mailing Address
Entity Name:	Mailing Address
Entity Title:	Not reported
Affiliation Address:	5505 Cancha De Golf
Affiliation City:	Rancho Santa Fe
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	92091
Affiliation Phone:	Not reported
Affiliation Type Desc:	Operator

SAN MARCOS GAS (Continued) **S106071324**

Entity Name:	Las Posas Venture, Inc.
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(760) 224-2890
Affiliation Type Desc:	UST Permit Applicant
Entity Name:	Scott Storms
Entity Title:	CERS Account Administrator
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(619) 379-1457
Affiliation Type Desc:	CUPA District
Entity Name:	San Diego County Env Health
Entity Title:	Not reported
Affiliation Address:	PO Box 129261
Affiliation City:	San Diego
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	92112-9261
Affiliation Phone:	(858) 505-6880
Affiliation Type Desc:	Identification Signer
Entity Name:	Gloria Jimenez
Entity Title:	CERS Administrator
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported
Affiliation Type Desc:	Parent Corporation
Entity Name:	LAS POSAS VENTURE, INC
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

B12 **MOBIL OIL CORPORATION** **UST** **U003789816**
SSE **1290 W MISSION RD** **San Diego Co. HMMD** **N/A**
< 1/8 **SAN MARCOS, CA 92069** **HAZNET**
0.072 mi. **HWTS**
382 ft. **Site 6 of 6 in cluster B**

Relative:
Higher

Actual:
581 ft.

UST:

Name:	MOBIL OIL CORPORATION
Address:	1290 W MISSION RD
City,State,Zip:	SAN MARCOS, CA 92069
Facility ID:	H25233
Permitting Agency:	SAN DIEGO COUNTY
Latitude:	33.149909
Longitude:	-117.186877

Name:	LAS POSAS VENTURE, INC
Address:	1290 W MISSION RD
City,State,Zip:	SAN MARCOS, CA 92069
Facility ID:	37-000-215691
Permitting Agency:	San Diego County Department of Environmental Health
Latitude:	33.14856
Longitude:	-117.18822

HMMD SAN DIEGO:

Name:	MOBIL OIL CORPORATION #18-HLE
Address:	1290 W MISSION RD
City,State,Zip:	SAN MARCOS, CA 92069
Permit Number:	125233
Business Type:	6HK28
EPA Id Number:	CAL000055711
APN:	219-161-20-00
Last HMMD Inspection:	07/25/2002
Facility Telephone:	760-752-7082
Permit Status:	CHNG
Permit Expiration:	10/31/2002
Date Last Updated:	11/02/2012
Facility Owner:	EXXON MOBIL OIL CORP
Facility Mailing Address:	12265 W. BAYAUD AVE., STE.# 300
Facility Mailing City:	LAKEWOOD
Facility Mailing State:	CO
Facility Mailing Zip:	80228
UST Owner:	EXXON MOBIL OIL CORP
Handle Regulated Hazmat:	Y
Own Or Operate UST:	Y
Subject To APSA:	Not reported
Generate Haz Waste:	Y
Treat Haz Waste:	Not reported
Generate Medical Waste:	Not reported

UST:

UST Name:	UNDERGROUND TANK 125233 T001
Last Update:	2012-11-02 14:17:38
Permit Number:	125233
Tank Type:	DOUBLE WALL
Additional Id:	RT1404
Capacity Gallons:	10000
UST Contents:	DIESEL
Other Content Info:	DIESEL
Reg Status:	ACTIVE

MOBIL OIL CORPORATION (Continued) **U003789816**

Remove Close Date:	Not reported
Year Installed:	1991-01-01 00:00:00
Pipe Type:	DOUBLE WALL
Delivery System:	PRESSURE
Monitor Code:	18
UST Monitor Method:	DW TNK SW PRESSURE PIPE W/ SHUTOFF LLD: INTERSTITIAL, PIPE TEST ANNUALLY 0.1 GAL/HR OR MONTHLY 0.2 GAL/HR.
UST Name:	UNDERGROUND TANK 125233 T002
Last Update:	2012-11-02 14:17:38
Permit Number:	125233
Tank Type:	DOUBLE WALL
Additional Id:	RT1043
Capacity Gallons:	10000
UST Contents:	PREMIUM UNLEADED
Other Content Info:	PREMIUM UNLEADED
Reg Status:	ACTIVE
Remove Close Date:	Not reported
Year Installed:	1991-01-01 00:00:00
Pipe Type:	LINED TRENCH
Delivery System:	PRESSURE
Monitor Code:	20
UST Monitor Method:	DW TANK DW PRESSURE PIPE W/ SHUT OFF AND ALARM ON LINE LEAK DETECTOR: INTERSTITIAL.
UST Name:	UNDERGROUND TANK 125233 T003
Last Update:	2012-11-02 14:17:38
Permit Number:	125233
Tank Type:	DOUBLE WALL
Additional Id:	RT1043
Capacity Gallons:	10000
UST Contents:	MIDGRADE UNLEADED
Other Content Info:	MIDGRADE UNLEADED
Reg Status:	ACTIVE
Remove Close Date:	Not reported
Year Installed:	1991-01-01 00:00:00
Pipe Type:	LINED TRENCH
Delivery System:	PRESSURE
Monitor Code:	18
UST Monitor Method:	DW TNK SW PRESSURE PIPE W/ SHUTOFF LLD: INTERSTITIAL, PIPE TEST ANNUALLY 0.1 GAL/HR OR MONTHLY 0.2 GAL/HR.
UST Name:	UNDERGROUND TANK 125233 T004
Last Update:	2012-11-02 14:17:38
Permit Number:	125233
Tank Type:	DOUBLE WALL
Additional Id:	RT1043
Capacity Gallons:	10000
UST Contents:	REGULAR UNLEADED
Other Content Info:	REGULAR UNLEADED
Reg Status:	ACTIVE
Remove Close Date:	Not reported
Year Installed:	1991-01-01 00:00:00
Pipe Type:	LINED TRENCH
Delivery System:	PRESSURE
Monitor Code:	18
UST Monitor Method:	DW TNK SW PRESSURE PIPE W/ SHUTOFF LLD: INTERSTITIAL, PIPE TEST

MOBIL OIL CORPORATION (Continued) **U003789816**

ANNUALLY 0.1 GAL/HR OR MONTHLY 0.2 GAL/HR.

HAZNET:

Name:	LAS POSAS VENTURE INC
Address:	1290 W MISSION RD
Address 2:	Not reported
City,State,Zip:	SAN MARCOS, CA 920910000
Contact:	PHILIP MOORE
Telephone:	7602242890
Mailing Name:	Not reported
Mailing Address:	5505 CANCHA DE GOLF
Year:	2019
Gepaid:	CAL000375415
TSD EPA ID:	CAD097030993
CA Waste Code:	491 - Unspecified sludge waste
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.04170
Year:	2019
Gepaid:	CAL000375415
TSD EPA ID:	CAD008252405
CA Waste Code:	352 - Other organic solids
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.15000
Year:	2019
Gepaid:	CAL000375415
TSD EPA ID:	AZR000510065
CA Waste Code:	352 - Other organic solids
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.15000
Year:	2019
Gepaid:	CAL000375415
TSD EPA ID:	CAT080013352
CA Waste Code:	223 - Unspecified oil-containing waste
Disposal Method:	H039 - Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Tons:	1.10922
Year:	2017
Gepaid:	CAL000375415
TSD EPA ID:	CAD008252405
CA Waste Code:	352 - Other organic solids
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.125
Year:	2017
Gepaid:	CAL000375415
TSD EPA ID:	CAT080013352
CA Waste Code:	135 - Unspecified aqueous solution

MOBIL OIL CORPORATION (Continued) **U003789816**

Disposal Method:	H039 - Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Tons:	0.63
Year:	2016
Gepaid:	CAL000375415
TSD EPA ID:	CAD008252405
CA Waste Code:	352 - Other organic solids
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.025
Year:	2016
Gepaid:	CAL000375415
TSD EPA ID:	CAT080013352
CA Waste Code:	135 - Unspecified aqueous solution
Disposal Method:	H039 - Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Tons:	0.189
Year:	2016
Gepaid:	CAL000375415
TSD EPA ID:	CAT080013352
CA Waste Code:	343 - Unspecified organic liquid mixture
Disposal Method:	H039 - Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Tons:	0.068
Year:	2015
Gepaid:	CAL000375415
TSD EPA ID:	CAD008252405
CA Waste Code:	352 - Other organic solids
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.025

Click this hyperlink while viewing on your computer to access
3 additional CA HAZNET: record(s) in the EDR Site Report.

Additional Info:

Year:	2017
Gen EPA ID:	CAL000375415
Shipment Date:	20171003
Creation Date:	8/1/2018 18:31:24
Receipt Date:	20171013
Manifest ID:	017726717JJK
Trans EPA ID:	CAD028277036
Trans Name:	ASBURY ENVIRONMENTAL SERVICES
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD008252405
Trans Name:	PACIFIC RESOURCE RECOVERY
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids

MOBIL OIL CORPORATION (Continued) **U003789816**

RCRA Code:	D018
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.125
Waste Quantity:	250
Quantity Unit:	P
Additional Code 1:	D001
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20171003
Creation Date:	6/13/2018 18:30:46
Receipt Date:	20171017
Manifest ID:	017726718JJK
Trans EPA ID:	CAD028277036
Trans Name:	ASBURY ENVIRONMENTAL SERVICES
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAT080013352
Trans Name:	DEMENNO / KERDOON
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	135 - Unspecified aqueous solution
RCRA Code:	Not reported
Meth Code:	H039 - Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Quantity Tons:	0.168
Waste Quantity:	40
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20170208
Creation Date:	5/18/2017 18:31:53
Receipt Date:	20170221
Manifest ID:	016858259JJK
Trans EPA ID:	CAD028277036
Trans Name:	ASBURY ENVIRONMENTAL SERVICES
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAT080013352
Trans Name:	DEMENNO/KERDOON
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	135 - Unspecified aqueous solution
RCRA Code:	Not reported
Meth Code:	H039 - Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Quantity Tons:	0.462
Waste Quantity:	110
Quantity Unit:	G
Additional Code 1:	Not reported

MOBIL OIL CORPORATION (Continued) **U003789816**

Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Additional Info:

Year:	2013
Gen EPA ID:	CAL000375415
Shipment Date:	20131216
Creation Date:	2/24/2014 22:15:23
Receipt Date:	20131224
Manifest ID:	012423145JJK
Trans EPA ID:	CAD028277036
Trans Name:	ASBURY ENVIRONMENTAL SERVICES
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAT080013352
Trans Name:	DEMENNO / KERDOON
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	135 - Unspecified aqueous solution
RCRA Code:	Not reported
Meth Code:	H039 - Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Quantity Tons:	0.462
Waste Quantity:	110
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Additional Info:

Year:	2015
Gen EPA ID:	CAL000375415
Shipment Date:	20150319
Creation Date:	9/11/2015 22:15:47
Receipt Date:	20150401
Manifest ID:	014065247JJK
Trans EPA ID:	CAD028277036
Trans Name:	ASBURY ENVIRONMENTAL SERVICES
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD008252405
Trans Name:	PACIFIC RESOURCE RECOVERY
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids
RCRA Code:	D018
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.025
Waste Quantity:	50

MOBIL OIL CORPORATION (Continued) **U003789816**

Quantity Unit:	P
Additional Code 1:	D001
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20150319
Creation Date:	9/22/2015 22:15:09
Receipt Date:	20150330
Manifest ID:	014065248JJK
Trans EPA ID:	CAD028277036
Trans Name:	ASBURY ENVIRONMENTAL SERVICES
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAT080013352
Trans Name:	DEMENNO / KERDOON
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	343 - Unspecified organic liquid mixture
RCRA Code:	D001
Meth Code:	H061 - Fuel Blending Prior To Energy Recovery At Another Site
Quantity Tons:	0.051
Waste Quantity:	15
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20150319
Creation Date:	9/22/2015 22:15:09
Receipt Date:	20150330
Manifest ID:	014065248JJK
Trans EPA ID:	CAD028277036
Trans Name:	ASBURY ENVIRONMENTAL SERVICES
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAT080013352
Trans Name:	DEMENNO / KERDOON
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	135 - Unspecified aqueous solution
RCRA Code:	Not reported
Meth Code:	H039 - Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Quantity Tons:	0.084
Waste Quantity:	20
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

MOBIL OIL CORPORATION (Continued) **U003789816**

Additional Info:

Year:	2016
Gen EPA ID:	CAL000375415
Shipment Date:	20150319
Creation Date:	9/11/2015 22:15:47
Receipt Date:	20150401
Manifest ID:	014065247JJK
Trans EPA ID:	CAD028277036
Trans Name:	ASBURY ENVIRONMENTAL SERVICES
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD008252405
Trans Name:	PACIFIC RESOURCE RECOVERY
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids
RCRA Code:	D018
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.025
Waste Quantity:	50
Quantity Unit:	P
Additional Code 1:	D001
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20150319
Creation Date:	9/22/2015 22:15:09
Receipt Date:	20150330
Manifest ID:	014065248JJK
Trans EPA ID:	CAD028277036
Trans Name:	ASBURY ENVIRONMENTAL SERVICES
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAT080013352
Trans Name:	DEMENNO / KERDOON
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	343 - Unspecified organic liquid mixture
RCRA Code:	D001
Meth Code:	H061 - Fuel Blending Prior To Energy Recovery At Another Site
Quantity Tons:	0.051
Waste Quantity:	15
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20150319
Creation Date:	9/22/2015 22:15:09
Receipt Date:	20150330
Manifest ID:	014065248JJK

MOBIL OIL CORPORATION (Continued) **U003789816**

Trans EPA ID:	CAD028277036
Trans Name:	ASBURY ENVIRONMENTAL SERVICES
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAT080013352
Trans Name:	DEMENNO / KERDOON
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	135 - Unspecified aqueous solution
RCRA Code:	Not reported
Meth Code:	H039 - Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Quantity Tons:	0.084
Waste Quantity:	20
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

HWTS:

Name:	LAS POSAS VENTURE INC
Address:	1290 W MISSION RD
Address 2:	Not reported
City,State,Zip:	SAN MARCOS, CA 920691416
EPA ID:	CAL000375415
Inactive Date:	Not reported
Create Date:	06/19/2012
Last Act Date:	07/28/2020
Mailing Name:	Not reported
Mailing Address:	5505 CANCHA DE GOLF
Mailing Address 2:	Not reported
Mailing City,State,Zip:	RANCHO SANTA FE, CA 920910000
Owner Name:	LAS POSAS VENTURE, INC
Owner Address:	5505 CANCHA DE GOLF
Owner Address 2:	Not reported
Owner City,State,Zip:	RANCHO SANTA FE, CA 920910000
Contact Name:	PHILIP MOORE
Contact Address:	1290 W MISSION RD.
Contact Address 2:	Not reported
City,State,Zip:	SAN MARCOS, CA 92069

NAICS:

EPA ID:	CAL000375415
Create Date:	2012-06-19 11:05:17.397
NAICS Code:	44719
NAICS Description:	Other Gasoline Stations
Issued EPA ID Date:	2012-06-19 11:05:17.38000
Inactive Date:	Not reported
Facility Name:	LAS POSAS VENTURE INC
Facility Address:	1290 W MISSION RD
Facility Address 2:	Not reported
Facility City:	SAN MARCOS
Facility County:	Not reported
Facility State:	CA
Facility Zip:	920691416

C13 **PEACOCK CLEANERS** **EDR Hist Cleaner** **1018834933**
WNW **1450 W MISSION RD STE S** **N/A**
< 1/8 **SAN MARCOS, CA 92069**
0.084 mi.
445 ft. **Site 1 of 3 in cluster C**

Relative: EDR Hist Cleaner
Lower

Actual: **567 ft.**

Year:	Name:	Type:
1994	PEACOCK CLEANERS	Garment Pressing And Cleaners' Agents
1995	PEACOCK CLEANERS	Garment Pressing And Cleaners' Agents
1996	PEACOCK CLEANERS	Garment Pressing And Cleaners' Agents
1997	PEACOCK CLEANERS	Garment Pressing And Cleaners' Agents
1998	PEACOCK CLEANERS	Garment Pressing And Cleaners' Agents
1999	PEACOCK CLEANERS	Garment Pressing And Cleaners' Agents
2000	PEACOCK CLEANERS	Garment Pressing And Cleaners' Agents
2001	PEACOCK CLEANERS	Garment Pressing And Cleaners' Agents
2002	PEACOCK CLEANERS	Garment Pressing And Cleaners' Agents
2003	PEACOCK CLEANERS	Garment Pressing And Cleaners' Agents
2004	PEACOCK CLEANERS	Garment Pressing And Cleaners' Agents
2005	PEACOCK CLEANERS	Garment Pressing And Cleaners' Agents
2006	PEACOCK CLEANERS	Garment Pressing And Cleaners' Agents
2007	PEACOCK CLEANERS	Garment Pressing And Cleaners' Agents
2008	PEACOCK CLEANERS	Garment Pressing And Cleaners' Agents
2009	PEACOCK CLEANERS	Garment Pressing And Cleaners' Agents
2010	PEACOCK CLEANERS	Garment Pressing And Cleaners' Agents
2011	PEACOCK CLEANERS	Garment Pressing And Cleaners' Agents
2012	PEACOCK CLEANERS	Garment Pressing And Cleaners' Agents
2013	PEACOCK CLEANERS	Garment Pressing And Cleaners' Agents
2014	PEACOCK CLEANERS	Garment Pressing And Cleaners' Agents

C14 **PEACOCK CLEANERS** **CERS HAZ WASTE** **S113166627**
WNW **1450 W MISSION RD STE S** **HAZNET** **N/A**
< 1/8 **SAN MARCOS, CA 92069** **CERS**
0.084 mi. **HWTS**
445 ft. **Site 2 of 3 in cluster C**

Relative: CERS HAZ WASTE:
Lower

Actual: **567 ft.**

Name:	PEACOCK CLEANERS
Address:	1450 W MISSION RD STE S
City,State,Zip:	SAN MARCOS, CA 92069
Site ID:	72233
CERS ID:	10376287
CERS Description:	Hazardous Waste Generator

HAZNET:

Name:	PEACOCK CLEANERS
Address:	1450 W MISSION RD STE S
Address 2:	Not reported
City,State,Zip:	SAN MARCOS, CA 920690000
Contact:	YOUNG KIM
Telephone:	6195987237
Mailing Name:	Not reported
Mailing Address:	1450 W MISSION RD STE S
Year:	1996
Gepaid:	CAL921555653
TSD EPA ID:	CAT000613976
CA Waste Code:	741 - Liquids with halogenated organic compounds >= 1,000 Mg./L

PEACOCK CLEANERS (Continued) **S113166627**

Disposal Method: H01 - Transfer Station
Tons: 0.39

Year: 1995
Gepaid: CAL921555653
TSD EPA ID: CAT000613976
CA Waste Code: 741 - Liquids with halogenated organic compounds >= 1,000 Mg./L
Disposal Method: H01 - Transfer Station
Tons: 0.195

Year: 1994
Gepaid: CAL921555653
TSD EPA ID: CAT000613976
CA Waste Code: 741 - Liquids with halogenated organic compounds >= 1,000 Mg./L
Disposal Method: H01 - Transfer Station
Tons: 0.195

Year: 1993
Gepaid: CAL921555653
TSD EPA ID: CAT000613893
CA Waste Code: 741 - Liquids with halogenated organic compounds >= 1,000 Mg./L
Disposal Method: H01 - Transfer Station
Tons: 0.3125

Additional Info:
Year: 1996
Gen EPA ID: CAL921555653

Shipment Date: 19960923
Creation Date: 5/20/1997 0:00:00
Receipt Date: 19960924
Manifest ID: 96075731
Trans EPA ID: ILD984908202
Trans Name: Not reported
Trans 2 EPA ID: ILD984908202
Trans 2 Name: Not reported
TSDF EPA ID: CAT000613976
Trans Name: Not reported
TSDF Alt EPA ID: Not reported
TSDF Alt Name: Not reported
Waste Code Description: 741 - Liquids with halogenated organic compounds > 1000 mg/l
RCRA Code: F002
Meth Code: H01 - Transfer Station
Quantity Tons: 0.195
Waste Quantity: 390
Quantity Unit: P
Additional Code 1: Not reported
Additional Code 2: Not reported
Additional Code 3: Not reported
Additional Code 4: Not reported
Additional Code 5: Not reported

Shipment Date: 19960418
Creation Date: 10/16/1996 0:00:00
Receipt Date: 19960419
Manifest ID: 95953332

PEACOCK CLEANERS (Continued) **S113166627**

Trans EPA ID: ILD984908202
Trans Name: Not reported
Trans 2 EPA ID: ILD984908202
Trans 2 Name: Not reported
TSDF EPA ID: CAT000613976
Trans Name: Not reported
TSDF Alt EPA ID: Not reported
TSDF Alt Name: Not reported
Waste Code Description: 741 - Liquids with halogenated organic compounds > 1000 mg/l
RCRA Code: F002
Meth Code: H01 - Transfer Station
Quantity Tons: 0.0975
Waste Quantity: 195
Quantity Unit: P
Additional Code 1: Not reported
Additional Code 2: Not reported
Additional Code 3: Not reported
Additional Code 4: Not reported
Additional Code 5: Not reported

Shipment Date: 19960125
Creation Date: 10/10/1996 0:00:00
Receipt Date: 19960126
Manifest ID: 95946947
Trans EPA ID: ILD984908202
Trans Name: Not reported
Trans 2 EPA ID: ILD984908202
Trans 2 Name: Not reported
TSDF EPA ID: CAT000613976
Trans Name: Not reported
TSDF Alt EPA ID: CAT000613976
TSDF Alt Name: Not reported
Waste Code Description: 741 - Liquids with halogenated organic compounds > 1000 mg/l
RCRA Code: F002
Meth Code: H01 - Transfer Station
Quantity Tons: 0.0975
Waste Quantity: 195
Quantity Unit: P
Additional Code 1: Not reported
Additional Code 2: Not reported
Additional Code 3: Not reported
Additional Code 4: Not reported
Additional Code 5: Not reported

Additional Info:
Year: 1994
Gen EPA ID: CAL921555653

Shipment Date: 19941018
Creation Date: 3/28/1996 0:00:00
Receipt Date: 19941019
Manifest ID: 95063385
Trans EPA ID: ILD984908202
Trans Name: Not reported
Trans 2 EPA ID: ILD984908202
Trans 2 Name: Not reported
TSDF EPA ID: CAT000613976

PEACOCK CLEANERS (Continued) **S113166627**

Trans Name:	Not reported
TSDF Alt EPA ID:	CAT000613976
TSDF Alt Name:	Not reported
Waste Code Description:	741 - Liquids with halogenated organic compounds > 1000 mg/l
RCRA Code:	F002
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.0975
Waste Quantity:	195
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	19940811
Creation Date:	3/26/1996 0:00:00
Receipt Date:	19940812
Manifest ID:	93684748
Trans EPA ID:	ILD984908202
Trans Name:	Not reported
Trans 2 EPA ID:	ILD984908202
Trans 2 Name:	Not reported
TSDF EPA ID:	CAT000613976
Trans Name:	Not reported
TSDF Alt EPA ID:	CAT000613976
TSDF Alt Name:	Not reported
Waste Code Description:	741 - Liquids with halogenated organic compounds > 1000 mg/l
RCRA Code:	F002
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.0975
Waste Quantity:	195
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Additional Info:

Year:	1995
Gen EPA ID:	CAL921555653

Shipment Date:	19950731
Creation Date:	4/1/1996 0:00:00
Receipt Date:	19950801
Manifest ID:	95424903
Trans EPA ID:	ILD984908202
Trans Name:	Not reported
Trans 2 EPA ID:	ILD984908202
Trans 2 Name:	Not reported
TSDF EPA ID:	CAT000613976
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	741 - Liquids with halogenated organic compounds > 1000 mg/l
RCRA Code:	F002

PEACOCK CLEANERS (Continued) **S113166627**

Meth Code:	H01 - Transfer Station
Quantity Tons:	0.0975
Waste Quantity:	195
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19950316
Creation Date:	3/29/1996 0:00:00
Receipt Date:	19950317
Manifest ID:	95087186
Trans EPA ID:	ILD984908202
Trans Name:	Not reported
Trans 2 EPA ID:	ILD984908202
Trans 2 Name:	Not reported
TSDF EPA ID:	CAT000613976
Trans Name:	Not reported
TSDF Alt EPA ID:	CAT000613976
TSDF Alt Name:	Not reported
Waste Code Description:	741 - Liquids with halogenated organic compounds > 1000 mg/l
RCRA Code:	F002
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.0975
Waste Quantity:	195
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Additional Info:

Year:	1993
Gen EPA ID:	CAL921555653
Shipment Date:	19931208
Creation Date:	3/25/1996 0:00:00
Receipt Date:	19931213
Manifest ID:	93030496
Trans EPA ID:	ILD984908202
Trans Name:	Not reported
Trans 2 EPA ID:	ILD984908202
Trans 2 Name:	Not reported
TSDF EPA ID:	CAT000613893
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	741 - Liquids with halogenated organic compounds > 1000 mg/l
RCRA Code:	F002
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.3125
Waste Quantity:	625
Quantity Unit:	P
Additional Code 1:	Not reported

PEACOCK CLEANERS (Continued) **S113166627**

Additional Code 2: Not reported
Additional Code 3: Not reported
Additional Code 4: Not reported
Additional Code 5: Not reported

CERS:
Name: PEACOCK CLEANERS
Address: 1450 W MISSION RD STE S
City,State,Zip: SAN MARCOS, CA 92069
Site ID: 72233
CERS ID: 10376287
CERS Description: Chemical Storage Facilities

Violations:
Site ID: 72233
Site Name: PEACOCK CLEANERS
Violation Date: 09-22-2014
Citation: HSC 6.95 25508.2 - California Health and Safety Code, Chapter 6.95, Section(s) 25508.2
Violation Description: Failure to annually review and electronically certify that the business plan is complete, accurate, and up-to-date.
Violation Notes: Returned to compliance on 02/21/2015.
Violation Division: San Diego County Department of Env Health
Violation Program: HMRRP
Violation Source: CERS

Evaluation:
Eval General Type: Compliance Evaluation Inspection
Eval Date: 09-22-2014
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Inspector: North HN004 Inspection ID:5123058
Eval Division: San Diego County Department of Env Health
Eval Program: HW
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 09-22-2014
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Inspector: North HN004 Inspection ID:5123058
Eval Division: San Diego County Department of Env Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 10-05-2018
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Inspector: Calcagno Leonardo Inspection ID:6023754
Eval Division: San Diego County Department of Env Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 10-05-2018
Violations Found: No

PEACOCK CLEANERS (Continued) **S113166627**

Eval Type: Routine done by local agency
Eval Notes: Inspector: Calcagno Leonardo Inspection ID:6023754
Eval Division: San Diego County Department of Env Health
Eval Program: HW
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 10-19-2016
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Inspector: Calcagno Leonardo Inspection ID:5514890
Eval Division: San Diego County Department of Env Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 10-19-2016
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Inspector: Calcagno Leonardo Inspection ID:5514890
Eval Division: San Diego County Department of Env Health
Eval Program: HW
Eval Source: CERS

Affiliation:
Affiliation Type Desc: Environmental Contact
Entity Name: HOON YOUNG JUNG
Entity Title: Not reported
Affiliation Address: 1450 W Mission Rd Ste S
Affiliation City: San Marcos
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 92069
Affiliation Phone: Not reported

Affiliation Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title: Not reported
Affiliation Address: 1450 W Mission Rd Ste S
Affiliation City: San Marcos
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 92069
Affiliation Phone: Not reported

Affiliation Type Desc: Parent Corporation
Entity Name: SUNNY FRESH & PEACOCK CLEANERS
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: Document Preparer
Entity Name: Hoon Young Jung

PEACOCK CLEANERS (Continued) **S113166627**

Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported
Affiliation Type Desc:	Identification Signer
Entity Name:	HOON YOUNG JUNG
Entity Title:	OWNER
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported
Affiliation Type Desc:	Operator
Entity Name:	HOON YOUNG JUNG
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(760) 598-7237
Affiliation Type Desc:	Property Owner
Entity Name:	P&A Management
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	United States
Affiliation Zip:	Not reported
Affiliation Phone:	(213) 675-5547
Affiliation Type Desc:	CUPA District
Entity Name:	San Diego County Env Health
Entity Title:	Not reported
Affiliation Address:	PO Box 129261
Affiliation City:	San Diego
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	92112-9261
Affiliation Phone:	(858) 505-6880
Affiliation Type Desc:	Legal Owner
Entity Name:	HOON YOUNG JUNG
Entity Title:	Not reported
Affiliation Address:	1450 W Mission Rd Ste S
Affiliation City:	San Marcos
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	92069
Affiliation Phone:	(760) 598-7237

PEACOCK CLEANERS (Continued) **S113166627**

HWTS:

Name:	PEACOCK CLEANERS
Address:	1450 W MISSION RD STE S
Address 2:	Not reported
City,State,Zip:	SAN MARCOS, CA 920690000
EPA ID:	CAL921555653
Inactive Date:	06/30/1998
Create Date:	06/03/1992
Last Act Date:	08/13/2008
Mailing Name:	Not reported
Mailing Address:	1450 W MISSION RD STE S
Mailing Address 2:	Not reported
Mailing City,State,Zip:	SAN MARCOS, CA 920691327
Owner Name:	YOUNG KIM & SOYAN CHEON
Owner Address:	1450 W MISSION RD STE S
Owner Address 2:	Not reported
Owner City,State,Zip:	SAN MARCOS, CA 920690000
Contact Name:	YOUNG KIM
Contact Address:	INACTIVE PER VQ98 - BMI
Contact Address 2:	Not reported
City,State,Zip:	SAN MARCOS, CA --

D15 **TECHNOGRAPHICS CO** **RCRA NonGen / NLR** **1024790740**
WSW **181 BALBOA STREET** **CAL000091925**
< 1/8 **SAN MARCOS, CA 92069**
0.093 mi.
491 ft. **Site 1 of 4 in cluster D**

Relative: **Lower**

Actual: **560 ft.**

RCRA NonGen / NLR:

Date Form Received by Agency:		1994-10-04 00:00:00.0
Handler Name:	TECHNOGRAPHICS CO	
Handler Address:		181 BALBOA STREET
Handler City,State,Zip:		SAN MARCOS, CA 92069-0000
EPA ID:		CAL000091925
Contact Name:		BRADEN THOMAS
Contact Address:		181 BALBOA ST STE 102
Contact City,State,Zip:		SAN MARCOS, CA 00000
Contact Telephone:		760-744-8540
Contact Fax:		000-000-0000
Contact Email:		TECHNOGRAPHICSBRAD@YAHOO.COM
Contact Title:		Not reported
EPA Region:		09
Land Type:		Not reported
Federal Waste Generator Description:		Not a generator, verified
Non-Notifier:		Not reported
Biennial Report Cycle:		Not reported
Accessibility:		Not reported
Active Site Indicator:		Handler Activities
State District Owner:		Not reported
State District:		Not reported
Mailing Address:		181 BALBOA ST STE 102
Mailing City,State,Zip:		SAN MARCOS, CA 92069-0000
Owner Name:		TECHNOGRAPHICS STUDENT INC
Owner Type:		Other
Operator Name:		BRADEN THOMAS
Operator Type:		Other
Short-Term Generator Activity:		No

TECHNOGRAPHICS CO (Continued) **1024790740**

Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2018-09-05 15:42:16.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

TECHNOGRAPHICS CO (Continued) **1024790740**

Handler - Owner Operator:

Owner/Operator Indicator:	Operator
Owner/Operator Name:	BRADEN THOMAS
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	181 BALBOA ST STE 102
Owner/Operator City,State,Zip:	SAN MARCOS, CA 00000
Owner/Operator Telephone:	760-744-8540
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name:	TECHNOGRAPHICS STUDENT INC
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	181 BALBOA ST #102
Owner/Operator City,State,Zip:	SAN MARCOS, CA 92069-0000
Owner/Operator Telephone:	760-744-8540
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	1994-10-04 00:00:00.0
Handler Name: TECHNOGRAPHICS CO	
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

List of NAICS Codes and Descriptions:

NAICS Code:	32311
NAICS Description:	PRINTING

Facility Has Received Notices of Violations:

Violations:	No Violations Found

Evaluation Action Summary:

Evaluations:	No Evaluations Found

C16 **PEACOCK CLEANERS** **DRYCLEANERS** **S103630912**
WNW **1450 MISSION RD STE S** **N/A**
< 1/8 **SAN MARCOS, CA 92069**
0.094 mi.
497 ft. **Site 3 of 3 in cluster C**

Relative: **Lower**

Actual: **572 ft.**

DRYCLEANERS:

Name:	PEACOCK CLEANERS
Address:	1450 MISSION RD STE S
City,State,Zip:	SAN MARCOS, CA 920690000
EPA Id:	CAL000139035
NAICS Code:	81232
NAICS Description:	Drycleaning and Laundry Services (except Coin-Operated)
SIC Code:	7211
SIC Description:	Power Laundries, Family and Commercial
Create Date:	04/23/1997
Facility Active:	No
Inactive Date:	06/30/2009
Facility Addr2:	Not reported
Owner Name:	YUN SONG CHOE
Owner Address:	1450 W MISSION RD STE S
Owner Address 2:	Not reported
Owner Telephone:	7605987237
Contact Name:	YUN SONG CHOE-OWNER
Contact Address:	1450 W MISSION RD STE S
Contact Address 2:	Not reported
Contact Telephone:	7605987237
Contact Fax:	Not reported
Mailing Name:	Not reported
Mailing Address 1:	1450 W MISSION RD STE S
Mailing Address 2:	Not reported
Mailing City:	SAN MARCOS
Mailing State:	CA
Mailing Zip:	920690000
Owner Fax:	Not reported
Region Code:	4
Latitude:	33.134611
Longitude:	-117.128433

Name:	PEACOCK CLEANERS
Address:	1450 MISSION RD
City,State,Zip:	SAN MARCOS, CA 920690000
EPA Id:	CAL000334565
NAICS Code:	81232
NAICS Description:	Drycleaning and Laundry Services (except Coin-Operated)
SIC Code:	7211
SIC Description:	Power Laundries, Family and Commercial
Create Date:	07/16/2008
Facility Active:	Yes
Inactive Date:	Not reported
Facility Addr2:	Not reported
Owner Name:	HOON YOUNG JUNG
Owner Address:	1219 MCGEARY RD
Owner Address 2:	Not reported
Owner Telephone:	8589228335
Contact Name:	HOON YOUNG JUNG
Contact Address:	1219 MCGEARY RD
Contact Address 2:	Not reported
Contact Telephone:	8589228335

PEACOCK CLEANERS (Continued) **S103630912**

Contact Fax:	Not reported
Mailing Name:	Not reported
Mailing Address 1:	1450 W MISSION RD STE S
Mailing Address 2:	SUITE # S
Mailing City:	SAN MARCOS
Mailing State:	CA
Mailing Zip:	920690000
Owner Fax:	Not reported
Region Code:	4
Latitude:	33.134611
Longitude:	-117.128433

E17 **K-TECH MACHINE INC** **RCRA NonGen / NLR** **1024794495**
SSW **1377 ARMORLITE DR STE B** **CAL000148579**
< 1/8 **SAN MARCOS, CA 92069**
0.095 mi.
504 ft. **Site 1 of 2 in cluster E**

Relative: **Lower**

Actual: **560 ft.**

RCRA NonGen / NLR:

Date Form Received by Agency:		1994-12-12 00:00:00.0
Handler Name:	K-TECH MACHINE INC	
Handler Address:		1377 ARMORLITE DR STE B
Handler City,State,Zip:		SAN MARCOS, CA 92069-0000
EPA ID:		CAL000148579
Contact Name:		STUART RUSSELL
Contact Address:		1377 ARMORLITE DR STE B
Contact City,State,Zip:		SAN MARCOS, CA 92069
Contact Telephone:		760-471-9262
Contact Fax:		760-736-9354
Contact Email:		SRUSSELL@K-TECHMACHINE.COM
Contact Title:		Not reported
EPA Region:		09
Land Type:		Not reported
Federal Waste Generator Description:		Not a generator, verified
Non-Notifier:		Not reported
Biennial Report Cycle:		Not reported
Accessibility:		Not reported
Active Site Indicator:		Handler Activities
State District Owner:		Not reported
State District:		Not reported
Mailing Address:		1377 ARMORLITE DR STE B
Mailing City,State,Zip:		SAN MARCOS, CA 92069-1341
Owner Name:		K-TECH MACHINE INC
Owner Type:		Other
Operator Name:		STUART RUSSELL
Operator Type:		Other
Short-Term Generator Activity:		No
Importer Activity:		No
Mixed Waste Generator:		No
Transporter Activity:		No
Transfer Facility Activity:		No
Recycler Activity with Storage:		No
Small Quantity On-Site Burner Exemption:		No
Smelting Melting and Refining Furnace Exemption:		No
Underground Injection Control:		No
Off-Site Waste Receipt:		No
Universal Waste Indicator:		Yes
Universal Waste Destination Facility:		Yes

K-TECH MACHINE INC (Continued) **1024794495**

Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2018-09-05 15:43:22.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Operator
Owner/Operator Name:	STUART RUSSELL
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1377 ARMORLITE DR STE B
Owner/Operator City,State,Zip:	SAN MARCOS, CA 92069
Owner/Operator Telephone:	760-471-9262
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

K-TECH MACHINE INC (Continued) **1024794495**

Owner/Operator Indicator:	Owner
Owner/Operator Name:	K-TECH MACHINE INC
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1377 ARMORLITE DR STE B
Owner/Operator City,State,Zip:	SAN MARCOS, CA 92069-1341
Owner/Operator Telephone:	760-471-9262
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	1994-12-12 00:00:00.0
Handler Name: K-TECH MACHINE INC	
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

List of NAICS Codes and Descriptions:

NAICS Code:	33992
NAICS Description:	SPORTING AND ATHLETIC GOODS MANUFACTURING

Facility Has Received Notices of Violations:

Violations:	No Violations Found

Evaluation Action Summary:

Evaluations:	No Evaluations Found

D18 **MELTON S ARCO SERVICE** **EDR Hist Auto** **1008998405**
SW **0130 BALBOA AVE** **N/A**
< 1/8 **SAN DIEGO, CA**
0.116 mi.
613 ft. **Site 2 of 4 in cluster D**

Relative: EDR Hist Auto
Lower

Actual:
560 ft.

Year:	Name:	Type:
1975	MELTON S ARCO SERVICE	SERVICE STATIONS

D19 **CONCOURS CLASSICS** **RCRA-SQG** **1000180622**
SW **155 BALBOA SUITE D-2** **FINDS** **CAD980891386**
< 1/8 **SAN MARCOS, CA 92069** **ECHO**
0.117 mi.
620 ft. **Site 3 of 4 in cluster D**

Relative: **Lower**

Actual: **560 ft.**

RCRA-SQG:

Date Form Received by Agency:		1996-09-01 00:00:00.0
Handler Name:	CONCOURS CLASSICS	
Handler Address:		155 BALBOA SUITE D-2
Handler City,State,Zip:		SAN MARCOS, CA 92069
EPA ID:		CAD980891386
Contact Name:		Not reported
Contact Address:		Not reported
Contact City,State,Zip:		Not reported
Contact Telephone:		Not reported
Contact Fax:		Not reported
Contact Email:		Not reported
Contact Title:		Not reported
EPA Region:		09
Land Type:		Not reported
Federal Waste Generator Description:		Small Quantity Generator
Non-Notifier:		Not reported
Biennial Report Cycle:		Not reported
Accessibility:		Not reported
Active Site Indicator:		Handler Activities
State District Owner:		CA
State District:		4
Mailing Address:		155 BALBOA SUITE D-2
Mailing City,State,Zip:		SAN MARCOS, CA 92069
Owner Name:		Not reported
Owner Type:		Not reported
Operator Name:		NOT REQUIRED
Operator Type:		Private
Short-Term Generator Activity:		No
Importer Activity:		No
Mixed Waste Generator:		No
Transporter Activity:		No
Transfer Facility Activity:		No
Recycler Activity with Storage:		No
Small Quantity On-Site Burner Exemption:		No
Smelting Melting and Refining Furnace Exemption:		No
Underground Injection Control:		No
Off-Site Waste Receipt:		No
Universal Waste Indicator:		No
Universal Waste Destination Facility:		No
Federal Universal Waste:		No
Active Site Fed-Reg Treatment Storage and Disposal Facility:		Not reported
Active Site Converter Treatment storage and Disposal Facility:		Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:		Not reported
Active Site State-Reg Handler:		---
Federal Facility Indicator:		Not reported
Hazardous Secondary Material Indicator:		NN
Sub-Part K Indicator:		Not reported
Commercial TSD Indicator:		No
Treatment Storage and Disposal Type:		Not reported
2018 GPRA Permit Baseline:		Not on the Baseline
2018 GPRA Renewals Baseline:		Not on the Baseline
Permit Renewals Workload Universe:		Not reported

CONCOURS CLASSICS (Continued) **1000180622**

Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2002-06-27 03:22:33.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	Not reported
Manifest Broker:	Not reported
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Operator
Owner/Operator Name:	NOT REQUIRED
Legal Status:	Private
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	NOT REQUIRED
Owner/Operator City,State,Zip:	NOT REQUIRED, ME 99999
Owner/Operator Telephone:	415-555-1212
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name:	NOT REQUIRED
Legal Status:	Private
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	NOT REQUIRED
Owner/Operator City,State,Zip:	NOT REQUIRED, ME 99999
Owner/Operator Telephone:	415-555-1212
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

CONCOURS CLASSICS (Continued) **1000180622**

Historic Generators:
Receive Date: 1996-09-01 00:00:00.0
Handler Name: CONCOURS CLASSICS
Federal Waste Generator Description: Small Quantity Generator
State District Owner: CA
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 1985-10-01 00:00:00.0
Handler Name: CONCOURS CLASSICS
Federal Waste Generator Description: Large Quantity Generator
State District Owner: CA
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 811121
NAICS Description: AUTOMOTIVE BODY, PAINT, AND INTERIOR REPAIR AND MAINTENANCE

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

FINDS:
Registry ID: 110002675999

Click Here:

Environmental Interest/Information System:
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1000180622

CONCOURS CLASSICS (Continued) **1000180622**

Registry ID: 110002675999
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110002675999
Name: CONCOURS CLASSICS
Address: 155 BALBOA SUITE D-2
City,State,Zip: SAN MARCOS, CA 92069

D20 **PACIFIC METAL PRODUCTS** **CERS HAZ WASTE** **S126327099**
SW **155 BALBOA STREET, SUITE D13** **N/A**
< 1/8 **SAN MARCOS, CA 92069**
0.117 mi.
620 ft. **Site 4 of 4 in cluster D**

Relative:
Lower

Actual:
560 ft.

CERS HAZ WASTE:
Name: PACIFIC METAL PRODUCTS
Address: 155 BALBOA STREET, SUITE D13
City,State,Zip: SAN MARCOS, CA 92069
Site ID: 566306
CERS ID: 10842595
CERS Description: Hazardous Waste Generator

Affiliation:
Affiliation Type Desc: Document Preparer
Entity Name: Sayed Mohammad Naim Khalid
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title: Not reported
Affiliation Address: 155 Balboa Street, Suite D13
Affiliation City: San Marcos
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 92069
Affiliation Phone: Not reported

Affiliation Type Desc: Identification Signer
Entity Name: VANESSA GRIFFIN
Entity Title: OFFICE MANAGER
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: Legal Owner
Entity Name: TERRY MCCAULEY
Entity Title: Not reported
Affiliation Address: 155 Balboa Street, Suite D13
Affiliation City: San Marcos
Affiliation State: CA
Affiliation Country: United States

PACIFIC METAL PRODUCTS (Continued) **S126327099**

Affiliation Zip:	92069
Affiliation Phone:	(760) 580-7686
Affiliation Type Desc:	Environmental Contact
Entity Name:	TERRY MCCAULEY
Entity Title:	Not reported
Affiliation Address:	155 Balboa Street, Suite D13
Affiliation City:	San Marcos
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	92069
Affiliation Phone:	Not reported
Affiliation Type Desc:	CUPA District
Entity Name:	San Diego County Env Health
Entity Title:	Not reported
Affiliation Address:	PO Box 129261
Affiliation City:	San Diego
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	92112-9261
Affiliation Phone:	(858) 505-6880
Affiliation Type Desc:	Parent Corporation
Entity Name:	Pacific Metal Products
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported
Affiliation Type Desc:	Operator
Entity Name:	TERRY MCCAULEY
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(760) 580-7686

21
ENE
< 1/8
0.121 mi.
637 ft.

JULIANNE RULJANCICH **RCRA NonGen / NLR** **1024782482**
1300 GRANITE RD. **CAC003002460**
SAN MARCOS, CA 92069

Relative:
Higher

Actual:
590 ft.

RCRA NonGen / NLR:

Date Form Received by Agency:		2019-02-22 00:00:00.0
Handler Name:	JULIANNE RULJANCICH	
Handler Address:		1300 GRANITE RD.
Handler City,State,Zip:		SAN MARCOS, CA 92069
EPA ID:		CAC003002460
Contact Name:		JULIANNE RULJANCICH
Contact Address:		1300 GRANITE RD.

JULIANNE RULJANCICH (Continued) **1024782482**

Contact City,State,Zip:	SAN MARCOS, CA 92069
Contact Telephone:	360-722-0339
Contact Fax:	Not reported
Contact Email:	CINDYEDWARDS@ALLIANCE-ENVIRO.COM
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	1300 GRANITE RD.
Mailing City,State,Zip:	SAN MARCOS, CA 92069
Owner Name:	JULIANNE RULJANCICH
Owner Type:	Other
Operator Name:	JULIANNE RULJANCICH
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No

JULIANNE RULJANCICH (Continued) **1024782482**

Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2019-02-22 19:42:02.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	JULIANNE RULJANCICH
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1300 GRANITE RD.
Owner/Operator City,State,Zip:	SAN MARCOS, CA 92069
Owner/Operator Telephone:	360-722-0339
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name:	JULIANNE RULJANCICH
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1300 GRANITE RD.
Owner/Operator City,State,Zip:	SAN MARCOS, CA 92069
Owner/Operator Telephone:	360-722-0339
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	2019-02-22 00:00:00.0
Handler Name: JULIANNE RULJANCICH	
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes

JULIANNE RULJANCICH (Continued) **1024782482**

Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 56299
NAICS Description: ALL OTHER WASTE MANAGEMENT SERVICES

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

F22 **SM BRAKE MASTERS** **RCRA NonGen / NLR** **1024841707**
South **1300 ARMORLITE DR** **CAL000391569**
1/8-1/4 **SAN MARCOS, CA 92069**
0.127 mi.
668 ft. **Site 1 of 10 in cluster F**

Relative: **Lower**
Actual: **560 ft.**

RCRA NonGen / NLR:

Date Form Received by Agency:		2013-11-22 00:00:00.0
Handler Name:	SM BRAKE MASTERS	
Handler Address:		1300 ARMORLITE DR
Handler City,State,Zip:		SAN MARCOS, CA 92069
EPA ID:		CAL000391569
Contact Name:		ABRAHAM RODRIGUEZ
Contact Address:		12311 MARMONT PL
Contact City,State,Zip:		MORENO VALLEY, CA 92557
Contact Telephone:		951-667-0084
Contact Fax:		000-000-0000
Contact Email:		BRAKEMASTERS218@YAHOO.COM
Contact Title:		Not reported
EPA Region:		09
Land Type:		Not reported
Federal Waste Generator Description:		Not a generator, verified
Non-Notifier:		Not reported
Biennial Report Cycle:		Not reported
Accessibility:		Not reported
Active Site Indicator:		Handler Activities
State District Owner:		Not reported
State District:		Not reported
Mailing Address:		1300 ARMORLITE DR
Mailing City,State,Zip:		SAN MARCOS, CA 92069-0000
Owner Name:		SM BRAKE MASTERS
Owner Type:		Other
Operator Name:		ABRAHAM RODRIGUEZ
Operator Type:		Other
Short-Term Generator Activity:		No
Importer Activity:		No
Mixed Waste Generator:		No
Transporter Activity:		No
Transfer Facility Activity:		No
Recycler Activity with Storage:		No
Small Quantity On-Site Burner Exemption:		No
Smelting Melting and Refining Furnace Exemption:		No

SM BRAKE MASTERS (Continued) **1024841707**

Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2018-09-06 17:03:28.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	SM BRAKE MASTERS
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1300 ARMORLITE DR
Owner/Operator City,State,Zip:	SAN MARCOS, CA 92069-0000

SM BRAKE MASTERS (Continued) **1024841707**

Owner/Operator Telephone: 951-667-0084
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Operator
Owner/Operator Name: ABRAHAM RODRIGUEZ
Legal Status: Other
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: 12311 MARMONT PL
Owner/Operator City,State,Zip: MORENO VALLEY, CA 92557
Owner/Operator Telephone: 951-667-0084
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:
Receive Date: 2013-11-22 00:00:00.0
Handler Name: SM BRAKE MASTERS
Federal Waste Generator Description: Not a generator, verified
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 56299
NAICS Description: ALL OTHER WASTE MANAGEMENT SERVICES

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

F23 **MISSION AUTO REPAIR** **San Diego Co. HMMD** **S105539561**
South **1300 ARMORLITE DR** **CERS HAZ WASTE** **N/A**
1/8-1/4 **SAN MARCOS, CA 92069** **CERS**
0.127 mi.
668 ft. **Site 2 of 10 in cluster F**

Relative: HMMD SAN DIEGO:
Lower
Name: MISSION AUTO REPAIR
Actual: Address: 1300 ARMORLITE DR
560 ft. City,State,Zip: SAN MARCOS, CA 92069
Permit Number: 113017
Business Type: 6HK26
EPA Id Number: CAL000042648
APN: 219-162-12-00

MISSION AUTO REPAIR (Continued) **S105539561**

Last HMMD Inspection:	08/05/2010
Facility Telephone:	760-744-8100
Permit Status:	INAC
Permit Expiration:	05/31/2013
Date Last Updated:	11/02/2012
Facility Owner:	RICHARD HARGROVE
Facility Mailing Address:	1300 ARMORLITE DR
Facility Mailing City:	SAN MARCOS
Facility Mailing State:	CA
Facility Mailing Zip:	92069-1342
UST Owner:	Not reported
Handle Regulated Hazmat:	Y
Own Or Operate UST:	Not reported
Subject To APSA:	Not reported
Generate Haz Waste:	Y
Treat Haz Waste:	Not reported
Generate Medical Waste:	Not reported

CERS HAZ WASTE:

Name:	BRAKE MASTERS
Address:	1300 ARMORLITE DR
City,State,Zip:	SAN MARCOS, CA 92069
Site ID:	363941
CERS ID:	10376683
CERS Description:	Hazardous Waste Generator

CERS:

Name:	BRAKE MASTERS
Address:	1300 ARMORLITE DR
City,State,Zip:	SAN MARCOS, CA 92069
Site ID:	363941
CERS ID:	10376683
CERS Description:	Chemical Storage Facilities

Violations:

Site ID:	363941
Site Name:	BRAKE MASTERS
Violation Date:	12-07-2017
Citation:	HSC 6.95 25505(a)(4) - California Health and Safety Code, Chapter 6.95, Section(s) 25505(a)(4)
Violation Description:	Failure to provide initial and annual training to all employees in safety procedures in the event of a release or threatened release of a hazardous material or failure to document and maintain training records for a minimum of three years.
Violation Notes:	Returned to compliance on 02/10/2018.
Violation Division:	San Diego County Department of Env Health
Violation Program:	HMRRP
Violation Source:	CERS

Site ID:	363941
Site Name:	BRAKE MASTERS
Violation Date:	02-04-2016
Citation:	22 CCR 12 66262.40(c) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.40(c)
Violation Description:	Failure to determine if the waste generated is a hazardous waste and to maintain analysis results for three years.
Violation Notes:	Returned to compliance on 02/04/2016.

MISSION AUTO REPAIR (Continued) **S105539561**

Violation Division: San Diego County Department of Env Health
Violation Program: HW
Violation Source: CERS

Site ID: 363941
Site Name: BRAKE MASTERS
Violation Date: 02-04-2016
Citation: HSC 6.95 25507 - California Health and Safety Code, Chapter 6.95, Section(s) 25507
Violation Description: Failure to adequately establish and implement a business plan when storing/handling a hazardous material at or above reportable quantities.
Violation Notes: Returned to compliance on 02/04/2016.
Violation Division: San Diego County Department of Env Health
Violation Program: HMRRP
Violation Source: CERS

Site ID: 363941
Site Name: BRAKE MASTERS
Violation Date: 12-07-2017
Citation: 22 CCR 12 66262.12 - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.12
Violation Description: Failure to obtain an Identification Number prior to treating, storing, disposing of, transporting or offering for transportation any hazardous waste.
Violation Notes: Returned to compliance on 05/10/2018.
Violation Division: San Diego County Department of Env Health
Violation Program: HW
Violation Source: CERS

Site ID: 363941
Site Name: BRAKE MASTERS
Violation Date: 12-07-2017
Citation: 22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f)
Violation Description: Failure to properly label hazardous waste accumulation containers and portable tanks with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date.
Violation Notes: Returned to compliance on 05/29/2018.
Violation Division: San Diego County Department of Env Health
Violation Program: HW
Violation Source: CERS

Site ID: 363941
Site Name: BRAKE MASTERS
Violation Date: 02-04-2016
Citation: HSC 6.95 25508(d) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(d)
Violation Description: Failure to complete and/or electronically submit a business plan when storing/handling a hazardous material at or above reportable quantities.
Violation Notes: Returned to compliance on 02/04/2016.
Violation Division: San Diego County Department of Env Health
Violation Program: HMRRP
Violation Source: CERS

MISSION AUTO REPAIR (Continued) **S105539561**

Evaluation:

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	02-04-2016
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Inspector: Calcagno Leonardo Inspection ID:5431447
Eval Division:	San Diego County Department of Env Health
Eval Program:	HMRRP
Eval Source:	CERS

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	02-04-2016
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Inspector: Calcagno Leonardo Inspection ID:5431447
Eval Division:	San Diego County Department of Env Health
Eval Program:	HW
Eval Source:	CERS

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	10-30-2020
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Inspector: Shaker Mirna Inspection ID:6327938
Eval Division:	San Diego County Department of Env Health
Eval Program:	HMRRP
Eval Source:	CERS

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	12-07-2017
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Inspector: Zmily Zanalee Inspection ID:5842567
Eval Division:	San Diego County Department of Env Health
Eval Program:	HMRRP
Eval Source:	CERS

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	12-07-2017
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Inspector: Zmily Zanalee Inspection ID:5842567
Eval Division:	San Diego County Department of Env Health
Eval Program:	HW
Eval Source:	CERS

Coordinates:

Site ID:	363941
Facility Name:	BRAKE MASTERS
Env Int Type Code:	HWG
Program ID:	10376683
Coord Name:	Not reported
Ref Point Type Desc:	Center of a facility or station.
Latitude:	33.147270
Longitude:	-117.189860

MISSION AUTO REPAIR (Continued) **S105539561**

Affiliation:

Affiliation Type Desc:	Facility Mailing Address
Entity Name:	Mailing Address
Entity Title:	Not reported
Affiliation Address:	1300 Armorlite Dr.
Affiliation City:	San Marcos
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	92069
Affiliation Phone:	Not reported

Affiliation Type Desc:	Legal Owner
Entity Name:	ABRAHAM RODRIGUEZ
Entity Title:	Not reported
Affiliation Address:	1300 Armorlite Dr.
Affiliation City:	San Marcos
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	92069
Affiliation Phone:	(951) 667-0084

Affiliation Type Desc:	Operator
Entity Name:	ABRAHAM RODRIGUEZ
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(951) 667-0084

Affiliation Type Desc:	CUPA District
Entity Name:	San Diego County Env Health
Entity Title:	Not reported
Affiliation Address:	PO Box 129261
Affiliation City:	San Diego
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	92112-9261
Affiliation Phone:	(858) 505-6880

Affiliation Type Desc:	Identification Signer
Entity Name:	ABRAHAM RODRIGUEZ
Entity Title:	OWNER
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

Affiliation Type Desc:	Parent Corporation
Entity Name:	Brake Masters
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported

MISSION AUTO REPAIR (Continued) **S105539561**

Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported
Affiliation Type Desc:	Document Preparer
Entity Name:	ABRAHAM RODRIGUEZ
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported
Affiliation Type Desc:	Environmental Contact
Entity Name:	ABRAHAM RODRIGUEZ
Entity Title:	Not reported
Affiliation Address:	1300 Armorlite Dr.
Affiliation City:	San Marcos
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	92069
Affiliation Phone:	Not reported

F24 **SOLID WASTES SERVICES INC** **HIST UST** **1000247741**
South **224 LOS POSAS RD** **RCRA NonGen / NLR** **CAD054780051**
1/8-1/4 **SAN MARCOS, CA 92078** **FINDS**
0.129 mi.
683 ft. **Site 3 of 10 in cluster F**

Relative: HIST UST:
Lower

Actual:
560 ft.

Name:	SOLID WASTES SERVICES OPER
Address:	224 LAS POSAS ROAD
City,State,Zip:	SAN MARCOS, CA 92069
File Number:	0002F338
URL:	http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0002F338.pdf
Region:	STATE
Facility ID:	00000035184
Facility Type:	Other
Other Type:	SOLID WASTE COLLECTI
Contact Name:	Not reported
Telephone:	6197442700
Owner Name:	SOLID WASTE SERVICES, INC.
Owner Address:	224 LAS POSAS ROAD
Owner City,St,Zip:	SAN MARCOS, CA 92069
Total Tanks:	0003
Tank Num:	001
Container Num:	003150
Year Installed:	1983
Tank Capacity:	00012000
Tank Used for:	PRODUCT
Type of Fuel:	DIESEL
Container Construction Thickness:	.267
Leak Detection:	Sensor Instrument
Tank Num:	002

SOLID WASTES SERVICES INC (Continued) **1000247741**

Container Num:	0002
Year Installed:	1968
Tank Capacity:	00000400
Tank Used for:	WASTE
Type of Fuel:	WASTE OIL
Container Construction Thickness:	Not reported
Leak Detection:	Visual

Tank Num:	003
Container Num:	0001
Year Installed:	1968
Tank Capacity:	00010000
Tank Used for:	PRODUCT
Type of Fuel:	DIESEL
Container Construction Thickness:	Not reported
Leak Detection:	Stock Inventor

Click here for Geo Tracker PDF:

RCRA NonGen / NLR:

Date Form Received by Agency:	1980-10-21 00:00:00.0
Handler Name:	SOLID WASTES SERVICES INC
Handler Address:	224 LOS POSAS RD
Handler City,State,Zip:	SAN MARCOS, CA 92069
EPA ID:	CAD054780051
Contact Name:	ENVIRONMENTAL MANAGER
Contact Address:	224 LOS POSAS RD
Contact City,State,Zip:	SAN MARCOS, CA 92069
Contact Telephone:	714-744-2700
Contact Fax:	Not reported
Contact Email:	Not reported
Contact Title:	Not reported
EPA Region:	09
Land Type:	Other
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	CA
State District:	4
Mailing Address:	PO BOX 668
Mailing City,State,Zip:	SAN MARCOS, CA 92069
Owner Name:	JAMES W MASHBURN & VIRGINIA J MASON
Owner Type:	Private
Operator Name:	NOT REQUIRED
Operator Type:	Private
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	Yes
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No

SOLID WASTES SERVICES INC (Continued) **1000247741**

Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2002-06-27 03:20:43.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Operator
Owner/Operator Name:	NOT REQUIRED
Legal Status:	Private
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	NOT REQUIRED
Owner/Operator City,State,Zip:	NOT REQUIRED, ME 99999
Owner/Operator Telephone:	415-555-1212
Owner/Operator Telephone Ext:	Not reported

SOLID WASTES SERVICES INC (Continued) **1000247741**

Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner
Owner/Operator Name: JAMES W MASHBURN & VIRGINIA J MASON
Legal Status: Private
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: NOT REQUIRED
Owner/Operator City,State,Zip: NOT REQUIRED, ME 99999
Owner/Operator Telephone: 415-555-1212
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:
Receive Date: 1980-10-21 00:00:00.0
Handler Name: SOLID WASTES SERVICES INC
Federal Waste Generator Description: Not a generator, verified
State District Owner: CA
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 562
NAICS Description: WASTE MANAGEMENT AND REMEDIATION SERVICES

Facility Has Received Notices of Violation:
Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: State Statute or Regulation
Date Violation was Determined: 2020-02-25 00:00:00.0
Actual Return to Compliance Date: 2020-09-09 00:00:00.0
Return to Compliance Qualifier: Documented
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 502
Date of Enforcement Action: 2020-06-15 00:00:00.0
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number:Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported

SOLID WASTES SERVICES INC (Continued) **1000247741**

Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: State Statute or Regulation
Date Violation was Determined: 2020-02-25 00:00:00.0
Actual Return to Compliance Date: 2020-09-09 00:00:00.0
Return to Compliance Qualifier: Documented
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 202
Date of Enforcement Action: 2020-02-25 00:00:00.0
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: WRITTEN INFORMAL
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: Universal Waste - Large Quantity Handlers

SOLID WASTES SERVICES INC (Continued) **1000247741**

Date Violation was Determined: 2015-01-26 00:00:00.0
Actual Return to Compliance Date: 2015-02-11 00:00:00.0
Return to Compliance Qualifier: Documented
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 201
Date of Enforcement Action: 2015-01-26 00:00:00.0
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: WRITTEN INFORMAL
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: Universal Waste - Large Quantity Handlers
Date Violation was Determined: 2015-01-26 00:00:00.0
Actual Return to Compliance Date: 2016-01-27 00:00:00.0
Return to Compliance Qualifier: Documented
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 201
Date of Enforcement Action: 2015-01-26 00:00:00.0
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported

SOLID WASTES SERVICES INC (Continued) **1000247741**

Enforcement Type:	WRITTEN INFORMAL
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported

Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	State Statute or Regulation
Date Violation was Determined:	2020-02-25 00:00:00.0
Actual Return to Compliance Date:	2020-09-09 00:00:00.0
Return to Compliance Qualifier:	Documented
Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	202
Date of Enforcement Action:	2020-02-25 00:00:00.0
Enforcement Responsible Agency:	State
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	WRITTEN INFORMAL
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported

Found Violation:	No
Agency Which Determined Violation:	Not reported
Violation Short Description:	Not reported

SOLID WASTES SERVICES INC (Continued) **1000247741**

Date Violation was Determined:	Not reported
Actual Return to Compliance Date:	Not reported
Return to Compliance Qualifier:	Not reported
Violation Responsible Agency:	Not reported
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported

Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	State Statute or Regulation
Date Violation was Determined:	2020-02-25 00:00:00.0
Actual Return to Compliance Date:	2020-09-09 00:00:00.0
Return to Compliance Qualifier:	Documented
Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	502
Date of Enforcement Action:	2020-06-15 00:00:00.0
Enforcement Responsible Agency:	State
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported

SOLID WASTES SERVICES INC (Continued) **1000247741**

Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: State Statute or Regulation
Date Violation was Determined: 2020-02-25 00:00:00.0
Actual Return to Compliance Date: 2020-10-26 00:00:00.0
Return to Compliance Qualifier: Documented
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 302
Date of Enforcement Action: 2020-08-11 00:00:00.0
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: LETTER OF INTENT TO INITIATE ENFORCEMENT ACTION
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: Universal Waste - General

SOLID WASTES SERVICES INC (Continued) **1000247741**

Date Violation was Determined:	2015-01-26 00:00:00.0
Actual Return to Compliance Date:	2016-01-27 00:00:00.0
Return to Compliance Qualifier:	Documented
Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	501
Date of Enforcement Action:	2015-02-11 00:00:00.0
Enforcement Responsible Agency:	State
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported

Found Violation:	No
Agency Which Determined Violation:	Not reported
Violation Short Description:	Not reported
Date Violation was Determined:	Not reported
Actual Return to Compliance Date:	Not reported
Return to Compliance Qualifier:	Not reported
Violation Responsible Agency:	Not reported
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported

SOLID WASTES SERVICES INC (Continued) **1000247741**

Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported

Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	Universal Waste - Large Quantity Handlers
Date Violation was Determined:	2015-01-26 00:00:00.0
Actual Return to Compliance Date:	2015-02-11 00:00:00.0
Return to Compliance Qualifier:	Not Resolved
Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	501
Date of Enforcement Action:	2015-02-11 00:00:00.0
Enforcement Responsible Agency:	State
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported

Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	State Statute or Regulation

SOLID WASTES SERVICES INC (Continued) **1000247741**

Date Violation was Determined:	2020-02-25 00:00:00.0
Actual Return to Compliance Date:	2020-10-26 00:00:00.0
Return to Compliance Qualifier:	Documented
Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	304
Date of Enforcement Action:	2020-12-18 00:00:00.0
Enforcement Responsible Agency:	State
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	SINGLE SITE CA/FO
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	18000
Paid Amount:	Not reported
Final Count:	1
Final Amount:	18000

Found Violation:	No
Agency Which Determined Violation:	Not reported
Violation Short Description:	Not reported
Date Violation was Determined:	Not reported
Actual Return to Compliance Date:	Not reported
Return to Compliance Qualifier:	Not reported
Violation Responsible Agency:	Not reported
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported

SOLID WASTES SERVICES INC (Continued) **1000247741**

Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: Universal Waste - Large Quantity Handlers
Date Violation was Determined: 2015-01-26 00:00:00.0
Actual Return to Compliance Date: 2015-02-11 00:00:00.0
Return to Compliance Qualifier: Documented
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 201
Date of Enforcement Action: 2015-01-26 00:00:00.0
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: WRITTEN INFORMAL
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: Universal Waste - General

SOLID WASTES SERVICES INC (Continued) **1000247741**

Date Violation was Determined: 2015-01-26 00:00:00.0
Actual Return to Compliance Date: 2015-02-11 00:00:00.0
Return to Compliance Qualifier: Documented
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 201
Date of Enforcement Action: 2015-01-26 00:00:00.0
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: WRITTEN INFORMAL
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: State Statute or Regulation
Date Violation was Determined: 2020-02-25 00:00:00.0
Actual Return to Compliance Date: 2020-09-09 00:00:00.0
Return to Compliance Qualifier: Documented
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 202
Date of Enforcement Action: 2020-02-25 00:00:00.0
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported

SOLID WASTES SERVICES INC (Continued) **1000247741**

Enforcement Type: WRITTEN INFORMAL
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: State Statute or Regulation
Date Violation was Determined: 2020-02-25 00:00:00.0
Actual Return to Compliance Date: 2020-09-09 00:00:00.0
Return to Compliance Qualifier: Documented
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 502
Date of Enforcement Action: 2020-06-15 00:00:00.0
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: State Statute or Regulation

SOLID WASTES SERVICES INC (Continued) **1000247741**

Date Violation was Determined: 2020-02-25 00:00:00.0
Actual Return to Compliance Date: 2020-09-09 00:00:00.0
Return to Compliance Qualifier: Documented
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 202
Date of Enforcement Action: 2020-02-25 00:00:00.0
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: WRITTEN INFORMAL
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: Universal Waste - General
Date Violation was Determined: 2015-01-26 00:00:00.0
Actual Return to Compliance Date: 2015-02-11 00:00:00.0
Return to Compliance Qualifier: Documented
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 501
Date of Enforcement Action: 2015-02-11 00:00:00.0
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported

SOLID WASTES SERVICES INC (Continued) **1000247741**

Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported

Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	Universal Waste - Large Quantity Handlers
Date Violation was Determined:	2015-01-26 00:00:00.0
Actual Return to Compliance Date:	2015-02-11 00:00:00.0
Return to Compliance Qualifier:	Documented
Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	501
Date of Enforcement Action:	2015-02-11 00:00:00.0
Enforcement Responsible Agency:	State
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported

Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	State Statute or Regulation

SOLID WASTES SERVICES INC (Continued) **1000247741**

Date Violation was Determined:	2020-02-25 00:00:00.0
Actual Return to Compliance Date:	2020-09-09 00:00:00.0
Return to Compliance Qualifier:	Documented
Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	502
Date of Enforcement Action:	2020-06-15 00:00:00.0
Enforcement Responsible Agency:	State
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported

Found Violation:	No
Agency Which Determined Violation:	Not reported
Violation Short Description:	Not reported
Date Violation was Determined:	Not reported
Actual Return to Compliance Date:	Not reported
Return to Compliance Qualifier:	Not reported
Violation Responsible Agency:	Not reported
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported

SOLID WASTES SERVICES INC (Continued) **1000247741**

Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: Universal Waste - General
Date Violation was Determined: 2015-01-26 00:00:00.0
Actual Return to Compliance Date: 2015-02-11 00:00:00.0
Return to Compliance Qualifier: Documented
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 201
Date of Enforcement Action: 2015-01-26 00:00:00.0
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: WRITTEN INFORMAL
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: State Statute or Regulation

SOLID WASTES SERVICES INC (Continued) **1000247741**

Date Violation was Determined: 2020-02-25 00:00:00.0
Actual Return to Compliance Date: 2020-09-09 00:00:00.0
Return to Compliance Qualifier: Documented
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 302
Date of Enforcement Action: 2020-08-11 00:00:00.0
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: LETTER OF INTENT TO INITIATE ENFORCEMENT ACTION
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: State Statute or Regulation
Date Violation was Determined: 2020-02-25 00:00:00.0
Actual Return to Compliance Date: 2020-10-26 00:00:00.0
Return to Compliance Qualifier: Documented
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 202
Date of Enforcement Action: 2020-02-25 00:00:00.0
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported

SOLID WASTES SERVICES INC (Continued) **1000247741**

Enforcement Type: WRITTEN INFORMAL
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: State Statute or Regulation
Date Violation was Determined: 2020-02-25 00:00:00.0
Actual Return to Compliance Date: 2020-09-09 00:00:00.0
Return to Compliance Qualifier: Documented
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 502
Date of Enforcement Action: 2020-06-15 00:00:00.0
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: Universal Waste - Large Quantity Handlers

SOLID WASTES SERVICES INC (Continued) **1000247741**

Date Violation was Determined: 2015-01-26 00:00:00.0
Actual Return to Compliance Date: 2015-02-11 00:00:00.0
Return to Compliance Qualifier: Documented
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 201
Date of Enforcement Action: 2015-01-26 00:00:00.0
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: WRITTEN INFORMAL
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: State Statute or Regulation
Date Violation was Determined: 2020-02-25 00:00:00.0
Actual Return to Compliance Date: 2020-10-26 00:00:00.0
Return to Compliance Qualifier: Documented
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 502
Date of Enforcement Action: 2020-06-15 00:00:00.0
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported

SOLID WASTES SERVICES INC (Continued) **1000247741**

Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: Universal Waste - Large Quantity Handlers
Date Violation was Determined: 2015-01-26 00:00:00.0
Actual Return to Compliance Date: 2015-02-11 00:00:00.0
Return to Compliance Qualifier: Not Resolved
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 201
Date of Enforcement Action: 2015-01-26 00:00:00.0
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: WRITTEN INFORMAL
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: Universal Waste - General

SOLID WASTES SERVICES INC (Continued) **1000247741**

Date Violation was Determined:	2015-01-26 00:00:00.0
Actual Return to Compliance Date:	2015-02-11 00:00:00.0
Return to Compliance Qualifier:	Documented
Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	501
Date of Enforcement Action:	2015-02-11 00:00:00.0
Enforcement Responsible Agency:	State
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported

Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	Universal Waste - Large Quantity Handlers
Date Violation was Determined:	2015-01-26 00:00:00.0
Actual Return to Compliance Date:	2015-02-11 00:00:00.0
Return to Compliance Qualifier:	Documented
Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	501
Date of Enforcement Action:	2015-02-11 00:00:00.0
Enforcement Responsible Agency:	State
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported

SOLID WASTES SERVICES INC (Continued) **1000247741**

Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: Universal Waste - General

SOLID WASTES SERVICES INC (Continued) **1000247741**

Date Violation was Determined: 2015-01-26 00:00:00.0
Actual Return to Compliance Date: 2015-02-11 00:00:00.0
Return to Compliance Qualifier: Documented
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 501
Date of Enforcement Action: 2015-02-11 00:00:00.0
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: State Statute or Regulation
Date Violation was Determined: 2020-02-25 00:00:00.0
Actual Return to Compliance Date: 2020-09-09 00:00:00.0
Return to Compliance Qualifier: Documented
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 304
Date of Enforcement Action: 2020-12-18 00:00:00.0
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported

SOLID WASTES SERVICES INC (Continued) **1000247741**

Enforcement Type: SINGLE SITE CA/FO
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: 18000
Paid Amount: Not reported
Final Count: 1
Final Amount: 18000

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: Universal Waste - General
Date Violation was Determined: 2015-01-26 00:00:00.0
Actual Return to Compliance Date: 2016-01-27 00:00:00.0
Return to Compliance Qualifier: Documented
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 201
Date of Enforcement Action: 2015-01-26 00:00:00.0
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: WRITTEN INFORMAL
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: Universal Waste - Large Quantity Handlers

SOLID WASTES SERVICES INC (Continued) **1000247741**

Date Violation was Determined:	2015-01-26 00:00:00.0
Actual Return to Compliance Date:	2016-01-27 00:00:00.0
Return to Compliance Qualifier:	Documented
Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	501
Date of Enforcement Action:	2015-02-11 00:00:00.0
Enforcement Responsible Agency:	State
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported

Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	Universal Waste - General
Date Violation was Determined:	2015-01-26 00:00:00.0
Actual Return to Compliance Date:	2015-02-11 00:00:00.0
Return to Compliance Qualifier:	Documented
Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	201
Date of Enforcement Action:	2015-01-26 00:00:00.0
Enforcement Responsible Agency:	State
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported

SOLID WASTES SERVICES INC (Continued) **1000247741**

Enforcement Type: WRITTEN INFORMAL
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: Universal Waste - General
Date Violation was Determined: 2015-01-26 00:00:00.0
Actual Return to Compliance Date: 2015-02-11 00:00:00.0
Return to Compliance Qualifier: Not Resolved
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 501
Date of Enforcement Action: 2015-02-11 00:00:00.0
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: State Statute or Regulation

SOLID WASTES SERVICES INC (Continued) **1000247741**

Date Violation was Determined: 2020-02-25 00:00:00.0
Actual Return to Compliance Date: 2020-09-09 00:00:00.0
Return to Compliance Qualifier: Documented
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 202
Date of Enforcement Action: 2020-02-25 00:00:00.0
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: WRITTEN INFORMAL
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: Universal Waste - Large Quantity Handlers
Date Violation was Determined: 2015-01-26 00:00:00.0
Actual Return to Compliance Date: 2015-02-11 00:00:00.0
Return to Compliance Qualifier: Documented
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 501
Date of Enforcement Action: 2015-02-11 00:00:00.0
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported

SOLID WASTES SERVICES INC (Continued) **1000247741**

Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: Universal Waste - General
Date Violation was Determined: 2015-01-26 00:00:00.0
Actual Return to Compliance Date: 2015-02-11 00:00:00.0
Return to Compliance Qualifier: Not Resolved
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 201
Date of Enforcement Action: 2015-01-26 00:00:00.0
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: WRITTEN INFORMAL
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Evaluation Action Summary:
Evaluation Date: 2020-02-25 00:00:00.0
Evaluation Responsible Agency: State

SOLID WASTES SERVICES INC (Continued) **1000247741**

Found Violation:	Yes
Evaluation Type Description:	FOCUSED COMPLIANCE INSPECTION
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	2020-09-09 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	2020-02-25 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	FOCUSED COMPLIANCE INSPECTION
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	2020-09-09 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	2015-01-26 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	FOCUSED COMPLIANCE INSPECTION
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	2015-02-11 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	2015-01-26 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	FOCUSED COMPLIANCE INSPECTION
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	2016-01-27 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	2020-02-25 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	FOCUSED COMPLIANCE INSPECTION
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	2020-09-09 00:00:00.0

SOLID WASTES SERVICES INC (Continued) **1000247741**

Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	2020-02-25 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	SIGNIFICANT NON-COMPLIER
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	2020-02-25 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	FOCUSED COMPLIANCE INSPECTION
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	2020-09-09 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	2020-02-25 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	FOCUSED COMPLIANCE INSPECTION
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	2020-10-26 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	2015-01-26 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	FOCUSED COMPLIANCE INSPECTION
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	2016-01-27 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

SOLID WASTES SERVICES INC (Continued) **1000247741**

Evaluation Date:	2008-06-02 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	FOCUSED COMPLIANCE INSPECTION
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	2015-01-26 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	FOCUSED COMPLIANCE INSPECTION
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	2015-02-11 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	2020-02-25 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	FOCUSED COMPLIANCE INSPECTION
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	2020-10-26 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	1985-05-06 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	NON-FINANCIAL RECORD REVIEW
Evaluation Responsible Person Identifier:	R9
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	2015-01-26 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	FOCUSED COMPLIANCE INSPECTION
Evaluation Responsible Person Identifier:	Not reported

SOLID WASTES SERVICES INC (Continued) **1000247741**

Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	2015-02-11 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	2015-01-26 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	FOCUSED COMPLIANCE INSPECTION
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	2015-02-11 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	2020-02-25 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	FOCUSED COMPLIANCE INSPECTION
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	2020-09-09 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	2020-02-25 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	FOCUSED COMPLIANCE INSPECTION
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	2020-09-09 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	2020-02-25 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	FOCUSED COMPLIANCE INSPECTION
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	2020-09-09 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported

SOLID WASTES SERVICES INC (Continued) **1000247741**

Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	2015-01-26 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	FOCUSED COMPLIANCE INSPECTION
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	2015-02-11 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	2015-01-26 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	FOCUSED COMPLIANCE INSPECTION
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	2015-02-11 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	2020-02-25 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	FOCUSED COMPLIANCE INSPECTION
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	2020-09-09 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	2020-10-26 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	NOT A SIGNIFICANT NON-COMPLIER
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	2015-01-26 00:00:00.0
Evaluation Responsible Agency:	State

SOLID WASTES SERVICES INC (Continued) **1000247741**

Found Violation:	Yes
Evaluation Type Description:	FOCUSED COMPLIANCE INSPECTION
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	2015-02-11 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	2020-02-25 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	FOCUSED COMPLIANCE INSPECTION
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	2020-09-09 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	2020-02-25 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	FOCUSED COMPLIANCE INSPECTION
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	2020-10-26 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	2020-02-25 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	FOCUSED COMPLIANCE INSPECTION
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	2020-09-09 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	2015-01-26 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	FOCUSED COMPLIANCE INSPECTION
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	2015-02-11 00:00:00.0

SOLID WASTES SERVICES INC (Continued) **1000247741**

Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	2020-02-25 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	FOCUSED COMPLIANCE INSPECTION
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	2020-10-26 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	2015-01-26 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	FOCUSED COMPLIANCE INSPECTION
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	2015-02-11 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	2015-01-26 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	FOCUSED COMPLIANCE INSPECTION
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	2015-02-11 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	2015-01-26 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	FOCUSED COMPLIANCE INSPECTION
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	2015-02-11 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

SOLID WASTES SERVICES INC (Continued) **1000247741**

Evaluation Date:	1985-05-06 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	2015-01-26 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	FOCUSED COMPLIANCE INSPECTION
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	2015-02-11 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	2020-02-25 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	FOCUSED COMPLIANCE INSPECTION
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	2020-09-09 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	2015-01-26 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	FOCUSED COMPLIANCE INSPECTION
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	2016-01-27 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	2015-01-26 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	FOCUSED COMPLIANCE INSPECTION
Evaluation Responsible Person Identifier:	Not reported

SOLID WASTES SERVICES INC (Continued) **1000247741**

Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	2016-01-27 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	2015-01-26 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	FOCUSED COMPLIANCE INSPECTION
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	2015-02-11 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	2015-01-26 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	FOCUSED COMPLIANCE INSPECTION
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	2015-02-11 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	2020-02-25 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	FOCUSED COMPLIANCE INSPECTION
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	2020-09-09 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	2015-01-26 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	FOCUSED COMPLIANCE INSPECTION
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	2015-02-11 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported

SOLID WASTES SERVICES INC (Continued) **1000247741**

Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	2015-01-26 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	FOCUSED COMPLIANCE INSPECTION
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	2015-02-11 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

FINDS:
Registry ID: 110002649956

Click Here:

Environmental Interest/Information System:
California Hazardous Waste Tracking System - Datamart (HWTS-DATAMART) provides California with information on hazardous waste shipments for generators, transporters, and treatment, storage, and disposal facilities.
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

F25 **MASHBURN WASTE** **LUST** **S104406486**
South **224 LAS POSAS RD S** **N/A**
1/8-1/4 **SAN MARCOS, CA 92069**
0.129 mi.
683 ft. **Site 4 of 10 in cluster F**

Relative: **Lower**

Actual: **560 ft.**

LUST REG 9:

Region:	9
Status:	Preliminary site assessment workplan submitted
Case Number:	9UT3726
Local Case:	H10646-004
Substance:	Diesel
Qty Leaked:	0
Abate Method:	Not reported
Local Agency:	San Diego
How Found:	Other Means
How Stopped:	Other Means
Source:	Piping
Cause:	Unknown
Lead Agency:	Local Agency
Case Type:	Other ground water affected
Date Found:	09/09/1998

MASHBURN WASTE (Continued) **S104406486**

Date Stopped: 09/09/1998
Confirm Date: 09/09/1998
Submit Workplan: 9/30/98
Prelim Assess: / /
Desc Pollution: Not reported
Remed Plan: / /
Remed Action: Not reported
Began Monitor: Not reported
Release Date: 09/09/1998
Enforce Date: 9/30/98
Closed Date: Not reported
Enforce Type: SEL
Pilot Program: LOP
Basin Number: 904.52
GW Depth: Not reported
Beneficial Use: MUNBU
NPDES Number: Not reported
Priority: 3A
File Dispn: Administratively opened on database, however no file physically exists
Interim Remedial Actions: Not reported
Cleanup and Abatement order Number: Not reported
Waste Discharge Requirement Number: Not reported

F26 **PACIFIC BELL SNMCCA11/DB151** **UST** **U003789294**
South **225 N LAS POSAS RD** **San Diego Co. HMMD** **N/A**
1/8-1/4 **SAN MARCOS, CA 92069** **SWEEPS UST**
0.136 mi. **CERS TANKS**
719 ft. **Site 5 of 10 in cluster F** **CERS**

Relative: **Lower**
Actual: **560 ft.**

UST:
Name: PACIFIC BELL SNMCCA11/DB151
Address: 225 N LAS POSAS RD
City,State,Zip: SAN MARCOS, CA 92069
Facility ID: H06360
Permitting Agency: SAN DIEGO COUNTY
Latitude: 33.1488065
Longitude: -117.1877583

Name: AT&T CALIFORNIA - DB151
Address: 225 N LAS POSAS RD
City,State,Zip: SAN MARCOS, CA 92069
Facility ID: 37-000-106360
Permitting Agency: San Diego County Department of Environmental Health
Latitude: 33.14718
Longitude: -117.18937

HMMD SAN DIEGO:
Name: PACIFIC BELL DBA AT&T (DB151)
Address: 225 N LAS POSAS RD
City,State,Zip: SAN MARCOS, CA 92069
Permit Number: 106360
Business Type: 6HK52
EPA Id Number: CAT080030620
APN: 219-162-14-00
Last HMMD Inspection: 01/27/2012
Facility Telephone: 949-551-7718
Permit Status: OPEN

PACIFIC BELL SNMCCA11/DB151 (Continued) **U003789294**

Permit Expiration:	06/30/2013
Date Last Updated:	11/02/2012
Facility Owner:	PACIFIC BELL DBA AT&T (DB151)
Facility Mailing Address:	PO BOX 5095
Facility Mailing City:	SAN RAMON
Facility Mailing State:	CA
Facility Mailing Zip:	94583-0995
UST Owner:	PACIFIC BELL
Handle Regulated Hazmat:	Y
Own Or Operate UST:	Y
Subject To APSA:	Not reported
Generate Haz Waste:	Y
Treat Haz Waste:	Not reported
Generate Medical Waste:	Not reported

Inventory Active Permits (not SQG Medical):

Permit Number:	106360
Update Date:	11/02/2012
Case Number:	68476-34-6
Name:	DIESEL
Other Information:	UNDERGROUND TANK 106360 T002 DIESEL
Material Waste:	Material
Hazardous Categories 1:	FIRE
Hazardous Categories 2:	Not reported

Permit Number:	106360
Update Date:	11/02/2012
Case Number:	7664-93-9
Name:	SULFURIC ACID
Other Information:	BATTERY ELECTROLYTE
Material Waste:	Material
Hazardous Categories 1:	REACTIVE
Hazardous Categories 2:	EXTREMELY HAZARDOUS

Violations Active Permits:

Permit Number:	106360
Update Date:	11/02/2012
Inspection Date:	06/01/2005
Violation Code:	6HV3251
Violation:	MONITOR IN ALARM AT START OF INSPECTION
Violation Citation:	Monitor in alarm at beginning of inspection. Alarm not investigated, recorded or reported. 2632 (c)(2)(B), 2650(e)(3)&(4), 2630(d)
Activity:	ACTIVE

Permit Number:	106360
Update Date:	11/02/2012
Inspection Date:	05/30/2003
Violation Code:	6HV3105
Violation:	NO CURRENT FINANCIAL RESPONSIBILITY
Violation Citation:	Current evidence of financial responsibility not available. 25292.2(a), 25299.33; 2809
Activity:	ACTIVE

Permit Number:	106360
Update Date:	11/02/2012
Inspection Date:	05/30/2003
Violation Code:	6HV3112

PACIFIC BELL SNMCCA11/DB151 (Continued) **U003789294**

Violation: 2NDRY CONT TEST NOT DONE (6/36 MOS.)
Violation Citation: Secondary containment testing not conducted at 6months/36 months. 25284.1; 2637(a)
Activity: ACTIVE

Permit Number: 106360
Update Date: 11/02/2012
Inspection Date: 05/30/2003
Violation Code: 6HV3113
Violation: 2NDRY CONT TEST NOT SENT TO CUPA
Violation Citation: Secondary Containment testing not submitted to CUPA within 30 days. 2637(a)(4)
Activity: ACTIVE

UST:
UST Name: UNDERGROUND TANK 106360 T001
Last Update: 2012-11-02 14:17:38
Permit Number: 106360
Tank Type: SINGLE WALL
Additional Id: D-80-1K
Capacity Gallons: 1000
UST Contents: DIESEL
Other Content Info: DIESEL
Reg Status: REMOVED
Remove Close Date: 1994-12-07 00:00:00
Year Installed: 1980-01-01 00:00:00
Pipe Type: SINGLE WALL
Delivery System: SUCTION
Monitor Code: 05
UST Monitor Method: SW TANK DW PIPE W/ POS SHUTOFF-ALARM ON LLD W/ SIRS:SIR ANALY MONTHLY, TANK TEST BIENNIALLY, PIPE TEST ANN 0.1 G/HR OR MO 0.2 G/HR

UST Name: UNDERGROUND TANK 106360 T002
Last Update: 2012-11-02 14:17:38
Permit Number: 106360
Tank Type: DOUBLE WALL
Additional Id: RT0968 DIESEL
Capacity Gallons: 5000
UST Contents: DIESEL
Other Content Info: DIESEL
Reg Status: ACTIVE
Remove Close Date: Not reported
Year Installed: 1994-01-01 00:00:00
Pipe Type: DOUBLE WALL
Delivery System: SUCTION
Monitor Code: 21
UST Monitor Method: DW TANK DW SUCTION AND/ OR GRAVITY PIPING WITH INTERSTITIAL MONITORS: INTERSTITIAL.

Name: PACIFIC BELL DBA AT&T (DB151)
Address: 225 N LAS POSAS RD
City,State,Zip: SAN MARCOS, CA 92069
Permit Number: 106360
Business Type: 6HK52
EPA Id Number: CAT080030620
APN: 219-162-14-00

PACIFIC BELL SNMCCA11/DB151 (Continued) **U003789294**

Last HMMD Inspection:	01/27/2012
Facility Telephone:	949-551-7718
Permit Status:	OPEN
Permit Expiration:	06/30/2013
Date Last Updated:	11/02/2012
Facility Owner:	PACIFIC BELL DBA AT&T (DB151)
Facility Mailing Address:	PO BOX 5095
Facility Mailing City:	SAN RAMON
Facility Mailing State:	CA
Facility Mailing Zip:	94583-0995
UST Owner:	PACIFIC BELL
Handle Regulated Hazmat:	Y
Own Or Operate UST:	Y
Subject To APSA:	Not reported
Generate Haz Waste:	Y
Treat Haz Waste:	Not reported
Generate Medical Waste:	Not reported

Inventory Active Permits (not SQG Medical):

Permit Number:	106360
Update Date:	11/02/2012
Case Number:	68476-34-6
Name:	DIESEL
Other Information:	UNDERGROUND TANK 106360 T002 DIESEL
Material Waste:	Material
Hazardous Categories 1:	FIRE
Hazardous Categories 2:	Not reported

Permit Number:	106360
Update Date:	11/02/2012
Case Number:	7664-93-9
Name:	SULFURIC ACID
Other Information:	BATTERY ELECTROLYTE
Material Waste:	Material
Hazardous Categories 1:	REACTIVE
Hazardous Categories 2:	EXTREMELY HAZARDOUS

Violations Active Permits:

Permit Number:	106360
Update Date:	11/02/2012
Inspection Date:	06/01/2005
Violation Code:	6HV3251
Violation:	MONITOR IN ALARM AT START OF INSPECTION
Violation Citation:	Monitor in alarm at beginning of inspection. Alarm not investigated, recorded or reported. 2632 (c)(2)(B), 2650(e)(3)&(4), 2630(d)
Activity:	ACTIVE

Permit Number:	106360
Update Date:	11/02/2012
Inspection Date:	05/30/2003
Violation Code:	6HV3105
Violation:	NO CURRENT FINANCIAL RESPONSIBILITY
Violation Citation:	Current evidence of financial responsibility not available. 25292.2(a), 25299.33; 2809
Activity:	ACTIVE

Permit Number:	106360

PACIFIC BELL SNMCCA11/DB151 (Continued) **U003789294**

Update Date: 11/02/2012
Inspection Date: 05/30/2003
Violation Code: 6HV3112
Violation: 2NDRY CONT TEST NOT DONE (6/36 MOS.)
Violation Citation: Secondary containment testing not conducted at 6months/36 months. 25284.1; 2637(a)
Activity: ACTIVE

Permit Number: 106360
Update Date: 11/02/2012
Inspection Date: 05/30/2003
Violation Code: 6HV3113
Violation: 2NDRY CONT TEST NOT SENT TO CUPA
Violation Citation: Secondary Containment testing not submitted to CUPA within 30 days. 2637(a)(4)
Activity: ACTIVE

UST:
UST Name: UNDERGROUND TANK 106360 T001
Last Update: 2012-11-02 14:17:38
Permit Number: 106360
Tank Type: SINGLE WALL
Additional Id: D-80-1K
Capacity Gallons: 1000
UST Contents: DIESEL
Other Content Info: DIESEL
Reg Status: REMOVED
Remove Close Date: 1994-12-07 00:00:00
Year Installed: 1980-01-01 00:00:00
Pipe Type: SINGLE WALL
Delivery System: SUCTION
Monitor Code: 05
UST Monitor Method: SW TANK DW PIPE W/ POS SHUTOFF-ALARM ON LLD W/ SIRS:SIR ANALY MONTHLY, TANK TEST BIENNIALLY, PIPE TEST ANN 0.1 G/HR OR MO 0.2 G/HR

UST Name: UNDERGROUND TANK 106360 T002
Last Update: 2012-11-02 14:17:38
Permit Number: 106360
Tank Type: DOUBLE WALL
Additional Id: RT0968 DIESEL
Capacity Gallons: 5000
UST Contents: DIESEL
Other Content Info: DIESEL
Reg Status: ACTIVE
Remove Close Date: Not reported
Year Installed: 1994-01-01 00:00:00
Pipe Type: DOUBLE WALL
Delivery System: SUCTION
Monitor Code: 21
UST Monitor Method: DW TANK DW SUCTION AND/ OR GRAVITY PIPING WITH INTERSTITIAL MONITORS: INTERSTITIAL.

SWEEPS UST:
Name: PACIFIC BELL SNMCCA11/DB151
Address: 225 N LAS POSAS RD

PACIFIC BELL SNMCCA11/DB151 (Continued) **U003789294**

City: SAN MARCOS
Status: Active
Comp Number: 6360
Number: 9
Board Of Equalization: 44-001027
Referral Date: Not reported
Action Date: 06-26-92
Created Date: 02-29-88
Owner Tank Id: Not reported
SWRCB Tank Id: 37-000-006360-000001
Tank Status: A
Capacity: 1000
Active Date: Not reported
Tank Use: M.V. FUEL
STG: P
Content: OTHER
Number Of Tanks: 1

CERS TANKS:
Name: AT&T CALIFORNIA - DB151
Address: 225 N LAS POSAS RD
City,State,Zip: SAN MARCOS, CA 92069
Site ID: 434495
CERS ID: 10375993
CERS Description: Underground Storage Tank

CERS:
Name: AT&T CALIFORNIA - DB151
Address: 225 N LAS POSAS RD
City,State,Zip: SAN MARCOS, CA 92069
Site ID: 434495
CERS ID: 10375993
CERS Description: Chemical Storage Facilities

Violations:
Site ID: 434495
Site Name: AT&T California - DB151
Violation Date: 10-11-2018
Citation: 23 CCR 16 2712(i) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2712(i)
Violation Description: Failure to have current UST Monitoring Plan available on site.
Violation Notes: Returned to compliance on 02/14/2019. Inspection Sequence ID:6005611;Tank ID:20360;Violation Description:Failure to have a current UST Monitoring Plan available on site. 23 CCR 2712(i)
Violation Division: San Diego County Department of Env Health
Violation Program: UST
Violation Source: CERS

Site ID: 434495
Site Name: AT&T California - DB151
Violation Date: 10-11-2018
Citation: 23 CCR 16 2712(b)(1)(G) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2712(b)(1)(G)
Violation Description: Failure to comply with one or more of the following overfill prevention equipment requirements: Alert the transfer operator when the tank is 90 percent full by restricting the flow into the tank or triggering an audible and visual alarm; or Restrict delivery of flow

PACIFIC BELL SNMCCA11/DB151 (Continued) **U003789294**

to the tank at least 30 minutes before the tank overfills, provided the restriction occurs when the tank is filled to no more than 95 percent of capacity; and activate an audible alarm at least five minutes before the tank overfills; or Provide positive shut-off of flow to the tank when the tank is filled to no more than 95 percent of capacity; or Provide positive shut-off of flow to the tank so that none of the fittings located on the top of the tank are exposed to product due to overfilling. Install/retrofit overfill prevention equipment that does not use flow restrictors on vent piping to meet overfill prevention equipment requirements when the overfill prevention equipment is installed, repaired, or replaced on and after October 1,- 2018. For USTs installed before October 1, 2018, perform an inspection by October 13, 2018 and every 36 months thereafter. For USTs installed on and after October- 1,- 2018, perform an inspection at installation and every 36 months thereafter. Inspected within 30 days after a repair to the overfill prevention equipment. Inspected using an applicable manufacturer guidelines, industry codes, engineering standards, or a method approved by a professional engineer. Inspected by a certified UST service technician. Maintain records of overfill prevention equipment inspection for 36 months.

Violation Notes: Returned to compliance on 01/07/2019. Inspection Sequence ID:6005611;Tank ID:20360;Violation Description:(TCR 9b) Failure to comply with one or more of the following overfill prevention equipment requirements: 1. Alert the transfer operator when the tank is 90% full by restricting the flow into the tank or triggering an audible and visual alarm; or 2. Restrict delivery of flow to the tank at least 30m before the tank overfills, provided the restriction occurs when the tank is filled to no more than 95% of capacity and activate an audible alarm at least 5m before the tank overfills; or 3. Provide positive shut-off of flow to the tank when the tank is filled to no more than 95% of capacity; or 4. Provide positive shut-off of flow to the tank so that none of the fittings located on the top of the tank are exposed to product due to overfilling. 5. Install/retrofit overfill prevention equipment that does not use flow restrictors on vent piping to meet overfill prevention equipment requirements when the overfill prevention equip

Violation Division: San Diego County Department of Env Health
Violation Program: UST
Violation Source: CERS

Evaluation:

Eval General Type: Compliance Evaluation Inspection
Eval Date: 01-08-2014
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Inspector: Burke Mike Inspection ID:4901575
Eval Division: San Diego County Department of Env Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 01-08-2014
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Inspector: Burke Mike Inspection ID:4901575
Eval Division: San Diego County Department of Env Health
Eval Program: UST

PACIFIC BELL SNMCCA11/DB151 (Continued) **U003789294**

Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 10-04-2019
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Inspector: Zmily Zanalee Inspection ID:6259129
Eval Division: San Diego County Department of Env Health
Eval Program: UST
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 10-11-2018
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Inspector: Kieu Bridget Inspection ID:6005611
Eval Division: San Diego County Department of Env Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 10-11-2018
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Inspector: Kieu Bridget Inspection ID:6005611
Eval Division: San Diego County Department of Env Health
Eval Program: HW
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 10-11-2018
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Inspector: Kieu Bridget Inspection ID:6005611
Eval Division: San Diego County Department of Env Health
Eval Program: UST
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 10-12-2020
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Inspector: Ayala Anthony Inspection ID:6597262
Eval Division: San Diego County Department of Env Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 10-12-2020
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Inspector: Ayala Anthony Inspection ID:6597262
Eval Division: San Diego County Department of Env Health
Eval Program: UST
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection

PACIFIC BELL SNMCCA11/DB151 (Continued) **U003789294**

Eval Date:	10-25-2017
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Inspector: Calcagno Leonardo Inspection ID:5754248
Eval Division:	San Diego County Department of Env Health
Eval Program:	HMRRP
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	10-25-2017
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Inspector: Calcagno Leonardo Inspection ID:5754248
Eval Division:	San Diego County Department of Env Health
Eval Program:	UST
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	11-08-2016
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Inspector: Calcagno Leonardo Inspection ID:5537921
Eval Division:	San Diego County Department of Env Health
Eval Program:	UST
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	11-30-2015
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Inspector: Calcagno Leonardo Inspection ID:5238551
Eval Division:	San Diego County Department of Env Health
Eval Program:	HMRRP
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	11-30-2015
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Inspector: Calcagno Leonardo Inspection ID:5238551
Eval Division:	San Diego County Department of Env Health
Eval Program:	UST
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	12-15-2014
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Inspector: Burke Mike Inspection ID:5158616
Eval Division:	San Diego County Department of Env Health
Eval Program:	HMRRP
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	12-15-2014
Violations Found:	No
Eval Type:	Routine done by local agency

PACIFIC BELL SNMCCA11/DB151 (Continued) **U003789294**

Eval Notes: Inspector: Burke Mike Inspection ID:5158616
Eval Division: San Diego County Department of Env Health
Eval Program: UST
Eval Source: CERS

Coordinates:
Site ID: 434495
Facility Name: AT&T California - DB151
Env Int Type Code: HMBP
Program ID: 10375993
Coord Name: Not reported
Ref Point Type Desc: Center of a facility or station.
Latitude: 33.147180
Longitude: -117.189370

Affiliation:
Affiliation Type Desc: Document Preparer
Entity Name: Peter Burnell, Sigma Consultants, Inc.
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: Identification Signer
Entity Name: Jeremy McGrue
Entity Title: National EPCRA Manager
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: CUPA District
Entity Name: San Diego County Env Health
Entity Title: Not reported
Affiliation Address: PO Box 129261
Affiliation City: San Diego
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 92112-9261
Affiliation Phone: (858) 505-6880

Affiliation Type Desc: Environmental Contact
Entity Name: AT&T EH&S Hotline - Option #1
Entity Title: Not reported
Affiliation Address: 308 S. Akard St., 17th Floor
Affiliation City: Dallas
Affiliation State: TX
Affiliation Country: Not reported
Affiliation Zip: 75202
Affiliation Phone: Not reported

PACIFIC BELL SNMCCA11/DB151 (Continued) **U003789294**

Affiliation Type Desc:	UST Tank Operator
Entity Name:	Pacific Bell Telephone Company dba AT&T California
Entity Title:	Not reported
Affiliation Address:	308 S. Akard St., 17th Floor
Affiliation City:	Dallas
Affiliation State:	TX
Affiliation Country:	United States
Affiliation Zip:	75202
Affiliation Phone:	(800) 566-9347

Affiliation Type Desc:	Facility Mailing Address
Entity Name:	Mailing Address
Entity Title:	Not reported
Affiliation Address:	308 S. Akard St., 17th Floor
Affiliation City:	Dallas
Affiliation State:	TX
Affiliation Country:	Not reported
Affiliation Zip:	75202
Affiliation Phone:	Not reported

Affiliation Type Desc:	Operator
Entity Name:	AT&T California
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(800) 566-9347

Affiliation Type Desc:	UST Permit Applicant
Entity Name:	Lisa Espinosa
Entity Title:	Manager - EH&S
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(800) 566-9347

Affiliation Type Desc:	UST Property Owner Name
Entity Name:	Pacific Bell Telephone Company dba AT&T California
Entity Title:	Not reported
Affiliation Address:	308 S. Akard St., 17th Floor
Affiliation City:	Dallas
Affiliation State:	TX
Affiliation Country:	United States
Affiliation Zip:	75202
Affiliation Phone:	(800) 566-9347

Affiliation Type Desc:	Legal Owner
Entity Name:	Pacific Bell Telephone Company dba AT&T California
Entity Title:	Not reported
Affiliation Address:	308 S. Akard St., 17th Floor
Affiliation City:	Dallas
Affiliation State:	TX
Affiliation Country:	United States

PACIFIC BELL SNMCCA11/DB151 (Continued) **U003789294**

Affiliation Zip:	75202
Affiliation Phone:	(214) 464-1712
Affiliation Type Desc:	Parent Corporation
Entity Name:	Pacific Bell Telephone Company dba AT&T California
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported
Affiliation Type Desc:	UST Tank Owner
Entity Name:	Pacific Bell Telephone Company dba AT&T California
Entity Title:	Not reported
Affiliation Address:	308 S. Akard St., 17th Floor
Affiliation City:	Dallas
Affiliation State:	TX
Affiliation Country:	United States
Affiliation Zip:	75202
Affiliation Phone:	(800) 566-9347

F27 **PACIFIC BELL** **RCRA-LQG** **1000250512**
South **225 LOS POSAS** **HIST UST** **CAT080030620**
1/8-1/4 **SAN MARCOS, CA 92069** **FINDS**
0.136 mi. **ECHO**
719 ft. **Site 6 of 10 in cluster F**

Relative: **Lower**
Actual: **560 ft.**

RCRA-LQG:

Date Form Received by Agency:		1981-02-23 00:00:00.0
Handler Name:	PACIFIC BELL	
Handler Address:		225 LOS POSAS
Handler City,State,Zip:		SAN MARCOS, CA 92069
EPA ID:		CAT080030620
Contact Name:		ENVIRONMENTAL MANAGER
Contact Address:		225 LOS POSAS
Contact City,State,Zip:		SAN MARCOS, CA 92069
Contact Telephone:		714-238-2710
Contact Fax:		Not reported
Contact Email:		Not reported
Contact Title:		Not reported
EPA Region:		09
Land Type:		Other
Federal Waste Generator Description:		Large Quantity Generator
Non-Notifier:		Not reported
Biennial Report Cycle:		Not reported
Accessibility:		Not reported
Active Site Indicator:		Handler Activities
State District Owner:		CA
State District:		4
Mailing Address:		525 B STREET ROOM 1346
Mailing City,State,Zip:		SAN DIEGO, CA 92101
Owner Name:		THE PACIFIC TELEPHONE AND TELEGRAPH CO
Owner Type:		Private
Operator Name:		Not reported
Operator Type:		Not reported

PACIFIC BELL (Continued) **1000250512**

Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	Yes
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2002-06-27 04:01:45.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

PACIFIC BELL (Continued) **1000250512**

Handler - Owner Operator:
Owner/Operator Indicator: Owner
Owner/Operator Name: THE PACIFIC TELEPHONE AND TELEGRAPH CO
Legal Status: Private
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: NOT REQUIRED
Owner/Operator City,State,Zip: NOT REQUIRED, ME 99999
Owner/Operator Telephone: 415-555-1212
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:
Receive Date: 1981-02-23 00:00:00.0
Handler Name: PACIFIC BELL
Federal Waste Generator Description: Large Quantity Generator
State District Owner: CA
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Codes: No NAICS Codes Found

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

HIST UST:
Name: PACIFIC BELL (DB-151)
Address: 225 LOS POSOS
City,State,Zip: SAN MARCOS, CA 92069
File Number: 0002F133
URL: http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0002F133.pdf
Region: STATE
Facility ID: 00000057717
Facility Type: Other
Other Type: SIC 4800
Contact Name: E.J.KOEHLER
Telephone: 4155426758
Owner Name: PACIFIC BELL
Owner Address: 370 THIRD STREET
Owner City,St,Zip: SAN FRANCISCO, CA 94107
Total Tanks: 0001

PACIFIC BELL (Continued) **1000250512**

Tank Num: 001
Container Num: 1
Year Installed: 1972
Tank Capacity: 00000550
Tank Used for: PRODUCT
Type of Fuel: DIESEL
Container Construction Thickness: Not reported
Leak Detection: None

Click here for Geo Tracker PDF:

FINDS:
Registry ID: 110002955990

Click Here:

Environmental Interest/Information System:
California Hazardous Waste Tracking System - Datamart (HWTS-DATAMART) provides California with information on hazardous waste shipments for generators, transporters, and treatment, storage, and disposal facilities.
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1000250512
Registry ID: 110002955990
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110002955990
Name: PACIFIC BELL
Address: 225 LOS POSAS
City,State,Zip: SAN MARCOS, CA 92069

E28 **ADVANCED STRUCTURES INC** **San Diego Co. HMMD** **1000151400**
SSW **1315 ARMORLITE DR** **RCRA NonGen / NLR** **CAD080920739**
1/8-1/4 **SAN MARCOS, CA 92069** **FINDS**
0.137 mi. **ECHO**
724 ft. **Site 2 of 2 in cluster E**

Relative:
Lower

Actual:
560 ft.

HMMD SAN DIEGO:
Name: ADVANCED STRUCTURES, INC
Address: 1315 ARMORLITE DR
City,State,Zip: SAN MARCOS, CA 92069
Permit Number: 114980
Business Type: Not reported
EPA Id Number: CAD080920739
APN: 219-470-11-00
Last HMMD Inspection: 06/26/1990
Facility Telephone: 619-744-8455
Permit Status: INAC
Permit Expiration: 06/26/1990
Date Last Updated: 11/02/2012

ADVANCED STRUCTURES INC (Continued) **1000151400**

Facility Owner:	CHARLES P DARBY
Facility Mailing Address:	1315 ARMORLITE DR
Facility Mailing City:	SAN MARCOS
Facility Mailing State:	CA
Facility Mailing Zip:	92069-1341
UST Owner:	Not reported
Handle Regulated Hazmat:	Not reported
Own Or Operate UST:	Not reported
Subject To APSA:	Not reported
Generate Haz Waste:	Y
Treat Haz Waste:	Not reported
Generate Medical Waste:	Not reported

RCRA NonGen / NLR:

Date Form Received by Agency:	1983-02-09 00:00:00.0
Handler Name:	ADVANCED STRUCTURES INC
Handler Address:	1315 ARMORLITE DR
Handler City,State,Zip:	SAN MARCOS, CA 92069
EPA ID:	CAD080920739
Contact Name:	ENVIRONMENTAL MANAGER
Contact Address:	1315 ARMORLITE DR
Contact City,State,Zip:	SAN MARCOS, CA 92069
Contact Telephone:	619-744-9220
Contact Fax:	Not reported
Contact Email:	Not reported
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Not reported
State District Owner:	CA
State District:	4
Mailing Address:	ARMORLITE DR
Mailing City,State,Zip:	SAN MARCOS, CA 92069
Owner Name:	ADVANCED STRUCTURES INC PETE DARBY
Owner Type:	Private
Operator Name:	NOT REQUIRED
Operator Type:	Private
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported

ADVANCED STRUCTURES INC (Continued) **1000151400**

Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	NN
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2000-09-15 17:29:20.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	Not reported
Manifest Broker:	Not reported
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	ADVANCED STRUCTURES INC PETE DARBY
Legal Status:	Private
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	NOT REQUIRED
Owner/Operator City,State,Zip:	NOT REQUIRED, ME 99999
Owner/Operator Telephone:	415-555-1212
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name:	NOT REQUIRED
Legal Status:	Private

ADVANCED STRUCTURES INC (Continued) **1000151400**

Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	NOT REQUIRED
Owner/Operator City,State,Zip:	NOT REQUIRED, ME 99999
Owner/Operator Telephone:	415-555-1212
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	1983-02-09 00:00:00.0
Handler Name:	ADVANCED STRUCTURES INC
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	CA
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

List of NAICS Codes and Descriptions:

NAICS Codes:	No NAICS Codes Found

Facility Has Received Notices of Violations:

Violations:	No Violations Found

Evaluation Action Summary:

Evaluations:	No Evaluations Found

FINDS:

Registry ID: 110001151663

Click Here:

Environmental Interest/Information System:

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid:	1000151400
Registry ID:	110001151663
DFR URL:	http://echo.epa.gov/detailed-facility-report?fid=110001151663
Name:	ADVANCED STRUCTURES INC
Address:	1315 ARMORLITE DR
City,State,Zip:	SAN MARCOS, CA 92069

F29
South
1/8-1/4
0.139 mi.
735 ft.

TORREY CHEMICAL CO
217 LAS POSAS RD
SAN MARCOS, CA 92069

Site 7 of 10 in cluster F

SEMS-ARCHIVE **1003879087**
CAD982360430

Relative:
Lower

Actual:
560 ft.

SEMS Archive:

Site ID:	0902600
EPA ID:	CAD982360430
Name:	TORREY CHEMICAL CO
Address:	217 LAS POSAS RD
Address 2:	Not reported
City,State,Zip:	SAN MARCOS, CA 92069
Cong District:	43
FIPS Code:	06073
FF:	N
NPL:	Not on the NPL
Non NPL Status:	NFRAP-Site does not qualify for the NPL based on existing information

SEMS Archive Detail:

Region:	09
Site ID:	0902600
EPA ID:	CAD982360430
Site Name:	TORREY CHEMICAL CO
NPL:	N
FF:	N
OU:	00
Action Code:	VS
Action Name:	ARCH SITE
SEQ:	1
Start Date:	Not reported
Finish Date:	1991-03-19 05:00:00
Qual:	Not reported
Current Action Lead:	EPA Perf In-Hse

Region:	09
Site ID:	0902600
EPA ID:	CAD982360430
Site Name:	TORREY CHEMICAL CO
NPL:	N
FF:	N
OU:	00
Action Code:	PA
Action Name:	PA
SEQ:	1
Start Date:	Not reported
Finish Date:	1991-03-19 05:00:00
Qual:	N
Current Action Lead:	EPA Perf

Region:	09
Site ID:	0902600
EPA ID:	CAD982360430
Site Name:	TORREY CHEMICAL CO
NPL:	N
FF:	N
OU:	00
Action Code:	DS
Action Name:	DISCVRY
SEQ:	1

TORREY CHEMICAL CO (Continued) **1003879087**

Start Date:	1987-11-01 05:00:00
Finish Date:	1987-11-01 05:00:00
Qual:	Not reported
Current Action Lead:	St Perf

F30 **TORREY CHEMICAL CO.** **ENVIROSTOR** **S101481993**
South **217 LAS POSAS ROAD** **N/A**
1/8-1/4 **SAN MARCOS, CA 92069**
0.139 mi.
735 ft. **Site 8 of 10 in cluster F**

Relative: **Lower**

Actual: **560 ft.**

ENVIROSTOR:

Name:	TORREY CHEMICAL CO.
Address:	217 LAS POSAS ROAD
City,State,Zip:	SAN MARCOS, CA 92069
Facility ID:	37510137
Status:	Refer: Other Agency
Status Date:	08/21/1995
Site Code:	Not reported
Site Type:	Historical
Site Type Detailed:	* Historical
Acres:	Not reported
NPL:	NO
Regulatory Agencies:	NONE SPECIFIED
Lead Agency:	NONE SPECIFIED
Program Manager:	Not reported
Supervisor:	* Mmonroy
Division Branch:	Cleanup Cypress
Assembly:	75
Senate:	38
Special Program:	Not reported
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	Not reported
Latitude:	33.14694
Longitude:	-117.1888
APN:	NONE SPECIFIED
Past Use:	NONE SPECIFIED
Potential COC:	* HALOGENATED SOLVENTS * OXYGENATED SOLVENTS * CONTAMINATED SOIL * UNSPECIFIED ACID SOLUTION
Confirmed COC:	NONE SPECIFIED
Potential Description:	NONE SPECIFIED
Alias Name:	37510137
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Site Screening
Completed Date:	10/25/1994
Comments:	CalSites Validation Program confirms NFA for DTSC.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Site Screening
Completed Date:	08/13/1991
Comments:	PA Report was reviewed by Region 4 staff. The site is located at 217

TORREY CHEMICAL CO. (Continued) **S101481993**

Las Posas R. between Mission Rd. & Hwy 78 in San Marcos. The area is industrial, but Palomar College is north of Mission Rd. Site includes 4,000 sf bldg., 2 small storage sheds, outdoor drum storage area, and abandoned above ground storage tanks (550 gal.). Chemical company is still operating repackaging and storing various chemical products (Algi-gon pool treatment etc.). No sampling result were considered in EPA's PA. Staff recommends PEARM to de- termine if there is a problem DTSC should address.

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Site Screening
Completed Date:	06/20/1987
Comments:	SITE SCREENING DONE

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	* Discovery
Completed Date:	05/11/1983
Comments:	FACILITY IDENTIFIED VIA DRIVEBY

Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

F31 **GRANDWOOD INC** **RCRA-SQG 1000311114**
SSW **1305 ARMORLITE DR** **FINDS CAD981453814**
1/8-1/4 **SAN MARCOS, CA 92069** **EMI**
0.143 mi.
753 ft. **Site 9 of 10 in cluster F**

Relative: **Lower**
Actual: **560 ft.**

RCRA-SQG:

Date Form Received by Agency:		1996-09-01 00:00:00.0
Handler Name:	GRANDWOOD, INC	
Handler Address:		1305 ARMORLITE DR
Handler City,State,Zip:		SAN MARCOS, CA 92069
EPA ID:		CAD981453814
Contact Name:		Not reported
Contact Address:		Not reported
Contact City,State,Zip:		Not reported
Contact Telephone:		Not reported
Contact Fax:		Not reported
Contact Email:		Not reported
Contact Title:		Not reported
EPA Region:		09
Land Type:		Not reported
Federal Waste Generator Description:		Small Quantity Generator
Non-Notifier:		Not reported
Biennial Report Cycle:		Not reported
Accessibility:		Not reported
Active Site Indicator:		Handler Activities
State District Owner:		CA

GRANDWOOD INC (Continued) **1000311114**

State District:	4
Mailing Address:	1305 ARMORLITE DR
Mailing City,State,Zip:	SAN MARCOS, CA 92069
Owner Name:	Not reported
Owner Type:	Not reported
Operator Name:	NOT REQUIRED
Operator Type:	Private
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	NN
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2002-06-27 03:25:22.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No

GRANDWOOD INC (Continued) **1000311114**

Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	Not reported
Manifest Broker:	Not reported
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	GRANDWOOD, INC
Legal Status:	Private
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	NOT REQUIRED
Owner/Operator City,State,Zip:	NOT REQUIRED, ME 99999
Owner/Operator Telephone:	415-555-1212
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name:	NOT REQUIRED
Legal Status:	Private
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	NOT REQUIRED
Owner/Operator City,State,Zip:	NOT REQUIRED, ME 99999
Owner/Operator Telephone:	415-555-1212
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	1996-09-01 00:00:00.0
Handler Name: GRANDWOOD, INC	
Federal Waste Generator Description:	Small Quantity Generator
State District Owner:	CA
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

Receive Date:	1986-02-11 00:00:00.0
Handler Name: GRANDWOOD, INC	
Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	CA
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No

GRANDWOOD INC (Continued) **1000311114**

Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 337122
NAICS Description: NONUPHOLSTERED WOOD HOUSEHOLD FURNITURE MANUFACTURING

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

FINDS:
Registry ID: 110002413610

Click Here:

Environmental Interest/Information System:
California Hazardous Waste Tracking System - Datamart (HWTS-DATAMART) provides California with information on hazardous waste shipments for generators, transporters, and treatment, storage, and disposal facilities.
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

EMI:

Name:	GRANDWOOD INC
Address:	1305 ARMORLITE DR
City,State,Zip:	SAN MARCOS, CA 92069
Year:	1993
County Code:	37
Air Basin:	SD
Facility ID:	5981
Air District Name:	SD
SIC Code:	2441
Air District Name:	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	4
Reactive Organic Gases Tons/Yr:	3
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Name: GRANDWOOD INC

GRANDWOOD INC (Continued) **1000311114**

Address:	1305 ARMORLITE DR
City,State,Zip:	SAN MARCOS, CA 92069
Year:	1995
County Code:	37
Air Basin:	SD
Facility ID:	5981
Air District Name:	SD
SIC Code:	2441
Air District Name:	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	4
Reactive Organic Gases Tons/Yr:	3
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Name:	GRANDWOOD INC
Address:	1305 ARMORLITE DR
City,State,Zip:	SAN MARCOS, CA 92069
Year:	1996
County Code:	37
Air Basin:	SD
Facility ID:	5981
Air District Name:	SD
SIC Code:	2441
Air District Name:	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	4
Reactive Organic Gases Tons/Yr:	3
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Name:	GRANDWOOD INC
Address:	1305 ARMORLITE DR
City,State,Zip:	SAN MARCOS, CA 92069
Year:	1997
County Code:	37
Air Basin:	SD
Facility ID:	5981
Air District Name:	SD
SIC Code:	2441
Air District Name:	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	4
Reactive Organic Gases Tons/Yr:	3
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0

GRANDWOOD INC (Continued) **1000311114**

Part. Matter 10 Micrometers and Smllr Tons/Yr:0

Name:	GRANDWOOD INC
Address:	1305 ARMORLITE DR
City,State,Zip:	SAN MARCOS, CA 920610000
Year:	1998
County Code:	37
Air Basin:	SD
Facility ID:	5981
Air District Name:	SD
SIC Code:	2411
Air District Name:	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	6
Reactive Organic Gases Tons/Yr:	6
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Name:	GRANDWOOD INC
Address:	1305 ARMORLITE DR
City,State,Zip:	SAN MARCOS, CA 920610000
Year:	1999
County Code:	37
Air Basin:	SD
Facility ID:	5981
Air District Name:	SD
SIC Code:	2511
Air District Name:	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	6
Reactive Organic Gases Tons/Yr:	6
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Name:	GRANDWOOD INC
Address:	1305 ARMORLITE DR
City,State,Zip:	SAN MARCOS, CA 920610000
Year:	2000
County Code:	37
Air Basin:	SD
Facility ID:	5981
Air District Name:	SD
SIC Code:	2511
Air District Name:	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	4
Reactive Organic Gases Tons/Yr:	4
Carbon Monoxide Emissions Tons/Yr:	0

GRANDWOOD INC (Continued) **1000311114**

NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Name:	GRANDWOOD INC
Address:	1305 ARMORLITE DR
City,State,Zip:	SAN MARCOS, CA 920610000
Year:	2001
County Code:	37
Air Basin:	SD
Facility ID:	5981
Air District Name:	SD
SIC Code:	2511
Air District Name:	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	4
Reactive Organic Gases Tons/Yr:	4
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

G32 **BENCHMARK LANDSCAPE SERVICES INC 1/1/07** **RCRA NonGen / NLR** **1025867545**
SW **145 N PACIFIC ST** **CAL000319551**
1/8-1/4 **SAN MARCOS, CA 92069**
0.150 mi.
793 ft. **Site 1 of 2 in cluster G**

Relative: **Lower**
Actual: **560 ft.**

RCRA NonGen / NLR:

Date Form Received by Agency:	2007-05-11 00:00:00.0
Handler Name:	BENCHMARK LANDSCAPE SERVICES INC 1/1/07
Handler Address:	145 N PACIFIC ST
Handler City,State,Zip:	SAN MARCOS, CA 92069-1222
EPA ID:	CAL000319551
Contact Name:	JOHN DEMOSS
Contact Address:	12575 STOWE DR
Contact City,State,Zip:	POWAY, CA 92064
Contact Telephone:	858-513-7190
Contact Fax:	858-513-7191
Contact Email:	JOHND@BENCHMARKLANDSCAPE.COM
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	12575 STOWE DR
Mailing City,State,Zip:	POWAY, CA 92064-0000
Owner Name:	JOHN MOHNS
Owner Type:	Other
Operator Name:	JOHN DEMOSS

BENCHMARK LANDSCAPE SERVICES INC 1/1/07 (Continued) **1025867545**

Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	Yes
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2019-06-27 15:49:11.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

BENCHMARK LANDSCAPE SERVICES INC 1/1/07 (Continued) **1025867545**

Handler - Owner Operator:

Owner/Operator Indicator:	Operator
Owner/Operator Name:	JOHN DEMOSS
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	12575 STOWE DR
Owner/Operator City,State,Zip:	POWAY, CA 92064
Owner/Operator Telephone:	858-513-7190
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name:	JOHN MOHNS
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	12575 STOWE DR
Owner/Operator City,State,Zip:	POWAY, CA 92064-0000
Owner/Operator Telephone:	858-513-7190
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	2007-05-11 00:00:00.0
Handler Name:	BENCHMARK LANDSCAPE SERVICES INC 1/1/07
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	Not reported
Recognized Trader Exporter:	Not reported
Spent Lead Acid Battery Importer:	Not reported
Spent Lead Acid Battery Exporter:	Not reported
Current Record:	Yes
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

List of NAICS Codes and Descriptions:

NAICS Code:	56173
NAICS Description:	LANDSCAPING SERVICES

Facility Has Received Notices of Violations:

Violations:	No Violations Found

Evaluation Action Summary:

Evaluations:	No Evaluations Found

G33 **BENCHMARK LANSCAPE INC** **SWF/LF** **S100727253**
SW **145 N PACIFIC ST** **San Diego Co. HMMD** **N/A**
1/8-1/4 **SAN MARCOS, CA 92069** **CERS HAZ WASTE**
0.150 mi. **CERS**
793 ft. **Site 2 of 2 in cluster G**

Relative:
Lower

Actual:
560 ft.

SWF/LF (SWIS):

Name:	BENCHMARK LANDSCAPE- SAN MARCOS
Address:	145 N. PACIFIC ST.
City,State,Zip:	SAN MARCOS, CA 92069
Region:	STATE
Facility ID:	37-AA-0986
SWIS Number:	37-AA-0986
Point of Contact:	Cody Oquendo
Is Archived:	No
Is Closed Illegal Abandoned:	No
Is Site Inert Debris Engineered Fill:	No
Is Financial Assurances Responsible:	No
Absorbed On:	Not reported
Operational Status:	Active
Absorbed By:	Not reported
Closed Illegal Abandoned Category:	Not reported
EPA Federal Registry ID:	Not reported
ARB District:	San Diego
SWRCB Region:	San Diego
Local Government:	San Marcos
Reporting Agency Legal Name:	County of San Diego
Reporting Agency Department:	Department of Environmental Health
Enforcing Agency Legal Name:	County of San Diego
Enforcing Agency Department:	Department of Environmental Health
Regulation Status:	Notification

Activity:

SWIS Number:	37-AA-0986
Site Name:	Benchmark Landscape- San Marcos
Activity:	Limited Volume Transfer Operation
Activity Is Archived:	No
Category:	Transfer/Processing
Activity Classification:	Solid Waste Operation
WDR Number:	Not reported
WDR Landfill Class:	Not reported
Cease Operation:	Not reported
Cease Operation Type:	Not reported
Inspection Frequency:	Semi-annual
Throughput:	1
Throughput Units:	Tons per day
Remaining Capacity:	Not reported
Remaining Capacity Date:	Not reported
Capacity:	600
Capacity Units:	Tons per year
Total Acreage:	1.2
Disposal Acreage:	Not reported
Permitted Elevation:	Not reported
Permitted Elevation Type:	Not reported
Permitted Depth:	Not reported
Permitted Depth Type:	Not reported
Point of Contact:	Cody Oquendo
Site Operational Status:	Active
Site Regulatory Status:	Notification
Site Is Archived:	No

BENCHMARK LANSCAPE INC (Continued) **S100727253**

Is Closed Illegal Abandoned:	No
Is Site Inert Debris Engineered Fill:	No
Is Financial Assurances Responsible:	No
Absorbed On:	Not reported
Absorbed By:	Not reported
Closed Illegal Abandoned Category:	Not reported
EPA Federal Registry ID:	Not reported
County:	San Diego
ARB District:	San Diego
SWRCB Region:	San Diego
Local Government:	San Marcos
Street Address:	145 N. Pacific St.
City:	San Marcos
State:	CA
ZIP Code:	92069
Reporting Agency Legal Name:	County of San Diego
Reporting Agency Department:	Department of Environmental Health
Enforcing Agency Legal Name:	County of San Diego
Enforcing Agency Department:	Department of Environmental Health

Operator:

SWIS Number:	37-AA-0986
Site Name:	Benchmark Landscape- San Marcos
Site Operational Status:	Active
Site Type:	Non-Disposal Only
Site Regulatory Status:	Notification
Latitude:	33.1478
Longitude:	-117.1919
Is Archived:	No
Operator:	Benchmark Landscape- San Marcos Branch
Started On:	10/8/2013
Contact Name:	Not reported
Contact Title:	Not reported
Contact Email:	johnd@benchmarklandscape.com
Contact Phone:	(858) 513-7190
Street Address:	John DeMoss 12575 Stowe Dr.
Operator City:	Poway
Operator State:	CA
Operator Zip:	92064

Owner:

SWIS Number:	37-AA-0986
Owner:	Benchmark Landscape LLC
Owner Address:	John DeMoss 12575 Stowe Dr.
Owner City:	Poway
Owner State:	CA
Owner Zip:	92064
Site Name:	Benchmark Landscape- San Marcos
Site Operational Status:	Active
Site Type:	Non-Disposal Only
Site Regulatory Status:	Notification
Latitude:	33.1478
Longitude:	-117.1919
Is Archived:	No
Started On:	10/8/2013
Contact Name:	Not reported

BENCHMARK LANSCAPE INC (Continued) **S100727253**

Contact Title: Not reported
Contact Email: johnd@benchmarklandscape.com
Contact Phone: (858) 513-7190

Waste:
SWIS Number: 37-AA-0986
Site Name: Benchmark Landscape- San Marcos
Activity: Limited Volume Transfer Operation
Waste Type: Green Materials
Site Is Archived: No
Site Operational Status: Active
Site Regulatory Status: Notification
Site Type: Non-Disposal Only
Point of Contact: Cody Oquendo
Activity Is Archived: No
Activity Operational Status: Active
Activity Regulatory Status: Notification
Activity Category: Transfer/Processing
Activity Classification: Solid Waste Operation

SAN DIEGO CO. LF:
Name: BENCHMARK LANDSCAPE SAN MARCOS
Address: 145 N. PACIFIC ST.
City,State,Zip: SAN MARCOS, CA
Facility Status: ACTIVE SITES
Operational Status: ACTIVE
Region: SAN DIEGO
SWIS Number: 37-AA-0986
Owner Name: MVLI-LLC
Operator: BENCHMARK LANDSCAPE INC
Facility Type: LIMITED VOLUME TRANSFER OPERATIONS/ ENGINEERED FILL
Facility Type2: TRANSFER OPERATION
PERMTIER: EA NOTIFICATION
Inspection Frequency: SEMI ANNUALLY

HMMD SAN DIEGO:
Name: BENCHMARK LANSCAPE INC
Address: 145 N PACIFIC ST
City,State,Zip: SAN MARCOS, CA 92069
Permit Number: 208337
Business Type: 6HK18
EPA Id Number: Not reported
APN: 219-122-11-00
Last HMMD Inspection: 11/30/2009
Facility Telephone: 858-513-7190
Permit Status: OPEN
Permit Expiration: 11/30/2013
Date Last Updated: 11/02/2012
Facility Owner: JOHN MOHNS
Facility Mailing Address: 12575 STOWE DR
Facility Mailing City: POWAY
Facility Mailing State: CA
Facility Mailing Zip: 92064
UST Owner: Not reported
Handle Regulated Hazmat: Not reported

BENCHMARK LANSCAPE INC (Continued) **S100727253**

Own Or Operate UST: Not reported
Subject To APSA: Not reported
Generate Haz Waste: Y
Treat Haz Waste: Not reported
Generate Medical Waste: Not reported

Inventory Active Permits (not SQG Medical):
Permit Number: 208337
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 221 WASTE OIL & MIXED OIL
Other Information: USED OIL
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Permit Number: 208337
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 888 USED OIL FILTERS
Other Information: Not reported
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Name: HINCKLEY & SCHMITT, INC
Address: 145 N PACIFIC ST
City,State,Zip: SAN MARCOS, CA 92069
Permit Number: 106125
Business Type: 6HK18
EPA Id Number: Not reported
APN: 219-122-11-00
Last HMMD Inspection: 12/01/1999
Facility Telephone: 619-726-0270
Permit Status: INAC
Permit Expiration: 12/01/1999
Date Last Updated: 11/02/2012
Facility Owner: HINCKLEY & SCHMITT
Facility Mailing Address: 145 N PACIFIC ST
Facility Mailing City: SAN MARCOS
Facility Mailing State: CA
Facility Mailing Zip: 92069-1222
UST Owner: Not reported
Handle Regulated Hazmat: Not reported
Own Or Operate UST: Not reported
Subject To APSA: Not reported
Generate Haz Waste: Not reported
Treat Haz Waste: Not reported
Generate Medical Waste: Not reported

Name: BENCHMARK LANSCAPE INC
Address: 145 N PACIFIC ST
City,State,Zip: SAN MARCOS, CA 92069
Permit Number: Not reported
Business Type: Not reported
EPA Id Number: CAL000319551
APN: Not reported

BENCHMARK LANSCAPE INC (Continued) **S100727253**

Last HMMD Inspection:	Not reported
Facility Telephone:	858-513-7190
Permit Status:	Permit Renewed
Permit Expiration:	Not reported
Date Last Updated:	11/18/2020
Facility Owner:	Not reported
Facility Mailing Address:	12575 STOWE DR, POWAY, CA 92064
Facility Mailing City:	Not reported
Facility Mailing State:	Not reported
Facility Mailing Zip:	Not reported
UST Owner:	N
Handle Regulated Hazmat:	Not reported
Own Or Operate UST:	Not reported
Subject To APSA:	Not reported
Generate Haz Waste:	Y
Treat Haz Waste:	N
Generate Medical Waste:	Not reported

Inspection Violation:

Record ID:	DEH2007-HUPFP-208337
Permit Status:	Permit Renewed
Active Permit:	Y
Facility Id Number:	37-000-208337
Program Element:	Hazardous Materials Release Response Plans
Inspection Type:	Routine
Inspection Number:	5097287
Return To Compliance Date:	2015-01-30T00:00:00.000
Nov:	No
Violation Classification:	Minor
Underground Storage Tank Id:	Not reported
Container/Tank Id:	Not reported
Last Update:	2020-11-18T00:00:00.000
Inspection Date:	2014-08-06T14:59:00.000
Violation Code:	1010008 Failure to submit inventory reports (Activities, Owner/Operator, Hazardous Materials Descriptions and Map pages, if required. Documentation must be resubmitted (for facilities which exceed EPCRA thresholds) or re-certified (for facilities which do not exceed EPCRA thresholds) by March 1; 19 CCR 4 2729.4(b), 2729.5.

Record ID:	DEH2007-HUPFP-208337
Permit Status:	Permit Renewed
Active Permit:	Y
Facility Id Number:	37-000-208337
Program Element:	Hazardous Materials Release Response Plans
Inspection Type:	Routine
Inspection Number:	5486794
Return To Compliance Date:	2016-12-28T00:00:00.000
Nov:	No
Violation Classification:	Minor
Underground Storage Tank Id:	Not reported
Container/Tank Id:	Not reported
Last Update:	2020-11-18T00:00:00.000
Inspection Date:	2016-09-13T16:07:00.000
Violation Code:	1010005 Site map not submitted in CERS or not sufficient. HSC 25505(a)(2) and 25508(a)(1)(A)

Record ID:	DEH2007-HUPFP-208337
Permit Status:	Permit Renewed

BENCHMARK LANSCAPE INC (Continued) **S100727253**

Active Permit:	Y
Facility Id Number:	37-000-208337
Program Element:	Hazardous Waste Generator
Inspection Type:	Routine
Inspection Number:	5097287
Return To Compliance Date:	2014-08-18T00:00:00.000
Nov:	No
Violation Classification:	Minor
Underground Storage Tank Id:	Not reported
Container/Tank Id:	Not reported
Last Update:	2020-11-18T00:00:00.000
Inspection Date:	2014-08-06T14:59:00.000
Violation Code:	3030007 Failure to properly label hazardous waste accumulation containers with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date.; 22 CCR 12 66262.34(f).

Record ID:	DEH2007-HUPFP-208337
Permit Status:	Permit Renewed
Active Permit:	Y
Facility Id Number:	37-000-208337
Program Element:	Hazardous Waste Generator
Inspection Type:	Routine
Inspection Number:	5486794
Return To Compliance Date:	2018-09-13T00:00:00.000
Nov:	No
Violation Classification:	Minor
Underground Storage Tank Id:	Not reported
Container/Tank Id:	Not reported
Last Update:	2020-11-18T00:00:00.000
Inspection Date:	2016-09-13T16:07:00.000
Violation Code:	3010010 Failed to maintain uniform hazardous waste manifest, consolidated manifest, or bills of lading copies for 3 years. HSC 25160.2(b)(3), 25185(a)(4); 22 CCR 66262.40(a)

Record ID:	DEH2007-HUPFP-208337
Permit Status:	Permit Renewed
Active Permit:	Y
Facility Id Number:	37-000-208337
Program Element:	Hazardous Waste Generator
Inspection Type:	Routine
Inspection Number:	5097287
Return To Compliance Date:	2014-09-06T00:00:00.000
Nov:	No
Violation Classification:	Minor
Underground Storage Tank Id:	Not reported
Container/Tank Id:	Not reported
Last Update:	2020-11-18T00:00:00.000
Inspection Date:	2014-08-06T14:59:00.000
Violation Code:	3010010 Failure to maintain uniform hazardous waste manifest, consolidated manifest, or bills of lading copies for three years.; 22 CCR 12 66262.40(a).

Record ID:	DEH2007-HUPFP-208337
Permit Status:	Permit Renewed
Active Permit:	Y

BENCHMARK LANSCAPE INC (Continued) **S100727253**

Facility Id Number:	37-000-208337
Program Element:	Hazardous Waste Generator
Inspection Type:	Routine
Inspection Number:	5486794
Return To Compliance Date:	2016-09-13T00:00:00.000
Nov:	No
Violation Classification:	Class II
Underground Storage Tank Id:	Not reported
Container/Tank Id:	Not reported
Last Update:	2020-11-18T00:00:00.000
Inspection Date:	2016-09-13T16:07:00.000
Violation Code:	3030030 Failed to maintain and/or operate the facility to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents. (40 CFR 262.34(d)(4), 265.31.) 22 CCR 66262.34(d)(2)

Record ID:	DEH2007-HUPFP-208337
Permit Status:	Permit Renewed
Active Permit:	Y
Facility Id Number:	37-000-208337
Program Element:	Hazardous Materials Release Response Plans
Inspection Type:	Routine
Inspection Number:	5997922
Return To Compliance Date:	2018-09-14T00:00:00.000
Nov:	No
Violation Classification:	Class II
Underground Storage Tank Id:	Not reported
Container/Tank Id:	Not reported
Last Update:	2020-11-18T00:00:00.000
Inspection Date:	2018-09-13T17:06:00.000
Violation Code:	1010008 HMBP not certified annually as complete and accurate in CERS. HSC 25508(a)(1)(A), 25508.2, 19 CCR 2654(b)

Record ID:	DEH2007-HUPFP-208337
Permit Status:	Permit Renewed
Active Permit:	Y
Facility Id Number:	37-000-208337
Program Element:	Hazardous Materials Release Response Plans
Inspection Type:	Routine
Inspection Number:	5097287
Return To Compliance Date:	2014-08-19T00:00:00.000
Nov:	No
Violation Classification:	Minor
Underground Storage Tank Id:	Not reported
Container/Tank Id:	Not reported
Last Update:	2020-11-18T00:00:00.000
Inspection Date:	2014-08-06T14:59:00.000
Violation Code:	1020001 Failure to include an adequate training program in the business plan, which is reasonable and appropriate for the size of the business and the nature of the hazardous material handled; 19 CCR 4 2732(a); HSC 6.95 25504(c).

Record ID:	DEH2007-HUPFP-208337
Permit Status:	Permit Renewed
Active Permit:	Y
Facility Id Number:	37-000-208337
Program Element:	Hazardous Materials Release Response Plans

BENCHMARK LANSCAPE INC (Continued) **S100727253**

Inspection Type:	Routine
Inspection Number:	5486794
Return To Compliance Date:	2016-12-28T00:00:00.000
Nov:	No
Violation Classification:	Minor
Underground Storage Tank Id:	Not reported
Container/Tank Id:	Not reported
Last Update:	2020-11-18T00:00:00.000
Inspection Date:	2016-09-13T16:07:00.000
Violation Code:	1010008 HMBP not certified annually as complete and accurate in CERS. HSC 25508.2

Record ID:	DEH2007-HUPFP-208337
Permit Status:	Permit Renewed
Active Permit:	Y
Facility Id Number:	37-000-208337
Program Element:	Hazardous Waste Generator
Inspection Type:	Routine
Inspection Number:	5997922
Return To Compliance Date:	2019-01-25T00:00:00.000
Nov:	No
Violation Classification:	Minor
Underground Storage Tank Id:	Not reported
Container/Tank Id:	Not reported
Last Update:	2020-11-18T00:00:00.000
Inspection Date:	2018-09-13T17:06:00.000
Violation Code:	3010002 Failed to obtain &/or maintain an active EPA ID Number. 22 CCR 66262.12(a)

Waste and Materials:

Record ID:	DEH2007-HUPFP-208337
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2020-HCHEM-0264943
Trade Secret:	N
Hazardous Material Type:	Pure
Last Updated:	2020-11-18T02:38:12.000
Chemical Name:	Phosphoric acid, iron(3+) salt (1:1)
Common Name:	Sluggo Snail Bait
Case Number:	10045-86-0

Record ID:	DEH2007-HUPFP-208337
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2020-HWAST-0235276
Trade Secret:	N
Hazardous Material Type:	Not reported
Last Updated:	2020-11-18T02:38:12.000
Chemical Name:	WASTE 221 WASTE OIL & MIXED OIL
Common Name:	USED OIL
Case Number:	Not reported

Record ID:	DEH2007-HUPFP-208337
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2019-HCHEM-0229331
Trade Secret:	N

BENCHMARK LANSCAPE INC (Continued) **S100727253**

Hazardous Material Type: Pure
Last Updated: 2019-10-10T02:32:51.000
Chemical Name: Phosphoric acid, iron(3+) salt (1:1)
Common Name: Sluggo Snail Bait
Case Number: 10045-86-0

Record ID: DEH2007-HUPFP-208337
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2019-HWAST-0199555
Trade Secret: N
Hazardous Material Type: Not reported
Last Updated: 2019-10-10T02:32:51.000
Chemical Name: WASTE 221 WASTE OIL & MIXED OIL
Common Name: USED OIL
Case Number: Not reported

Record ID: DEH2007-HUPFP-208337
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2016-HWAST-0104040
Trade Secret: N
Hazardous Material Type: Not reported
Last Updated: 2017-10-25T02:31:33.000
Chemical Name: WASTE 221 WASTE OIL & MIXED OIL
Common Name: USED OIL
Case Number: Not reported

Record ID: DEH2007-HUPFP-208337
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2018-HWAST-0167810
Trade Secret: N
Hazardous Material Type: Not reported
Last Updated: 2019-04-19T21:32:48.000
Chemical Name: WASTE 221 WASTE OIL & MIXED OIL
Common Name: USED OIL
Case Number: Not reported

CERS HAZ WASTE:
Name: BENCHMARK LANSCAPE INC
Address: 145 N PACIFIC ST
City,State,Zip: SAN MARCOS, CA 92069
Site ID: 98169
CERS ID: 10376257
CERS Description: Hazardous Waste Generator

CERS:
Name: BENCHMARK LANSCAPE INC
Address: 145 N PACIFIC ST
City,State,Zip: SAN MARCOS, CA 92069
Site ID: 98169
CERS ID: 10376257
CERS Description: Chemical Storage Facilities

BENCHMARK LANSCAPE INC (Continued) **S100727253**

Violations:

Site ID:	98169
Site Name:	BENCHMARK LANSCAPE INC
Violation Date:	08-06-2014
Citation:	22 CCR 12 66262.40(a) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.40(a)
Violation Description:	Failure to maintain uniform hazardous waste manifest, consolidated manifest, or bills of lading copies for three years.
Violation Notes:	Returned to compliance on 09/06/2014.
Violation Division:	San Diego County Department of Env Health
Violation Program:	HW
Violation Source:	CERS

Site ID:	98169
Site Name:	BENCHMARK LANSCAPE INC
Violation Date:	08-06-2014
Citation:	22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f)
Violation Description:	Failure to properly label hazardous waste accumulation containers with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date.
Violation Notes:	Returned to compliance on 08/18/2014.
Violation Division:	San Diego County Department of Env Health
Violation Program:	HW
Violation Source:	CERS

Site ID:	98169
Site Name:	BENCHMARK LANSCAPE INC
Violation Date:	09-13-2018
Citation:	22 CCR 12 66262.12 - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.12
Violation Description:	Failure to obtain an Identification Number prior to treating, storing, disposing of, transporting or offering for transportation any hazardous waste.
Violation Notes:	Returned to compliance on 01/25/2019. Inspection Sequence ID:5997922
Violation Division:	San Diego County Department of Env Health
Violation Program:	HW
Violation Source:	CERS

Site ID:	98169
Site Name:	BENCHMARK LANSCAPE INC
Violation Date:	09-13-2016
Citation:	22 CCR 12 66262.40(a) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.40(a)
Violation Description:	Failure to keep a copy of each properly signed manifest for at least three years from the date the waste was accepted by the initial transporter. The manifest signed at the time the waste was accepted for transport shall be kept until receiving a signed copy from the designated facility which received the waste.
Violation Notes:	Returned to compliance on 09/13/2018. Inspection Sequence ID:5486794
Violation Division:	San Diego County Department of Env Health
Violation Program:	HW
Violation Source:	CERS

Site ID:	98169
Site Name:	BENCHMARK LANSCAPE INC

BENCHMARK LANSCAPE INC (Continued) **S100727253**

Violation Date:	08-06-2014
Citation:	HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description:	Failure to establish and electronically submit an adequate training program in safety procedures in the event of a release or threatened release of a hazardous material.
Violation Notes:	Returned to compliance on 08/19/2014.
Violation Division:	San Diego County Department of Env Health
Violation Program:	HMRRP
Violation Source:	CERS
Site ID:	98169
Site Name:	BENCHMARK LANSCAPE INC
Violation Date:	09-13-2016
Citation:	HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description:	Failure to annually review and electronically certify that the business plan is complete and accurate on or before the annual due date.
Violation Notes:	Returned to compliance on 12/28/2016. Inspection Sequence ID:5486794
Violation Division:	San Diego County Department of Env Health
Violation Program:	HMRRP
Violation Source:	CERS
Site ID:	98169
Site Name:	BENCHMARK LANSCAPE INC
Violation Date:	08-06-2014
Citation:	HSC 6.95 25508.2 - California Health and Safety Code, Chapter 6.95, Section(s) 25508.2
Violation Description:	Failure to annually review and electronically certify that the business plan is complete, accurate, and up-to-date.
Violation Notes:	Returned to compliance on 01/30/2015.
Violation Division:	San Diego County Department of Env Health
Violation Program:	HMRRP
Violation Source:	CERS
Site ID:	98169
Site Name:	BENCHMARK LANSCAPE INC
Violation Date:	09-13-2018
Citation:	HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description:	Failure to annually review and electronically certify that the business plan is complete and accurate on or before the annual due date.
Violation Notes:	Returned to compliance on 09/14/2018. Inspection Sequence ID:5997922
Violation Division:	San Diego County Department of Env Health
Violation Program:	HMRRP
Violation Source:	CERS
Site ID:	98169
Site Name:	BENCHMARK LANSCAPE INC
Violation Date:	09-13-2016
Citation:	40 CFR 1 265.31 - U.S. Code of Federal Regulations, Title 40, Chapter 1, Section(s) 265.31
Violation Description:	Failure to maintain and operate the facility to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents

BENCHMARK LANSCAPE INC (Continued) **S100727253**

to air, soil, or surface water which could threaten human health or the environment.
Violation Notes: Returned to compliance on 09/13/2016. Inspection Sequence ID:5486794
Violation Division: San Diego County Department of Env Health
Violation Program: HW
Violation Source: CERS

Site ID: 98169
Site Name: BENCHMARK LANSCAPE INC
Violation Date: 09-13-2016
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description: Failure to complete and electronically submit a site map with all required content.
Violation Notes: Returned to compliance on 12/28/2016. Inspection Sequence ID:5486794
Violation Division: San Diego County Department of Env Health
Violation Program: HMRRP
Violation Source: CERS

Evaluation:
Eval General Type: Compliance Evaluation Inspection
Eval Date: 08-06-2014
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Inspector: Beacon Ellen Inspection ID:5097287
Eval Division: San Diego County Department of Env Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 08-06-2014
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Inspector: Beacon Ellen Inspection ID:5097287
Eval Division: San Diego County Department of Env Health
Eval Program: HW
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 09-13-2016
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Inspector: Calcagno Leonardo Inspection ID:5486794
Eval Division: San Diego County Department of Env Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 09-13-2016
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Inspector: Calcagno Leonardo Inspection ID:5486794
Eval Division: San Diego County Department of Env Health
Eval Program: HW
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection

BENCHMARK LANSCAPE INC (Continued) **S100727253**

Eval Date: 09-13-2018
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Inspector: Kieu Bridget Inspection ID:5997922
Eval Division: San Diego County Department of Env Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 09-13-2018
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Inspector: Kieu Bridget Inspection ID:5997922
Eval Division: San Diego County Department of Env Health
Eval Program: HW
Eval Source: CERS

Coordinates:
Site ID: 98169
Facility Name: BENCHMARK LANSCAPE INC
Env Int Type Code: HWG
Program ID: 10376257
Coord Name: Not reported
Ref Point Type Desc: Center of a facility or station.
Latitude: 33.147820
Longitude: -117.192050

Affiliation:
Affiliation Type Desc: Operator
Entity Name: BENCHMARK LANDSCAPE INC
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: (858) 513-7190

Affiliation Type Desc: CUPA District
Entity Name: San Diego County Env Health
Entity Title: Not reported
Affiliation Address: PO Box 129261
Affiliation City: San Diego
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 92112-9261
Affiliation Phone: (858) 505-6880

Affiliation Type Desc: Legal Owner
Entity Name: BENCHMARK LANDSCAPE
Entity Title: Not reported
Affiliation Address: 12575 STOWE DR
Affiliation City: POWAY
Affiliation State: CA
Affiliation Country: United States
Affiliation Zip: 92064

BENCHMARK LANSCAPE INC (Continued) **S100727253**

Affiliation Phone: (858) 513-7190

Affiliation Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title: Not reported
Affiliation Address: 12575 STOWE DR
Affiliation City: POWAY
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 92064
Affiliation Phone: Not reported

Affiliation Type Desc: Parent Corporation
Entity Name: BENCHMARK LANDSCAPE INC
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: Property Owner
Entity Name: MVLI
Entity Title: Not reported
Affiliation Address: 12575 STOWE DR
Affiliation City: POWAY
Affiliation State: CA
Affiliation Country: United States
Affiliation Zip: 92064
Affiliation Phone: (858) 513-7190

Affiliation Type Desc: Environmental Contact
Entity Name: John DeMoss
Entity Title: Not reported
Affiliation Address: 12575 STOWE DR
Affiliation City: POWAY
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 92064
Affiliation Phone: Not reported

Name: BENCHMARK LANDSCAPE- SAN MARCOS
Address: 145 N. PACIFIC ST.
City,State,Zip: SAN MARCOS, CA
Site ID: 507027
CERS ID: 37-AA-0986
CERS Description: Solid Waste and Recycle Sites

Affiliation:
Affiliation Type Desc: Legal Operator
Entity Name: Benchmark Landscape- San Marcos Branch
Entity Title: Not reported
Affiliation Address: John DeMoss12575 Stowe Dr.
Affiliation City: Poway
Affiliation State: CA
Affiliation Country: Not reported

BENCHMARK LANSCAPE INC (Continued) **S100727253**

Affiliation Zip: 92064
Affiliation Phone: 8585137190

Affiliation Type Desc: Legal Owner
Entity Name: Benchmark Landscape LLC
Entity Title: Not reported
Affiliation Address: John DeMoss12575 Stowe Dr.
Affiliation City: Poway
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 92064
Affiliation Phone: 8585137190

F34 **COCA COLA ENTERPISES** **SAN DIEGO CO. SAM** **S109277043**
South **LAS POSAS/ARMORLITE** **N/A**
1/8-1/4 **SAN MARCOS, CA 92069**
0.160 mi.
847 ft. **Site 10 of 10 in cluster F**

Relative: SAN DIEGO CO. SAM:
Lower
Name: COCA COLA ENTERPISES
Actual: Address: LAS POSAS/ARMORLITE
560 ft. City,State,Zip: SAN MARCOS, CA 92069
Case Number: H36816-001
Agency: DEH Site Assessment & Mitigation
Funding: **Private - VAP**
Facility Type: Drinking Water Aquifer Impacted
Facility Status: Closed Case
Date: 7/31/1997
Date Began: Not reported

H35 **VACANT LOT** **SAN DIEGO CO. SAM** **S104750821**
South **199 LAS POSAS RD** **San Diego Co. HMMD** **N/A**
1/8-1/4 **SAN MARCOS, CA 92069**
0.189 mi.
999 ft. **Site 1 of 6 in cluster H**

Relative: SAN DIEGO CO. SAM:
Lower
Name: VACANT LOT
Actual: Address: 199 LAS POSAS RD
560 ft. City,State,Zip: SAN MARCOS, CA 920691419
Case Number: H25926-001
Agency: CA Regional Water Quality Control Board
Funding: **Private - VAP**
Facility Type: Drinking Water Aquifer Impacted
Facility Status: Closed Case
Date: 7/31/1997
Date Began: Not reported

HMMD SAN DIEGO:
Name: VACANT LOT
Address: 199 LAS POSAS RD
City,State,Zip: SAN MARCOS, CA 92069
Permit Number: 125926
Business Type: Not reported

VACANT LOT (Continued) **S104750821**

EPA Id Number:	Not reported
APN:	219-151-02-00
Last HMMD Inspection:	Not reported
Facility Telephone:	Not reported
Permit Status:	INAC
Permit Expiration:	Not reported
Date Last Updated:	11/02/2012
Facility Owner:	COCA COLA CO OF LOS ANGELES
Facility Mailing Address:	1334 S CENTRAL AV
Facility Mailing City:	LOS ANGELES
Facility Mailing State:	CA
Facility Mailing Zip:	90021-2210
UST Owner:	Not reported
Handle Regulated Hazmat:	Not reported
Own Or Operate UST:	Not reported
Subject To APSA:	Not reported
Generate Haz Waste:	Not reported
Treat Haz Waste:	Not reported
Generate Medical Waste:	Not reported

I36 **MEL'S AUTO REPAIR, LLC** **San Diego Co. HMMD** **S106062794**
WSW **139 N PACIFIC ST** **CERS HAZ WASTE** **N/A**
1/8-1/4 **SAN MARCOS, CA 92069** **CERS**
0.196 mi.
1035 ft. **Site 1 of 8 in cluster I**

Relative:
Lower

Actual:
563 ft.

HMMD SAN DIEGO:

Name:	DAVID CABRERA
Address:	139 N PACIFIC ST
City,State,Zip:	SAN MARCOS, CA 92069
Permit Number:	213699
Business Type:	6HK18
EPA Id Number:	Not reported
APN:	219-122-11-00
Last HMMD Inspection:	02/07/2011
Facility Telephone:	760-270-5893
Permit Status:	INAC
Permit Expiration:	05/31/2011
Date Last Updated:	11/02/2012
Facility Owner:	DAVID CABRERA
Facility Mailing Address:	139 N PACIFIC ST #C
Facility Mailing City:	San Marcos
Facility Mailing State:	CA
Facility Mailing Zip:	92069
UST Owner:	Not reported
Handle Regulated Hazmat:	Not reported
Own Or Operate UST:	Not reported
Subject To APSA:	Not reported
Generate Haz Waste:	Y
Treat Haz Waste:	Not reported
Generate Medical Waste:	Not reported

Violations Inactive Permits:

Permit Number:	213699
Update Date:	11/02/2012
Inspection Date:	02/07/2011
Violation Code:	6HV1001
Violation:	NO UPF PERMIT FOR HAZMATS

MEL'S AUTO REPAIR, LLC (Continued) **S106062794**

Violation Citation: A Unified Program Facility permit has not been obtained for hazardous materials. 68.905
Activity: Inactive Permit

Permit Number: 213699
Update Date: 11/02/2012
Inspection Date: 02/07/2011
Violation Code: 6HV0132
Violation: EPA ID NUMBER NOT OBTAINED/MAINTAINED
Violation Citation: Generator of hazardous waste has not obtained/maintained an EPA identification number. CCR 66262.12(a)
Activity: Inactive Permit

Name: K & D MACHINE
Address: 139 N PACIFIC ST
City,State,Zip: SAN MARCOS, CA 92069
Permit Number: 216956
Business Type: 6HK18
EPA Id Number: CAL000377771
APN: 219-122-11-00
Last HMMD Inspection: 08/22/2012
Facility Telephone: 760-201-5587
Permit Status: OPEN
Permit Expiration: 12/31/2012
Date Last Updated: 11/02/2012
Facility Owner: DAVID FORGE
Facility Mailing Address: 139 N PACIFIC ST #B
Facility Mailing City: SAN MARCOS
Facility Mailing State: CA
Facility Mailing Zip: 92069
UST Owner: Not reported
Handle Regulated Hazmat: Not reported
Own Or Operate UST: Not reported
Subject To APSA: Not reported
Generate Haz Waste: Not reported
Treat Haz Waste: Not reported
Generate Medical Waste: Not reported

Inventory Active Permits (not SQG Medical):
Permit Number: 216956
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 221 WASTE OIL & MIXED OIL
Other Information: USED OIL
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Name: K.B. MOTORSPORTS
Address: 139 N PACIFIC AV
City,State,Zip: SAN MARCOS, CA 92069
Permit Number: 128900
Business Type: 6HK26
EPA Id Number: CAL000187872
APN: 219-122-21-00
Last HMMD Inspection: 04/24/2009

MEL'S AUTO REPAIR, LLC (Continued) **S106062794**

Facility Telephone:	760-471-0441
Permit Status:	INAC
Permit Expiration:	12/31/2009
Date Last Updated:	11/02/2012
Facility Owner:	K.B. MOTORSPORTS INC
Facility Mailing Address:	139 N PACIFIC AV #A
Facility Mailing City:	SAN MARCOS
Facility Mailing State:	CA
Facility Mailing Zip:	92069-1273
UST Owner:	Not reported
Handle Regulated Hazmat:	Not reported
Own Or Operate UST:	Not reported
Subject To APSA:	Not reported
Generate Haz Waste:	Y
Treat Haz Waste:	Not reported
Generate Medical Waste:	Not reported

Violations Inactive Permits:

Permit Number:	128900
Update Date:	11/02/2012
Inspection Date:	12/18/2003
Violation Code:	6HV0202
Violation:	WASTE CONTAINER W/O LABELS
Violation Citation:	Hazardous waste containers &/or tanks are missing labels, accumulation date and/or are improperly labeled. CCR 66262.34(a)(2); 66262.34(a)(3) & 66262.34(f)
Activity:	Inactive Permit

Permit Number:	128900
Update Date:	11/02/2012
Inspection Date:	12/18/2003
Violation Code:	6HV0401
Violation:	TRAINING RECORDS UNAVAILABLE
Violation Citation:	Personnel training records are not maintained to document compliance with requirements for current and former employees. CCR 66265.16(d)&(e)
Activity:	Inactive Permit

Name:	DT AUTOBODY
Address:	139 N PACIFIC ST
City,State,Zip:	SAN MARCOS, CA 92069
Permit Number:	216339
Business Type:	6HK18
EPA Id Number:	Not reported
APN:	219-122-11-00
Last HMMD Inspection:	04/18/2012
Facility Telephone:	760-580-8735
Permit Status:	OPEN
Permit Expiration:	07/31/2013
Date Last Updated:	11/02/2012
Facility Owner:	DT AUTOBODY
Facility Mailing Address:	139 N PACIFIC ST #D
Facility Mailing City:	SAN MARCOS
Facility Mailing State:	CA
Facility Mailing Zip:	92069
UST Owner:	Not reported
Handle Regulated Hazmat:	Not reported

MEL'S AUTO REPAIR, LLC (Continued) **S106062794**

Own Or Operate UST: Not reported
Subject To APSA: Not reported
Generate Haz Waste: Y
Treat Haz Waste: Not reported
Generate Medical Waste: Not reported

Inventory Active Permits (not SQG Medical):
Permit Number: 216339
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 221 WASTE OIL & MIXED OIL
Other Information: USED OIL
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Permit Number: 216339
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 461 PAINT SLUDGE
Other Information: WASTE PAINT
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Violations Active Permits:
Permit Number: 216339
Update Date: 11/02/2012
Inspection Date: 04/18/2012
Violation Code: 6HV0131
Violation: UPF Permit NOT OBTAINED for HAZWASTE
Violation Citation: A Unified Program Facility permit has not been obtained for the generation of hazardous waste. 68.905
Activity: ACTIVE

Permit Number: 216339
Update Date: 11/02/2012
Inspection Date: 04/18/2012
Violation Code: 6HV0132
Violation: EPA ID NUMBER NOT OBTAINED/MAINTAINED
Violation Citation: Generator of hazardous waste has not obtained/maintained an EPA identification number. CCR 66262.12(a)
Activity: ACTIVE

Permit Number: 216339
Update Date: 11/02/2012
Inspection Date: 04/18/2012
Violation Code: 6HV0304
Violation: WASTE DETERMINATION NOT MADE
Violation Citation: Generator of a waste has not determined if that waste is a hazardous waste as defined by law. CCR 66262.11 & 66260.200(c)
Activity: ACTIVE

Permit Number: 216339
Update Date: 11/02/2012
Inspection Date: 04/18/2012
Violation Code: 6HV0227

MEL'S AUTO REPAIR, LLC (Continued) **S106062794**

Violation: HAZWASTE TANK/CONTAINER W/O LABEL/DATE
Violation Citation: Failed to properly label/date hazardous waste container &/or tank. 66262.34(f)
Activity: ACTIVE

Permit Number: 216339
Update Date: 11/02/2012
Inspection Date: 04/18/2012
Violation Code: 6HV0228
Violation: CONTAINER NOT KEPT CLOSED
Violation Citation: Failed to keep container closed. CFR 265.173
Activity: ACTIVE

Permit Number: 216339
Update Date: 11/02/2012
Inspection Date: 04/18/2012
Violation Code: 6HV0407
Violation: EMPLOYEE TRAINING NOT ADEQUATE
Violation Citation: Employee training program for small quantity generator of hazardous waste is inadequate. CFR 262.34(d)(5)(iii)
Activity: ACTIVE

CERS HAZ WASTE:
Name: MEL'S AUTO REPAIR, LLC
Address: 139 N PACIFIC ST
City,State,Zip: SAN MARCOS, CA 92069
Site ID: 47908
CERS ID: 10375861
CERS Description: Hazardous Waste Generator

CERS:
Name: MEL'S AUTO REPAIR, LLC
Address: 139 N PACIFIC ST
City,State,Zip: SAN MARCOS, CA 92069
Site ID: 47908
CERS ID: 10375861
CERS Description: Chemical Storage Facilities

Violations:
Site ID: 47908
Site Name: MEL'S AUTO REPAIR, LLC
Violation Date: 09-12-2016
Citation: HSC 6.95 25505(a)(4) - California Health and Safety Code, Chapter 6.95, Section(s) 25505(a)(4)
Violation Description: Failure to provide initial and annual training to all employees in safety procedures in the event of a release or threatened release of a hazardous material or failure to document and maintain training records for a minimum of three years.
Violation Notes: Returned to compliance on 09/19/2016.
Violation Division: San Diego County Department of Env Health
Violation Program: HMRRP
Violation Source: CERS

Site ID: 47908
Site Name: MEL'S AUTO REPAIR, LLC
Violation Date: 08-05-2014

MEL'S AUTO REPAIR, LLC (Continued) **S106062794**

Citation:	HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description:	Failure to establish and electronically submit an adequate training program in safety procedures in the event of a release or threatened release of a hazardous material.
Violation Notes:	Returned to compliance on 08/05/2014.
Violation Division:	San Diego County Department of Env Health
Violation Program:	HMRRP
Violation Source:	CERS

Evaluation:

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	08-05-2014
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Inspector: North HN004 Inspection ID:5096489
Eval Division:	San Diego County Department of Env Health
Eval Program:	HW
Eval Source:	CERS

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	08-05-2014
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Inspector: North HN004 Inspection ID:5096489
Eval Division:	San Diego County Department of Env Health
Eval Program:	HMRRP
Eval Source:	CERS

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	08-29-2018
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Inspector: Kieu Bridget Inspection ID:5996841
Eval Division:	San Diego County Department of Env Health
Eval Program:	HMRRP
Eval Source:	CERS

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	08-29-2018
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Inspector: Kieu Bridget Inspection ID:5996841
Eval Division:	San Diego County Department of Env Health
Eval Program:	HW
Eval Source:	CERS

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	09-12-2016
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Inspector: Calcagno Leonardo Inspection ID:5486697
Eval Division:	San Diego County Department of Env Health
Eval Program:	HW
Eval Source:	CERS

Eval General Type:	Compliance Evaluation Inspection

MEL'S AUTO REPAIR, LLC (Continued) **S106062794**

Eval Date: 09-12-2016
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Inspector: Calcagno Leonardo Inspection ID:5486697
Eval Division: San Diego County Department of Env Health
Eval Program: HMRRP
Eval Source: CERS

Coordinates:
Site ID: 47908
Facility Name: MEL'S AUTO REPAIR, LLC
Env Int Type Code: HWG
Program ID: 10375861
Coord Name: Not reported
Ref Point Type Desc: Center of a facility or station.
Latitude: 33.148510
Longitude: -117.193860

Affiliation:
Affiliation Type Desc: Environmental Contact
Entity Name: MELVYN MUZIO
Entity Title: Not reported
Affiliation Address: 139 N PACIFIC ST
Affiliation City: SAN MARCOS
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 92069
Affiliation Phone: Not reported

Affiliation Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title: Not reported
Affiliation Address: 139 N PACIFIC ST
Affiliation City: SAN MARCOS
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 92069
Affiliation Phone: Not reported

Affiliation Type Desc: Legal Owner
Entity Name: MELVYN MUZIO
Entity Title: Not reported
Affiliation Address: 139 N PACIFIC ST
Affiliation City: SAN MARCOS
Affiliation State: CA
Affiliation Country: United States
Affiliation Zip: 92069
Affiliation Phone: (760) 591-0311

Affiliation Type Desc: Parent Corporation
Entity Name: MEL'S AUTO REPAIR, LLC
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported

MEL'S AUTO REPAIR, LLC (Continued) **S106062794**

Affiliation Zip:	Not reported
Affiliation Phone:	Not reported
Affiliation Type Desc:	Identification Signer
Entity Name:	Tina Muzio
Entity Title:	Office Mgr
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported
Affiliation Type Desc:	CUPA District
Entity Name:	San Diego County Env Health
Entity Title:	Not reported
Affiliation Address:	PO Box 129261
Affiliation City:	San Diego
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	92112-9261
Affiliation Phone:	(858) 505-6880
Affiliation Type Desc:	Document Preparer
Entity Name:	Tina Muzio
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported
Affiliation Type Desc:	Operator
Entity Name:	MEL'S AUTO REPAIR, LLC
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(760) 591-0311

I37 **MEL'S AUTO REPAIR LLC** **RCRA NonGen / NLR** **1024789319**
WSW **139 NORTH PACIFIC STE A1** **CAL000063269**
1/8-1/4 **SAN MARCOS, CA 92069**
0.196 mi.
1035 ft. **Site 2 of 8 in cluster I**

Relative: RCRA NonGen / NLR:
Lower

Date Form Received by Agency:		1993-07-28 00:00:00.0
Handler Name:	MEL'S AUTO REPAIR LLC	
Handler Address:		139 NORTH PACIFIC STE A1
Handler City,State,Zip:		SAN MARCOS, CA 92069-0000
EPA ID:		CAL000063269
Contact Name:		MEL MUZIO
Contact Address:		139 NORTH PACIFIC STE A1

Actual:
563 ft.

MEL'S AUTO REPAIR LLC (Continued) **1024789319**

Contact City,State,Zip:	SAN MARCOS, CA 92069
Contact Telephone:	760-591-0311
Contact Fax:	000-000-0000
Contact Email:	MJCAUTO@AOL.COM
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	139 N PACIFIC ST STE A-1
Mailing City,State,Zip:	SAN MARCOS, CA 92069-0000
Owner Name:	MEL'S AUTO REPAIR LLC
Owner Type:	Other
Operator Name:	MEL MUZIO
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No

MEL'S AUTO REPAIR LLC (Continued) **1024789319**

Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2018-09-05 15:41:52.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	MEL'S AUTO REPAIR LLC
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	139 N PACIFIC ST STE A-1
Owner/Operator City,State,Zip:	SAN MARCOS, CA 92069-0000
Owner/Operator Telephone:	760-591-0311
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name:	MEL MUZIO
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	139 NORTH PACIFIC STE A1
Owner/Operator City,State,Zip:	SAN MARCOS, CA 92069
Owner/Operator Telephone:	760-591-0311
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	1993-07-28 00:00:00.0
Handler Name: MEL'S AUTO REPAIR LLC	
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes

MEL'S AUTO REPAIR LLC (Continued) **1024789319**

Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 811111
NAICS Description: GENERAL AUTOMOTIVE REPAIR

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

H38 **COCA COLA ENTERPISES** **CPS-SLIC** **S106716295**
South **NONE LAS POSAS/ARMORLITE** **CERS** **N/A**
1/8-1/4 **SAN MARCOS, CA 92069**
0.197 mi.
1038 ft. **Site 2 of 6 in cluster H**

Relative: **Lower**
Actual: **560 ft.**

CPS-SLIC:
Name: COCA COLA ENTERPISES
Address: NONE LAS POSAS/ARMORLITE
City,State,Zip: SAN MARCOS, CA 92069
Region: STATE
Facility Status: **Completed - Case Closed**
Status Date: 07/31/1997
Global Id: T0608184290
Lead Agency: SAN DIEGO COUNTY LOP
Lead Agency Case Number: H36816-001
Latitude: 33.1462615771038
Longitude: -117.18950788548
Case Type: Cleanup Program Site
Case Worker: Not reported
Local Agency: Not reported
RB Case Number: Not reported
File Location: Local Agency
Potential Media Affected: Aquifer used for drinking water supply
Potential Contaminants of Concern: * Chlorinated Hydrocarbons
Site History: Not reported

Click here to access the California GeoTracker records for this facility:

CERS:
Name: COCA COLA ENTERPISES
Address: NONE LAS POSAS/ARMORLITE
City,State,Zip: SAN MARCOS, CA 92069
Site ID: 232487
CERS ID: T0608184290
CERS Description: Cleanup Program Site

H39
SSW
1/8-1/4
0.204 mi.
1078 ft.

READY LINE FLEET SERVICE INC DBA READY LINE FLEET
1322 DESCANSO AVE STE A
SAN MARCOS, CA 92069

Site 3 of 6 in cluster H

RCRA NonGen / NLR | **1024855277** | **CAL000417746**

Relative:
Lower

Actual:
560 ft.

RCRA NonGen / NLR:

Date Form Received by Agency:	2016-06-06 00:00:00.0
Handler Name:	READY LINE FLEET SERVICE INC DBA READY LINE FLEET SERVICE
Handler Address:	1322 DESCANSO AVE STE A
Handler City,State,Zip:	SAN MARCOS, CA 92069-1391
EPA ID:	CAL000417746
Contact Name:	EDWARD RODRIQUEZ
Contact Address:	1322 DESCANSO AVE.
Contact City,State,Zip:	SAN MARCOS, CA 92069
Contact Telephone:	760-529-6552
Contact Fax:	760-737-2039
Contact Email:	READYLINEFLEET@GMAIL.COM
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	1322 DESCANSO AVE.
Mailing City,State,Zip:	SAN MARCOS, CA 92069-0000
Owner Name:	EDWARD RODRIQUEZ
Owner Type:	Other
Operator Name:	EDWARD RODRIQUEZ
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported

READY LINE FLEET SERVICE INC DBA READY LINE FLEET SERVICE (Continued) **1024855277**

Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2018-09-06 17:07:50.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	EDWARD RODRIQUEZ
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1322 DESCANSO AVE.
Owner/Operator City,State,Zip:	SAN MARCOS, CA 92069-0000
Owner/Operator Telephone:	760-529-6552
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name:	EDWARD RODRIQUEZ
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1322 DESCANSO AVE.
Owner/Operator City,State,Zip:	SAN MARCOS, CA 92069
Owner/Operator Telephone:	760-529-6552
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

READY LINE FLEET SERVICE INC DBA READY LINE FLEET SERVICE (Continued) **1024855277**

Historic Generators:
Receive Date: 2016-06-06 00:00:00.0
Handler Name: READY LINE FLEET SERVICE INC DBA READY LINE FLEET SERVICE
Federal Waste Generator Description: Not a generator, verified
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 811111
NAICS Description: GENERAL AUTOMOTIVE REPAIR

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

H40 **READY LINE FLEET SERVICE** **San Diego Co. HMMD** **S106065959**
SSW **1322 DESCANSO AVE STE A** **CERS HAZ WASTE** **N/A**
1/8-1/4 **SAN MARCOS, CA 92069** **HAZNET**
0.204 mi. **CERS**
1078 ft. **Site 4 of 6 in cluster H** **HWTS**

Relative: **Lower**
Actual: **560 ft.**

HMMD SAN DIEGO:
Name: KM CERTIFIED WELDING
Address: 1322 DESCANSO AVE B
City,State,Zip: SAN MARCOS, CA 92069
Permit Number: Not reported
Business Type: Not reported
EPA Id Number: Not reported
APN: Not reported
Last HMMD Inspection: Not reported
Facility Telephone: 760-803-9964
Permit Status: Permit Renewed
Permit Expiration: Not reported
Date Last Updated: 06/27/2020
Facility Owner: Not reported
Facility Mailing Address: 1322 Descanso Ave Ste B, San Marcos, CA 92069
Facility Mailing City: Not reported
Facility Mailing State: Not reported
Facility Mailing Zip: Not reported
UST Owner: N
Handle Regulated Hazmat: Not reported
Own Or Operate UST: Not reported
Subject To APSA: Not reported
Generate Haz Waste: N
Treat Haz Waste: N
Generate Medical Waste: Not reported

READY LINE FLEET SERVICE (Continued) **S106065959**

Inspection Violation:

Record ID:	DEH2012-HUPFP-216064
Permit Status:	Permit Renewed
Active Permit:	Y
Facility Id Number:	37-000-216064
Program Element:	Hazardous Materials Release Response Plans
Inspection Type:	Routine
Inspection Number:	5957535
Return To Compliance Date:	2018-07-24T00:00:00.000
Nov:	No
Violation Classification:	Class II
Underground Storage Tank Id:	Not reported
Container/Tank Id:	Not reported
Last Update:	2020-06-27T00:00:00.000
Inspection Date:	2018-07-24T16:40:58.000
Violation Code:	1010008 HMBP not certified annually as complete and accurate in CERS. HSC 25508(a)(1)(A), 25508.2, 19 CCR 2654(b)

Waste and Materials:

Record ID:	DEH2012-HUPFP-216064
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2018-HCHEM-0189151
Trade Secret:	N
Hazardous Material Type:	Pure
Last Updated:	2020-06-27T02:33:07.000
Chemical Name:	Oxygen Gas
Common Name:	Oxygen Gas
Case Number:	7782-44-7

Record ID:	DEH2012-HUPFP-216064
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2018-HCHEM-0189152
Trade Secret:	N
Hazardous Material Type:	Pure
Last Updated:	2020-06-27T02:33:07.000
Chemical Name:	Propane
Common Name:	Liquefied Petroleum Gas (lpg)
Case Number:	74-98-6

Record ID:	DEH2012-HUPFP-216064
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2018-HCHEM-0189153
Trade Secret:	N
Hazardous Material Type:	Pure
Last Updated:	2020-06-27T02:33:07.000
Chemical Name:	Acetylene
Common Name:	Acetylene
Case Number:	74-86-2

Record ID:	DEH2012-HUPFP-216064
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2016-HCHEM-0109121

READY LINE FLEET SERVICE (Continued) **S106065959**

Trade Secret: N
Hazardous Material Type: Pure
Last Updated: 2018-06-07T02:31:01.000
Chemical Name: Oxygen Gas
Common Name: Oxygen Gas
Case Number: 7782-44-7

Record ID: DEH2012-HUPFP-216064
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2016-HCHEM-0109122
Trade Secret: N
Hazardous Material Type: Pure
Last Updated: 2018-06-07T02:31:01.000
Chemical Name: Acetylene
Common Name: Acetylene
Case Number: 74-86-2

Record ID: DEH2012-HUPFP-216064
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2016-HCHEM-0109123
Trade Secret: N
Hazardous Material Type: Pure
Last Updated: 2018-06-07T02:31:01.000
Chemical Name: Propane
Common Name: Liquefied Petroleum Gas (lpg)
Case Number: 74-98-6

Name: KM CERTIFIED WELDING
Address: 1322 DESCANSO AV
City,State,Zip: SAN MARCOS, CA 92069
Permit Number: 216064
Business Type: 6HK35
EPA Id Number: Not reported
APN: 219-122-07-00
Last HMMD Inspection: 04/18/2012
Facility Telephone: 760-510-8089
Permit Status: OPEN
Permit Expiration: 06/30/2013
Date Last Updated: 11/02/2012
Facility Owner: EARL KROGH
Facility Mailing Address: 1322 DESCANSO AVE #B,
Facility Mailing City: San Marcos
Facility Mailing State: CA
Facility Mailing Zip: 92069
UST Owner: Not reported
Handle Regulated Hazmat: Y
Own Or Operate UST: Not reported
Subject To APSA: Not reported
Generate Haz Waste: Not reported
Treat Haz Waste: Not reported
Generate Medical Waste: Not reported

Inventory Active Permits (not SQG Medical):
Permit Number: 216064
Update Date: 11/02/2012

READY LINE FLEET SERVICE (Continued) **S106065959**

Case Number: 124-38-9
Name: CARBON DIOXIDE GAS
Other Information: Not reported
Material Waste: Material
Hazardous Categories 1: PRESSURE RELEASE
Hazardous Categories 2: Not reported

Permit Number: 216064
Update Date: 11/02/2012
Case Number: 7782-44-7
Name: OXYGEN GAS
Other Information: Not reported
Material Waste: Material
Hazardous Categories 1: FIRE
Hazardous Categories 2: PRESSURE RELEASE

Violations Active Permits:

Permit Number: 216064
Update Date: 11/02/2012
Inspection Date: 04/18/2012
Violation Code: 6HV1001
Violation: NO UPF PERMIT FOR HAZMATS
Violation Citation: A Unified Program Facility permit has not been obtained for hazardous materials. 68.905
Activity: ACTIVE

Permit Number: 216064
Update Date: 11/02/2012
Inspection Date: 04/18/2012
Violation Code: 6HV1002
Violation: HMBP NOT ESTABISHED/IMPLEMENTED.
Violation Citation: Hazardous materials handler has not established/implemented a business plan. HSC 25503.5(a)
Activity: ACTIVE

Permit Number: 216064
Update Date: 11/02/2012
Inspection Date: 04/18/2012
Violation Code: 6HV1015
Violation: EMPLOYEE TRAINING NOT ADEQUATE
Violation Citation: Did not have adequate employee training program 2732 &/or 25504(c)
Activity: ACTIVE

Permit Number: 216064
Update Date: 11/02/2012
Inspection Date: 01/27/2012
Violation Code: 6HV1001
Violation: NO UPF PERMIT FOR HAZMATS
Violation Citation: A Unified Program Facility permit has not been obtained for hazardous materials. 68.905
Activity: ACTIVE

Permit Number: 216064
Update Date: 11/02/2012
Inspection Date: 01/27/2012
Violation Code: 6HV1002
Violation: HMBP NOT ESTABISHED/IMPLEMENTED.

READY LINE FLEET SERVICE (Continued) **S106065959**

Violation Citation:	Hazardous materials handler has not established/implemented a business plan. HSC 25503.5(a)
Activity:	ACTIVE
Permit Number:	216064
Update Date:	11/02/2012
Inspection Date:	01/27/2012
Violation Code:	6HV1015
Violation:	EMPLOYEE TRAINING NOT ADEQUATE
Violation Citation:	Did not have adequate employee training program 2732 &/or 25504(c)
Activity:	ACTIVE
Name:	ALL AUTOMOTIVE SERVICES
Address:	1322 DESCANSO AV
City,State,Zip:	SAN MARCOS, CA 92069
Permit Number:	139386
Business Type:	6HK26
EPA Id Number:	CAL000214473
APN:	219-122-07-00
Last HMMD Inspection:	03/06/2003
Facility Telephone:	760-510-9999
Permit Status:	INAC
Permit Expiration:	08/31/2004
Date Last Updated:	11/02/2012
Facility Owner:	DANIEL ORTEGA
Facility Mailing Address:	1322 DESCANSO AV #A
Facility Mailing City:	SAN MARCOS
Facility Mailing State:	CA
Facility Mailing Zip:	92069-
UST Owner:	Not reported
Handle Regulated Hazmat:	Not reported
Own Or Operate UST:	Not reported
Subject To APSA:	Not reported
Generate Haz Waste:	Y
Treat Haz Waste:	Not reported
Generate Medical Waste:	Not reported
Name:	PETE'S WELDING & REPAIR
Address:	1322 DESCANSO AV
City,State,Zip:	SAN MARCOS, CA 92069
Permit Number:	204773
Business Type:	6HK35
EPA Id Number:	Not reported
APN:	219-122-07-00
Last HMMD Inspection:	02/02/2005
Facility Telephone:	760-801-0540
Permit Status:	INAC
Permit Expiration:	05/31/2007
Date Last Updated:	11/02/2012
Facility Owner:	PETER VILLALOBOS
Facility Mailing Address:	P O BOX 406
Facility Mailing City:	VALLEY CENTER
Facility Mailing State:	CA
Facility Mailing Zip:	92082
UST Owner:	Not reported
Handle Regulated Hazmat:	Not reported

READY LINE FLEET SERVICE (Continued) **S106065959**

Own Or Operate UST: Not reported
Subject To APSA: Not reported
Generate Haz Waste: Not reported
Treat Haz Waste: Not reported
Generate Medical Waste: Not reported

Name: PETE'S WELDING & REPAIR
Address: 1322 DESCANSO AV
City,State,Zip: SAN MARCOS, CA 92069
Permit Number: 204773
Business Type: 6HK35
EPA Id Number: Not reported
APN: 219-122-07-00
Last HMMD Inspection: 02/02/2005
Facility Telephone: 760-801-0540
Permit Status: INAC
Permit Expiration: 05/31/2007
Date Last Updated: 11/02/2012
Facility Owner: PETER VILLALOBOS
Facility Mailing Address: P O BOX 406
Facility Mailing City: VALLEY CENTER
Facility Mailing State: CA
Facility Mailing Zip: 92082
UST Owner: Not reported
Handle Regulated Hazmat: Y
Own Or Operate UST: Not reported
Subject To APSA: Not reported
Generate Haz Waste: Not reported
Treat Haz Waste: Not reported
Generate Medical Waste: Not reported

CERS HAZ WASTE:
Name: READY LINE FLEET SERVICE
Address: 1322 DESCANSO AVE STE A
City,State,Zip: SAN MARCOS, CA 92069
Site ID: 412135
CERS ID: 10710316
CERS Description: Hazardous Waste Generator

HAZNET:
Name: READY LINE FLEET SERVICE INC DBA READY LINE FLEET SERVICE
Address: 1322 DESCANSO AVE STE A
Address 2: Not reported
City,State,Zip: SAN MARCOS, CA 920690000
Contact: EDWARD RODRIQUEZ
Telephone: 7605296552
Mailing Name: Not reported
Mailing Address: 1322 DESCANSO AVE.

Year: 2019
Gepaid: CAL000417746
TSD EPA ID: CAD097030993
CA Waste Code: 352 - Other organic solids
Disposal Method: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons: 0.05000

READY LINE FLEET SERVICE (Continued) **S106065959**

Year:	2018
Gepaid:	CAL000417746
TSD EPA ID:	AZR000515924
CA Waste Code:	352 - Other organic solids
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.07500
Year:	2018
Gepaid:	CAL000417746
TSD EPA ID:	CAD097030993
CA Waste Code:	352 - Other organic solids
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.05000
Year:	2017
Gepaid:	CAL000417746
TSD EPA ID:	CAD097030993
CA Waste Code:	352 - Other organic solids
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.05
Year:	2017
Gepaid:	CAL000417746
TSD EPA ID:	CAD097030993
CA Waste Code:	135 - Unspecified aqueous solution
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.063
Year:	2017
Gepaid:	CAL000417746
TSD EPA ID:	CAT080013352
CA Waste Code:	343 - Unspecified organic liquid mixture
Disposal Method:	H039 - Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Tons:	0.187
Year:	2016
Gepaid:	CAL000417746
TSD EPA ID:	CAT080013352
CA Waste Code:	343 - Unspecified organic liquid mixture
Disposal Method:	H039 - Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Tons:	0.459

Additional Info:

Year:	2017
Gen EPA ID:	CAL000417746
Shipment Date:	20171226
Creation Date:	8/20/2018 18:30:18
Receipt Date:	20180105
Manifest ID:	017740442JJK

READY LINE FLEET SERVICE (Continued) **S106065959**

Trans EPA ID:	CAD028277036
Trans Name:	ASBURY ENVIRONMENTAL SERVICES
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD097030993
Trans Name:	US ECOLOGY VERNON INC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	135 - Unspecified aqueous solution
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.063
Waste Quantity:	15
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20171208
Creation Date:	8/10/2018 18:30:35
Receipt Date:	20171215
Manifest ID:	017739027JJK
Trans EPA ID:	CAD028277036
Trans Name:	ASBURY ENVIRONMENTAL SERVICES
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD097030993
Trans Name:	US ECOLOGY VERNON INC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.05
Waste Quantity:	100
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20170223
Creation Date:	5/19/2017 18:30:21
Receipt Date:	20170303
Manifest ID:	016757494JJK
Trans EPA ID:	CAD028277036
Trans Name:	ASBURY ENVIRONMENTAL SERVICES
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAT080013352
Trans Name:	DEMENNO / KERDOON
TSDF Alt EPA ID:	Not reported

READY LINE FLEET SERVICE (Continued) **S106065959**

TSDF Alt Name:	Not reported
Waste Code Description:	343 - Unspecified organic liquid mixture
RCRA Code:	D018
Meth Code:	H039 - Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Quantity Tons:	0.187
Waste Quantity:	55
Quantity Unit:	G
Additional Code 1:	D001
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

CERS:

Name:	KM CERTIFIED WELDING
Address:	1322 DESCANSO AVE STE B
City,State,Zip:	SAN MARCOS, CA 92069
Site ID:	41889
CERS ID:	10376620
CERS Description:	Chemical Storage Facilities

Violations:

Site ID:	41889
Site Name:	KM CERTIFIED WELDING
Violation Date:	07-24-2018
Citation:	HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description:	Failure to annually review and electronically certify that the business plan is complete and accurate on or before the annual due date.
Violation Notes:	Returned to compliance on 07/24/2018. Inspection Sequence ID:5957535
Violation Division:	San Diego County Department of Env Health
Violation Program:	HMRRP
Violation Source:	CERS

Evaluation:

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	07-24-2018
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Inspector: Calcagno Leonardo Inspection ID:5957535
Eval Division:	San Diego County Department of Env Health
Eval Program:	HMRRP
Eval Source:	CERS

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	07-28-2016
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Inspector: Calcagno Leonardo Inspection ID:5408911
Eval Division:	San Diego County Department of Env Health
Eval Program:	HMRRP
Eval Source:	CERS

Enforcement Action:

READY LINE FLEET SERVICE (Continued) **S106065959**

Site ID: 41889
Site Name: KM CERTIFIED WELDING
Site Address: 1322 DESCANSO AVE STE B
Site City: SAN MARCOS
Site Zip: 92069
Enf Action Date: 09-12-2012
Enf Action Type: AEO - Unified Program
Enf Action Description: Administrative Enforcement Order Based on the Unified Program Statute
Enf Action Notes: Not reported
Enf Action Division: San Diego County Department of Env Health
Enf Action Program: UNSPEC
Enf Action Source: CERS

Affiliation:

Affiliation Type Desc: CUPA District
Entity Name: San Diego County Env Health
Entity Title: Not reported
Affiliation Address: PO Box 129261
Affiliation City: San Diego
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 92112-9261
Affiliation Phone: (858) 505-6880

Affiliation Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title: Not reported
Affiliation Address: 1322 Descanso Ave Ste B
Affiliation City: San Marcos
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 92069
Affiliation Phone: Not reported

Affiliation Type Desc: Parent Corporation
Entity Name: KM CERTIFIED WELDING
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: Identification Signer
Entity Name: Guy Smith
Entity Title: Owner
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: Legal Owner
Entity Name: GUY SMITH
Entity Title: Not reported

READY LINE FLEET SERVICE (Continued) **S106065959**

Affiliation Address:	1322 Descanso Ave Ste B
Affiliation City:	San Marcos
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	92069
Affiliation Phone:	(760) 803-9964
Affiliation Type Desc:	Operator
Entity Name:	GUY SMITH
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(760) 803-9964
Affiliation Type Desc:	Document Preparer
Entity Name:	Guy Smith
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported
Affiliation Type Desc:	Environmental Contact
Entity Name:	GUY SMITH
Entity Title:	Not reported
Affiliation Address:	1322 Descanso Ave Ste B
Affiliation City:	San Marcos
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	92069
Affiliation Phone:	Not reported

Name:	READY LINE FLEET SERVICE
Address:	1322 DESCANSO AVE STE A
City,State,Zip:	SAN MARCOS, CA 92069
Site ID:	412135
CERS ID:	10710316
CERS Description:	Chemical Storage Facilities

Violations:

Site ID:	412135
Site Name:	Ready Line Fleet Service
Violation Date:	10-19-2016
Citation:	HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description:	Failure to complete and electronically submit a business plan when storing/handling a hazardous material at or above reportable quantities.
Violation Notes:	Returned to compliance on 10/19/2016. Inspection Sequence ID:5600966
Violation Division:	San Diego County Department of Env Health
Violation Program:	HMRRP
Violation Source:	CERS

READY LINE FLEET SERVICE (Continued) **S106065959**

Site ID: 412135
Site Name: Ready Line Fleet Service
Violation Date: 10-19-2016
Citation: HSC 6.5 Multiple - California Health and Safety Code, Chapter 6.5, Section(s) Multiple
Violation Description: Hazardous Waste Generator Program - Administration/Documentation - General
Violation Notes: Returned to compliance on 12/28/2016. Inspection Sequence ID:5600966;Violation:HMD0131 Unified Program Facility Permit not obtained &/or maintained for the generation of hazardous waste. HSC 25404.1; SDCC 68.905; 68.906, 68.907
Violation Division: San Diego County Department of Env Health
Violation Program: HW
Violation Source: CERS

Site ID: 412135
Site Name: Ready Line Fleet Service
Violation Date: 10-19-2016
Citation: HSC 6.95 Multiple - California Health and Safety Code, Chapter 6.95, Section(s) Multiple
Violation Description: Business Plan Program - Administration/Documentation - General
Violation Notes: Returned to compliance on 12/28/2016. Inspection Sequence ID:5600966;Violation:HMD1001 Unified Program Facility permit not obtained for hazardous materials. SDCC 68.905
Violation Division: San Diego County Department of Env Health
Violation Program: HMRRP
Violation Source: CERS

Site ID: 412135
Site Name: Ready Line Fleet Service
Violation Date: 10-30-2018
Citation: HSC 6.95 25505(a)(4) - California Health and Safety Code, Chapter 6.95, Section(s) 25505(a)(4)
Violation Description: Failure to provide initial and annual training to all employees in safety procedures in the event of a release or threatened release of a hazardous material or failure to document and maintain training records for a minimum of three years.
Violation Notes: Returned to compliance on 11/10/2018. Inspection Sequence ID:6023758
Violation Division: San Diego County Department of Env Health
Violation Program: HMRRP
Violation Source: CERS

Evaluation:
Eval General Type: Compliance Evaluation Inspection
Eval Date: 10-19-2016
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Inspector: Calcagno Leonardo Inspection ID:5600966
Eval Division: San Diego County Department of Env Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 10-19-2016
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Inspector: Calcagno Leonardo Inspection ID:5600966

READY LINE FLEET SERVICE (Continued) **S106065959**

Eval Division: San Diego County Department of Env Health
Eval Program: HW
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 10-30-2018
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Inspector: Kieu Bridget Inspection ID:6023758
Eval Division: San Diego County Department of Env Health
Eval Program: HW
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 10-30-2018
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Inspector: Kieu Bridget Inspection ID:6023758
Eval Division: San Diego County Department of Env Health
Eval Program: HMRRP
Eval Source: CERS

Affiliation:
Affiliation Type Desc: Environmental Contact
Entity Name: Edward Rodriguez
Entity Title: Not reported
Affiliation Address: 1322 Descanso Ave Ste A
Affiliation City: San Marcos
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 92069
Affiliation Phone: Not reported

Affiliation Type Desc: Identification Signer
Entity Name: Edward Rodriguez
Entity Title: Owner
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: Legal Owner
Entity Name: Edward Rodriguez
Entity Title: Not reported
Affiliation Address: 1322 Descanso Ave Ste A
Affiliation City: San Marcos
Affiliation State: CA
Affiliation Country: United States
Affiliation Zip: 92069
Affiliation Phone: (760) 727-2055

Affiliation Type Desc: Document Preparer
Entity Name: Edward Rodriguez
Entity Title: Not reported
Affiliation Address: Not reported

READY LINE FLEET SERVICE (Continued) **S106065959**

Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported
Affiliation Type Desc:	Facility Mailing Address
Entity Name:	Mailing Address
Entity Title:	Not reported
Affiliation Address:	1322 Descanso Ave Ste A
Affiliation City:	San Marcos
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	92069
Affiliation Phone:	Not reported
Affiliation Type Desc:	Parent Corporation
Entity Name:	READY LINE FLEET SERVICE
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported
Affiliation Type Desc:	CUPA District
Entity Name:	San Diego County Env Health
Entity Title:	Not reported
Affiliation Address:	PO Box 129261
Affiliation City:	San Diego
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	92112-9261
Affiliation Phone:	(858) 505-6880
Affiliation Type Desc:	Operator
Entity Name:	Edward Rodriguez
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(760) 727-2055

HWTS:

Name:	READY LINE FLEET SERVICE INC DBA READY LINE FLEET SERVICE
Address:	1322 DESCANSO AVE STE A
Address 2:	Not reported
City,State,Zip:	SAN MARCOS, CA 920691391
EPA ID:	CAL000417746
Inactive Date:	Not reported
Create Date:	06/06/2016
Last Act Date:	08/25/2020
Mailing Name:	Not reported

READY LINE FLEET SERVICE (Continued) **S106065959**

Mailing Address:	1322 DESCANSO AVE.
Mailing Address 2:	Not reported
Mailing City,State,Zip:	SAN MARCOS, CA 920690000
Owner Name:	EDWARD RODRIQUEZ
Owner Address:	1322 DESCANSO AVE.
Owner Address 2:	Not reported
Owner City,State,Zip:	SAN MARCOS, CA 920690000
Contact Name:	EDWARD RODRIQUEZ
Contact Address:	1322 DESCANSO AVE.
Contact Address 2:	Not reported
City,State,Zip:	SAN MARCOS, CA 92069

NAICS:

EPA ID:	CAL000417746
Create Date:	2016-06-06 08:58:05.680
NAICS Code:	811111
NAICS Description:	General Automotive Repair
Issued EPA ID Date:	2016-06-06 08:58:05.61000
Inactive Date:	Not reported
Facility Name:	READY LINE FLEET SERVICE INC DBA READY LINE FLEET SERVICE
Facility Address:	1322 DESCANSO AVE STE A
Facility Address 2:	Not reported
Facility City:	SAN MARCOS
Facility County:	Not reported
Facility State:	CA
Facility Zip:	920691391

J41 **IRON FACTORY THE** **RCRA NonGen / NLR** **1000305017**
SSW **1402-C DESCANSO RD** **CAD098234511**
1/8-1/4 **SAN MARCOS, CA 92069**
0.206 mi.
1089 ft. **Site 1 of 13 in cluster J**

Relative: **Lower**
Actual: **560 ft.**

RCRA NonGen / NLR:

Date Form Received by Agency:		1986-08-11 00:00:00.0
Handler Name:	IRON FACTORY THE	
Handler Address:		1402-C DESCANSO RD
Handler City,State,Zip:		SAN MARCOS, CA 92069
EPA ID:		CAD098234511
Contact Name:		ENVIRONMENTAL MANAGER
Contact Address:		1402-C DESCANSO RD
Contact City,State,Zip:		SAN MARCOS, CA 92069
Contact Telephone:		619-744-3294
Contact Fax:		Not reported
Contact Email:		Not reported
Contact Title:		Not reported
EPA Region:		09
Land Type:		Not reported
Federal Waste Generator Description:		Not a generator, verified
Non-Notifier:		Not reported
Biennial Report Cycle:		Not reported
Accessibility:		Not reported
Active Site Indicator:		Not reported
State District Owner:		CA
State District:		4
Mailing Address:		DESCANSO RD
Mailing City,State,Zip:		SAN MARCOS, CA 92069

IRON FACTORY THE (Continued) **1000305017**

Owner Name:	KRONUS JAMES
Owner Type:	Private
Operator Name:	NOT REQUIRED
Operator Type:	Private
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	NN
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2000-09-15 17:29:22.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	Not reported

IRON FACTORY THE (Continued) **1000305017**

Manifest Broker: Not reported
Sub-Part P Indicator: No

Handler - Owner Operator:
Owner/Operator Indicator: Owner
Owner/Operator Name: KRONUS JAMES
Legal Status: Private
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: NOT REQUIRED
Owner/Operator City,State,Zip: NOT REQUIRED, ME 99999
Owner/Operator Telephone: 415-555-1212
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Operator
Owner/Operator Name: NOT REQUIRED
Legal Status: Private
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: NOT REQUIRED
Owner/Operator City,State,Zip: NOT REQUIRED, ME 99999
Owner/Operator Telephone: 415-555-1212
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:
Receive Date: 1986-08-11 00:00:00.0
Handler Name: IRON FACTORY THE
Federal Waste Generator Description: Not a generator, verified
State District Owner: CA
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Codes: No NAICS Codes Found

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

J42 **CARB ON TECH** **RCRA NonGen / NLR** **1026056005**
SSW **1402 DESCANSO AVE STE B** **CAL000452191**
1/8-1/4 **SAN MARCOS, CA 92069**
0.206 mi.
1089 ft. **Site 2 of 13 in cluster J**

Relative: **Lower**
Actual: **560 ft.**

RCRA NonGen / NLR:

Date Form Received by Agency:		2020-01-27 00:00:00.0
Handler Name:	CARB ON TECH	
Handler Address:		1402 DESCANSO AVE STE B
Handler City,State,Zip:		SAN MARCOS, CA 92069
EPA ID:		CAL000452191
Contact Name:		ULISES MERINO
Contact Address:		1402 DESCANSO AVE STE B
Contact City,State,Zip:		SAN MARCOS, CA 92069
Contact Telephone:		760-510-2025
Contact Fax:		Not reported
Contact Email:		ULISES@CARBONTECHPRO.COM
Contact Title:		Not reported
EPA Region:		09
Land Type:		Not reported
Federal Waste Generator Description:		Not a generator, verified
Non-Notifier:		Not reported
Biennial Report Cycle:		Not reported
Accessibility:		Not reported
Active Site Indicator:		Not reported
State District Owner:		Not reported
State District:		Not reported
Mailing Address:		1402 DESCANSO AVE STE B
Mailing City,State,Zip:		SAN MARCOS, CA 92069
Owner Name:		ULISES MERINO
Owner Type:		Other
Operator Name:		ULISES MERINO
Operator Type:		Other
Short-Term Generator Activity:		No
Importer Activity:		No
Mixed Waste Generator:		No
Transporter Activity:		No
Transfer Facility Activity:		No
Recycler Activity with Storage:		No
Small Quantity On-Site Burner Exemption:		No
Smelting Melting and Refining Furnace Exemption:		No
Underground Injection Control:		No
Off-Site Waste Receipt:		No
Universal Waste Indicator:		No
Universal Waste Destination Facility:		No
Federal Universal Waste:		No
Active Site Fed-Reg Treatment Storage and Disposal Facility:		Not reported
Active Site Converter Treatment storage and Disposal Facility:		Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:		Not reported
Active Site State-Reg Handler:		---
Federal Facility Indicator:		Not reported
Hazardous Secondary Material Indicator:		N
Sub-Part K Indicator:		Not reported
Commercial TSD Indicator:		No
Treatment Storage and Disposal Type:		Not reported
2018 GPRA Permit Baseline:		Not on the Baseline
2018 GPRA Renewals Baseline:		Not on the Baseline
Permit Renewals Workload Universe:		Not reported

CARB ON TECH (Continued) **1026056005**

Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2020-02-10 17:54:17.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	ULISES MERINO
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1402 DESCANSO AVE STE B
Owner/Operator City,State,Zip:	SAN MARCOS, CA 92069
Owner/Operator Telephone:	760-510-2025
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name:	ULISES MERINO
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1402 DESCANSO AVE STE B
Owner/Operator City,State,Zip:	SAN MARCOS, CA 92069
Owner/Operator Telephone:	760-510-2025
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

CARB ON TECH (Continued) **1026056005**

Historic Generators:
Receive Date: 2020-01-27 00:00:00.0
Handler Name: CARB ON TECH
Federal Waste Generator Description: Not a generator, verified
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 56299
NAICS Description: ALL OTHER WASTE MANAGEMENT SERVICES

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

J43 **CARB-ON TECH** **San Diego Co. HMMD** **S106064065**
SSW **1402 DESCANSO AVE STE B** **CERS HAZ WASTE** **N/A**
1/8-1/4 **SAN MARCOS, CA 92069** **CERS**
0.206 mi.
1089 ft. **Site 3 of 13 in cluster J**

Relative: **Lower**
Actual: **560 ft.**

HMMD SAN DIEGO:
Name: J & H FABRICATION
Address: 1402 DESCANSO AV
City,State,Zip: SAN MARCOS, CA 92069
Permit Number: 133989
Business Type: 6HK18
EPA Id Number: CAL000082831
APN: 219-122-18-00
Last HMMD Inspection: 11/14/1995
Facility Telephone: 619-471-5158
Permit Status: INAC
Permit Expiration: 11/14/1995
Date Last Updated: 11/02/2012
Facility Owner: HENRY GARCIA
Facility Mailing Address: 1402 DESCANSO AV #C
Facility Mailing City: SAN MARCOS
Facility Mailing State: CA
Facility Mailing Zip: 92069-
UST Owner: Not reported
Handle Regulated Hazmat: Not reported
Own Or Operate UST: Not reported
Subject To APSA: Not reported
Generate Haz Waste: Y
Treat Haz Waste: Not reported
Generate Medical Waste: Not reported

CARB-ON TECH (Continued) **S106064065**

CERS HAZ WASTE:
Name: CARB-ON TECH
Address: 1402 DESCANSO AVE STE B
City,State,Zip: SAN MARCOS, CA 92069
Site ID: 16395
CERS ID: 10376392
CERS Description: Hazardous Waste Onsite Treatment

Name: CARB-ON TECH
Address: 1402 DESCANSO AVE STE B
City,State,Zip: SAN MARCOS, CA 92069
Site ID: 16395
CERS ID: 10376392
CERS Description: Hazardous Waste Generator

CERS:
Name: CARB-ON TECH
Address: 1402 DESCANSO AVE STE B
City,State,Zip: SAN MARCOS, CA 92069
Site ID: 16395
CERS ID: 10376392
CERS Description: Chemical Storage Facilities

Violations:
Site ID: 16395
Site Name: CARB-ON TECH
Violation Date: 04-04-2014
Citation: HSC 6.67 Multiple Sections - California Health and Safety Code, Chapter 6.67, Section(s) Multiple Sections
Violation Description: Tiered Permitting Program - Administration/Documentation - General
Violation Notes: Returned to compliance on 01/27/2015. Inspection Sequence ID:4181028;Tank ID:1;Violation:HMD1712 Inadequate or no onsite records/logs of inspections conducted (must include dates, times, name of inspector, observations, and specifics of any needed repairs or corrective actions). (3 years for CE and PBR units, 5 years for CA). {CE: 25201.5(d)(4)&(5), 25201.14(c)(1); CA: 25200.3(c)(5)&(7); PBR: 67450.3(c)(8) & (9)(A) & (D), 66265.73(a)&(b)(1); 66265.15(b) & (d)}
Violation Division: San Diego County Department of Env Health
Violation Program: CE
Violation Source: CERS

Site ID: 16395
Site Name: CARB-ON TECH
Violation Date: 06-14-2018
Citation: HSC 6.5 Multiple - California Health and Safety Code, Chapter 6.5, Section(s) Multiple
Violation Description: Tiered Permitting - Administration/Documentation - General
Violation Notes: Returned to compliance on 07/31/2020. Inspection Sequence ID:5927153;Tank ID:1;Violation:HMD1716 Inadequate or no written operating instructions for unit (how to do waste treatment, and how to manage residuals; AND records of the dates, volumes, and types of wastes treated). Records must be kept 3 years for CE; 5 years for CA; or until closure-PBR unit. CE: HSC 25201.5(d)(3)&(5); CEL: HSC 25201.14(c)(1); CA: HSC 25200.3(c)(6) & (7); PBR: 22 CCR 67450.3(c)(9)(D), 66265.73(a) & (b)(1)
Violation Division: San Diego County Department of Env Health
Violation Program: CE

CARB-ON TECH (Continued) **S106064065**

Violation Source:	CERS
Site ID:	16395
Site Name:	CARB-ON TECH
Violation Date:	06-14-2018
Citation:	HSC 6.5 Multiple - California Health and Safety Code, Chapter 6.5, Section(s) Multiple
Violation Description:	Hazardous Waste Generator Program - Administration/Documentation - General
Violation Notes:	Returned to compliance on 10/17/2019. Inspection Sequence ID:5927153;Violation:HMD0131 Unified Program Facility Permit not obtained &/or maintained for the generation of hazardous waste. SDCC 68.905
Violation Division:	San Diego County Department of Env Health
Violation Program:	HW
Violation Source:	CERS
Site ID:	16395
Site Name:	CARB-ON TECH
Violation Date:	06-14-2018
Citation:	HSC 6.95 Multiple - California Health and Safety Code, Chapter 6.95, Section(s) Multiple
Violation Description:	Business Plan Program - Administration/Documentation - General
Violation Notes:	Returned to compliance on 10/17/2019. Inspection Sequence ID:5927153;Violation:HMD1001 Unified Program Facility permit not obtained for hazardous materials. SDCC 68.905; 68.906, 68.907
Violation Division:	San Diego County Department of Env Health
Violation Program:	HMRRP
Violation Source:	CERS
Site ID:	16395
Site Name:	CARB-ON TECH
Violation Date:	06-14-2018
Citation:	22 CCR 12 66262.12 - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.12
Violation Description:	Failure to obtain an Identification Number prior to treating, storing, disposing of, transporting or offering for transportation any hazardous waste.
Violation Notes:	Returned to compliance on 01/27/2020. Inspection Sequence ID:5927153
Violation Division:	San Diego County Department of Env Health
Violation Program:	HW
Violation Source:	CERS
Site ID:	16395
Site Name:	CARB-ON TECH
Violation Date:	04-04-2014
Citation:	19 CCR 4 2729.5 - California Code of Regulations, Title 19, Chapter 4, Section(s) 2729.5
Violation Description:	Failure to submit inventory reports (Activities, Owner/Operator, Hazardous Materials Descriptions and Map pages, if required. Documentation must be resubmitted (for facilities which exceed EPCRA thresholds) or re-certified (for facilities which do not exceed EPCRA thresholds) by March 1.
Violation Notes:	Returned to compliance on 05/14/2014. Inspection Sequence ID:4181028
Violation Division:	San Diego County Department of Env Health
Violation Program:	HMRRP
Violation Source:	CERS

CARB-ON TECH (Continued) **S106064065**

Site ID: 16395
Site Name: CARB-ON TECH
Violation Date: 04-04-2014
Citation: 22 CCR 12 66262.40(a) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.40(a)
Violation Description: Failure to maintain uniform hazardous waste manifest, consolidated manifest, or bills of lading copies for three years.
Violation Notes: Returned to compliance on 05/14/2014. Inspection Sequence ID:4181028
Violation Division: San Diego County Department of Env Health
Violation Program: HW
Violation Source: CERS

Site ID: 16395
Site Name: CARB-ON TECH
Violation Date: 04-04-2014
Citation: 22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f)
Violation Description: Failure to properly label hazardous waste accumulation containers with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date.
Violation Notes: Returned to compliance on 05/14/2014. Inspection Sequence ID:4181028
Violation Division: San Diego County Department of Env Health
Violation Program: HW
Violation Source: CERS

Evaluation:
Eval General Type: Compliance Evaluation Inspection
Eval Date: 04-04-2014
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Inspector: Beacon Ellen Inspection ID:4181028
Eval Division: San Diego County Department of Env Health
Eval Program: CE
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 04-04-2014
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Inspector: Beacon Ellen Inspection ID:4181028
Eval Division: San Diego County Department of Env Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 04-04-2014
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Inspector: Beacon Ellen Inspection ID:4181028
Eval Division: San Diego County Department of Env Health
Eval Program: HW
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 06-14-2016
Violations Found: No

CARB-ON TECH (Continued) **S106064065**

Eval Type:	Routine done by local agency
Eval Notes:	Inspector: Calcagno Leonardo Inspection ID:5413236
Eval Division:	San Diego County Department of Env Health
Eval Program:	CE
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	06-14-2016
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Inspector: Calcagno Leonardo Inspection ID:5413236
Eval Division:	San Diego County Department of Env Health
Eval Program:	HMRRP
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	06-14-2016
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Inspector: Calcagno Leonardo Inspection ID:5413236
Eval Division:	San Diego County Department of Env Health
Eval Program:	HW
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	06-14-2018
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Inspector: Calcagno Leonardo Inspection ID:5927153
Eval Division:	San Diego County Department of Env Health
Eval Program:	CE
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	06-14-2018
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Inspector: Calcagno Leonardo Inspection ID:5927153
Eval Division:	San Diego County Department of Env Health
Eval Program:	HMRRP
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	06-14-2018
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Inspector: Calcagno Leonardo Inspection ID:5927153
Eval Division:	San Diego County Department of Env Health
Eval Program:	HW
Eval Source:	CERS

Affiliation:

Affiliation Type Desc:	Legal Owner
Entity Name:	ULISES MERINO
Entity Title:	Not reported
Affiliation Address:	1402 Descanso Ave Ste B
Affiliation City:	San Marcos

CARB-ON TECH (Continued) **S106064065**

Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	92069
Affiliation Phone:	(760) 510-2025
Affiliation Type Desc:	Onsite Treatment Unit Owner Operator
Entity Name:	ulises merino
Entity Title:	Owner
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported
Affiliation Type Desc:	Environmental Contact
Entity Name:	ULISES MERINO
Entity Title:	Not reported
Affiliation Address:	1402 Descanso Ave Ste B
Affiliation City:	San Marcos
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	92069
Affiliation Phone:	Not reported
Affiliation Type Desc:	Operator
Entity Name:	ULISES MERINO
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(760) 510-2025
Affiliation Type Desc:	Parent Corporation
Entity Name:	CARB-ON TECH
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported
Affiliation Type Desc:	CUPA District
Entity Name:	San Diego County Env Health
Entity Title:	Not reported
Affiliation Address:	PO Box 129261
Affiliation City:	San Diego
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	92112-9261
Affiliation Phone:	(858) 505-6880
Affiliation Type Desc:	Document Preparer
Entity Name:	Ulises Merino

CARB-ON TECH (Continued) **S106064065**

Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported
Affiliation Type Desc:	Facility Mailing Address
Entity Name:	Mailing Address
Entity Title:	Not reported
Affiliation Address:	1402 Descanso Ave Ste B
Affiliation City:	San Marcos
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	92069
Affiliation Phone:	Not reported
Affiliation Type Desc:	Identification Signer
Entity Name:	ulises merino
Entity Title:	Owner
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

H44 **SINGH GROUP INC.** **HAULERS** **S104746334**
South **1308 DESCANSO AVE** **San Diego Co. HMMD** **N/A**
1/8-1/4 **SAN MARCOS, CA 92069** **HWT**
0.207 mi. **MWMP**
1095 ft. **Site 5 of 6 in cluster H** **PEST LIC**

Relative: **Lower**
Actual: **560 ft.**

HAULERS:

Name:	SINGH GROUP INC.
Address:	1308 DESCANSO AVENUE
City,State,Zip:	SAN MARCOS, CA 92069
Facility ID:	1926717
Facility Phone:	(760) 213-5462
Business Email Address:	adolf@sgiwebsite.com
Contact Person:	Adolf Singh
Mailing Address:	1308 Descanso Avenue
Mailing City:	San Marcos
Mailing State:	CA
Mailing Zip:	92069
Mailing County:	Not reported
Mailing Phone:	(760) 213-5462
Current Status:	Active Business
Current Hauler Status:	Hauler - Registered
Accepting Tires From Public:	No
Regulatory Status Last Changed:	10/1/2018
Business Types:	Hauler (Com Car, Ag, Gov Exempt); Other: Landscaping

HMMD SAN DIEGO:

Name:	TIAGO INC

SINGH GROUP INC. (Continued) **S104746334**

Address:	1308 DESCANSO AV
City,State,Zip:	SAN MARCOS, CA 92069
Permit Number:	106201
Business Type:	6HK26
EPA Id Number:	CAL000214886
APN:	219-122-17-00
Last HMMD Inspection:	07/01/2010
Facility Telephone:	760-471-9531
Permit Status:	INAC
Permit Expiration:	01/31/2011
Date Last Updated:	11/02/2012
Facility Owner:	TIAGO, INC
Facility Mailing Address:	1308 DESCANSO AV
Facility Mailing City:	SAN MARCOS
Facility Mailing State:	CA
Facility Mailing Zip:	92069-
UST Owner:	Not reported
Handle Regulated Hazmat:	Y
Own Or Operate UST:	Not reported
Subject To APSA:	Not reported
Generate Haz Waste:	Y
Treat Haz Waste:	Not reported
Generate Medical Waste:	Not reported

Violations Inactive Permits:

Permit Number:	106201
Update Date:	11/02/2012
Inspection Date:	11/26/2003
Violation Code:	6HV0201
Violation:	WASTE CONTAINER NOT CLOSED
Violation Citation:	Hazardous waste containers are not kept closed while in storage. CCR 66265.173(a)
Activity:	Inactive Permit

Permit Number:	106201
Update Date:	11/02/2012
Inspection Date:	11/26/2003
Violation Code:	6HV0210
Violation:	DID NOT CLEAN SPILL TO FLOOR
Violation Citation:	Failure to clean up hazardous waste off of floor surface. 66262.10b
Activity:	Inactive Permit

Permit Number:	106201
Update Date:	11/02/2012
Inspection Date:	11/26/2003
Violation Code:	6HV0401
Violation:	TRAINING RECORDS UNAVAILABLE
Violation Citation:	Personnel training records are not maintained to document compliance with requirements for current and former employees. CCR 66265.16(d)&(e)
Activity:	Inactive Permit

Permit Number:	106201
Update Date:	11/02/2012
Inspection Date:	10/24/2006
Violation Code:	6HV0225
Violation:	ACCUMULATED HW>180 OR >270 DAYS
Violation Citation:	Accumulated waste too long (>180 or 270 days). 66262.34(d), CFR

SINGH GROUP INC. (Continued) **S104746334**

262.34(e)&(f), &/or 25201(a) [>90 days for AHW waste]
Activity: Inactive Permit

Permit Number: 106201
Update Date: 11/02/2012
Inspection Date: 10/24/2006
Violation Code: 6HV0227
Violation: HAZWASTE TANK/CONTAINER W/O LABEL/DATE
Violation Citation: Failed to properly label/date hazardous waste container &/or tank. 66262.34(f)
Activity: Inactive Permit

Permit Number: 106201
Update Date: 11/02/2012
Inspection Date: 10/14/2008
Violation Code: 6HV0230
Violation: FAILED TO MAINTAIN AISLE SPACE
Violation Citation: Failed to maintain aisle space. CFR 265.35
Activity: Inactive Permit

HWT:
Name: BAJA PACIFIC
Address: 1308 DESCANSO AVE
City,State,Zip: SAN MARCOS, CA 92069
Reg Num: 4695
Expiration Date: 02/28/2021

MWMP:
Name: SINGH GROUP INC. DBA BAJA PACIFIC
Address: 1308 DESCANSO AVE
City,State,Zip: SAN MARCOS, CA 92069
Facility Type: Medical Waste Management Program
Contact Name: Not reported
Contact Phone: 760-213-5462
Registration Number: 4695

PEST LIC:
Name: ADOLF B SINGH
Address: 1308 DESCANSO AVE
City,State,Zip: SAN MARCOS, CA 92069
Facility Type: QAL
Categories: K
License No: 122214
Issued or Renewed Date: 01/24/2020
Expiration Date: 12/31/2021

Name: SINGH GROUP INC.
Address: 1308 DESCANSO AVE
City,State,Zip: SAN MARCOS, CA 92069
Facility Type: PCM
Categories: Not reported
License No: 41239
Issued or Renewed Date: 01/27/2020
Expiration Date: 12/31/2021

H45 **BAJA PACIFIC** **RCRA NonGen / NLR** **1024811339**
South **1308 DECANSO AVE** **CAL000294570**
1/8-1/4 **SAN MARCOS, CA 92069**
0.207 mi.
1095 ft. **Site 6 of 6 in cluster H**

Relative: **Lower**

Actual: **560 ft.**

RCRA NonGen / NLR:

Date Form Received by Agency:		2005-05-25 00:00:00.0
Handler Name:	BAJA PACIFIC	
Handler Address:		1308 DECANSO AVE
Handler City,State,Zip:		SAN MARCOS, CA 92069
EPA ID:		CAL000294570
Contact Name:		ADOLF SINGH/PRES
Contact Address:		1308 DECANSO AVE
Contact City,State,Zip:		SAN MARCOS, CA 92069
Contact Telephone:		760-213-5462
Contact Fax:		760-798-3096
Contact Email:		ADOLF@SGIWEBSITE.COM
Contact Title:		Not reported
EPA Region:		09
Land Type:		Not reported
Federal Waste Generator Description:		Not a generator, verified
Non-Notifier:		Not reported
Biennial Report Cycle:		Not reported
Accessibility:		Not reported
Active Site Indicator:		Handler Activities
State District Owner:		Not reported
State District:		Not reported
Mailing Address:		1308 DECANSO AVE
Mailing City,State,Zip:		SAN MARCOS, CA 92069
Owner Name:		SINGH GROUP INC./ADOLF SINGH
Owner Type:		Other
Operator Name:		ADOLF SINGH/PRES
Operator Type:		Other
Short-Term Generator Activity:		No
Importer Activity:		No
Mixed Waste Generator:		No
Transporter Activity:		Yes
Transfer Facility Activity:		No
Recycler Activity with Storage:		No
Small Quantity On-Site Burner Exemption:		No
Smelting Melting and Refining Furnace Exemption:		No
Underground Injection Control:		No
Off-Site Waste Receipt:		No
Universal Waste Indicator:		Yes
Universal Waste Destination Facility:		Yes
Federal Universal Waste:		No
Active Site Fed-Reg Treatment Storage and Disposal Facility:		Not reported
Active Site Converter Treatment storage and Disposal Facility:		Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:		Not reported
Active Site State-Reg Handler:		---
Federal Facility Indicator:		Not reported
Hazardous Secondary Material Indicator:		N
Sub-Part K Indicator:		Not reported
Commercial TSD Indicator:		No
Treatment Storage and Disposal Type:		Not reported
2018 GPRA Permit Baseline:		Not on the Baseline
2018 GPRA Renewals Baseline:		Not on the Baseline
Permit Renewals Workload Universe:		Not reported

BAJA PACIFIC (Continued) **1024811339**

Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2018-09-05 20:27:20.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	SINGH GROUP INC./ADOLF SINGH
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1308 DECANSO AVE
Owner/Operator City,State,Zip:	SAN MARCOS, CA 92069
Owner/Operator Telephone:	760-213-5462
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name:	ADOLF SINGH/PRES
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1308 DECANSO AVE
Owner/Operator City,State,Zip:	SAN MARCOS, CA 92069
Owner/Operator Telephone:	760-213-5462
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

BAJA PACIFIC (Continued) **1024811339**

Historic Generators:
Receive Date: 2005-05-25 00:00:00.0
Handler Name: BAJA PACIFIC
Federal Waste Generator Description: Not a generator, verified
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 48423
NAICS Description: SPECIALIZED FREIGHT (EXCEPT USED GOODS) TRUCKING, LONG-DISTANCE

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

J46 **DRAPERIES & STUFF** **RCRA-SQG** **1000319121**
SSW **1404 DESCANSO AVE STE D** **FINDS** **CAD981672835**
1/8-1/4 **SAN MARCOS, CA 92069** **ECHO**
0.211 mi.
1114 ft. **Site 4 of 13 in cluster J**

Relative: **Lower**
Actual: **560 ft.**

RCRA-SQG:
Date Form Received by Agency: 1996-09-01 00:00:00.0
Handler Name: DRAPERIES & STUFF
Handler Address: 1404 DESCANSO AVE STE D
Handler City,State,Zip: SAN MARCOS, CA 92069
EPA ID: CAD981672835
Contact Name: Not reported
Contact Address: Not reported
Contact City,State,Zip: Not reported
Contact Telephone: Not reported
Contact Fax: Not reported
Contact Email: Not reported
Contact Title: Not reported
EPA Region: 09
Land Type: Not reported
Federal Waste Generator Description: Small Quantity Generator
Non-Notifier: Not reported
Biennial Report Cycle: Not reported
Accessibility: Not reported
Active Site Indicator: Handler Activities
State District Owner: CA
State District: 4
Mailing Address: 1404 DESCANSO STE D
Mailing City,State,Zip: SAN MARCOS, CA 92069
Owner Name: Not reported

DRAPERIES & STUFF (Continued) **1000319121**

Owner Type:	Not reported
Operator Name:	NOT REQUIRED
Operator Type:	Private
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	NN
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2002-06-27 03:29:09.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	Not reported
Manifest Broker:	Not reported

DRAPERIES & STUFF (Continued) **1000319121**

Sub-Part P Indicator: No

Handler - Owner Operator:
Owner/Operator Indicator: Operator
Owner/Operator Name: NOT REQUIRED
Legal Status: Private
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: NOT REQUIRED
Owner/Operator City,State,Zip: NOT REQUIRED, ME 99999
Owner/Operator Telephone: 415-555-1212
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner
Owner/Operator Name: A CHARLES LUNDEN
Legal Status: Private
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: NOT REQUIRED
Owner/Operator City,State,Zip: NOT REQUIRED, ME 99999
Owner/Operator Telephone: 415-555-1212
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:
Receive Date: 1996-09-01 00:00:00.0
Handler Name: DRAPERIES & STUFF
Federal Waste Generator Description: Small Quantity Generator
State District Owner: CA
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 1990-12-17 00:00:00.0
Handler Name: DRAPERIES & STUFF
Federal Waste Generator Description: Large Quantity Generator
State District Owner: CA
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

DRAPERIES & STUFF (Continued) **1000319121**

List of NAICS Codes and Descriptions:
NAICS Codes: No NAICS Codes Found

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

FINDS:
Registry ID: 110002745245

Click Here:

Environmental Interest/Information System:
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid:	1000319121
Registry ID:	110002745245
DFR URL:	http://echo.epa.gov/detailed-facility-report?fid=110002745245
Name:	DRAPERIES & STUFF
Address:	1404 DESCANSO AVE STE D
City,State,Zip:	SAN MARCOS, CA 92069

J47 **D & C AUTOBODY & PAINT** **San Diego Co. HMMD** **S106060397**
SSW **1404 DESCANSO AVE STE B** **CERS HAZ WASTE** **N/A**
1/8-1/4 **SAN MARCOS, CA 92069** **CERS**
0.211 mi. **HWTS**
1114 ft. **Site 5 of 13 in cluster J**

Relative:
Lower

Actual:
560 ft.

HMMD SAN DIEGO:

Name:	TOVI'S AUTOBODY & PAINT
Address:	1404 DESCANSO AV
City,State,Zip:	SAN MARCOS, CA 92069
Permit Number:	104054
Business Type:	6HK18
EPA Id Number:	CAL000213056
APN:	219-122-10-00
Last HMMD Inspection:	12/14/2006
Facility Telephone:	760-591-4371
Permit Status:	CHNG
Permit Expiration:	03/31/2009
Date Last Updated:	11/02/2012
Facility Owner:	JOSE LARA
Facility Mailing Address:	1404 DESCANSO AV #B
Facility Mailing City:	SAN MARCOS
Facility Mailing State:	CA

D & C AUTOBODY & PAINT (Continued) **S106060397**

Facility Mailing Zip: 92069-
UST Owner: Not reported
Handle Regulated Hazmat: Not reported
Own Or Operate UST: Not reported
Subject To APSA: Not reported
Generate Haz Waste: Y
Treat Haz Waste: Not reported
Generate Medical Waste: Not reported

CERS HAZ WASTE:
Name: J & X AUTO & BODY REPAIR
Address: 1404 DESCANSO AVE STE I
City,State,Zip: SAN MARCOS, CA 92069
Site ID: 38841
CERS ID: 10375966
CERS Description: Hazardous Waste Generator

Name: RADIATOR SHOP
Address: 1404 DESCANSO AVE STE C
City,State,Zip: SAN MARCOS, CA 92069
Site ID: 59917
CERS ID: 10376008
CERS Description: Hazardous Waste Generator

Name: D & C AUTOBODY & PAINT
Address: 1404 DESCANSO AVE STE B
City,State,Zip: SAN MARCOS, CA 92069
Site ID: 86197
CERS ID: 10376374
CERS Description: Hazardous Waste Generator

CERS:
Name: J & X AUTO & BODY REPAIR
Address: 1404 DESCANSO AVE STE I
City,State,Zip: SAN MARCOS, CA 92069
Site ID: 38841
CERS ID: 10375966
CERS Description: Chemical Storage Facilities

Violations:
Site ID: 38841
Site Name: J & X AUTO & BODY REPAIR
Violation Date: 04-04-2014
Citation: HSC 6.95 25505(c) - California Health and Safety Code, Chapter 6.95, Section(s) 25505(c)
Violation Description: Failure to review, revise, and recertify the business plan at least once every three years.
Violation Notes: Returned to compliance on 05/13/2014.
Violation Division: San Diego County Department of Env Health
Violation Program: HMRRP
Violation Source: CERS

Site ID: 38841
Site Name: J & X AUTO & BODY REPAIR
Violation Date: 08-10-2016
Citation: 22 CCR 12 66262.12 - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.12

D & C AUTOBODY & PAINT (Continued) **S106060397**

Violation Description: Failure to obtain an Identification Number prior to treating, storing, disposing of, transporting or offering for transportation any hazardous waste.
Violation Notes: Returned to compliance on 09/22/2016.
Violation Division: San Diego County Department of Env Health
Violation Program: HW
Violation Source: CERS

Site ID: 38841
Site Name: J & X AUTO & BODY REPAIR
Violation Date: 08-10-2016
Citation: HSC 6.95 25505(a)(4) - California Health and Safety Code, Chapter 6.95, Section(s) 25505(a)(4)
Violation Description: Failure to provide initial and annual training to all employees in safety procedures in the event of a release or threatened release of a hazardous material or failure to document and maintain training records for a minimum of three years.
Violation Notes: Returned to compliance on 09/05/2016.
Violation Division: San Diego County Department of Env Health
Violation Program: HMRRP
Violation Source: CERS

Site ID: 38841
Site Name: J & X AUTO & BODY REPAIR
Violation Date: 04-04-2014
Citation: 19 CCR 4 2729.5 - California Code of Regulations, Title 19, Chapter 4, Section(s) 2729.5
Violation Description: Failure to submit inventory reports (Activities, Owner/Operator, Hazardous Materials Descriptions and Map pages, if required. Documentation must be resubmitted (for facilities which exceed EPCRA thresholds) or re-certified (for facilities which do not exceed EPCRA thresholds) by March 1.
Violation Notes: Returned to compliance on 05/13/2014.
Violation Division: San Diego County Department of Env Health
Violation Program: HMRRP
Violation Source: CERS

Site ID: 38841
Site Name: J & X AUTO & BODY REPAIR
Violation Date: 04-04-2014
Citation: 22 CCR 12 66262.40(a) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.40(a)
Violation Description: Failure to maintain uniform hazardous waste manifest, consolidated manifest, or bills of lading copies for three years.
Violation Notes: Returned to compliance on 05/02/2014.
Violation Division: San Diego County Department of Env Health
Violation Program: HW
Violation Source: CERS

Evaluation:
Eval General Type: Compliance Evaluation Inspection
Eval Date: 04-04-2014
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Inspector: Beacon Ellen Inspection ID:4095380
Eval Division: San Diego County Department of Env Health
Eval Program: HMRRP

D & C AUTOBODY & PAINT (Continued) **S106060397**

Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 04-04-2014
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Inspector: Beacon Ellen Inspection ID:4095380
Eval Division: San Diego County Department of Env Health
Eval Program: HW
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 08-10-2016
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Inspector: Calcagno Leonardo Inspection ID:5413224
Eval Division: San Diego County Department of Env Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 08-10-2016
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Inspector: Calcagno Leonardo Inspection ID:5413224
Eval Division: San Diego County Department of Env Health
Eval Program: HW
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 09-06-2018
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Inspector: Kieu Bridget Inspection ID:5967328
Eval Division: San Diego County Department of Env Health
Eval Program: HMRRP
Eval Source: CERS

Affiliation:
Affiliation Type Desc: Environmental Contact
Entity Name: XOCHILT ARELLANO
Entity Title: Not reported
Affiliation Address: 1404 Descanso Ave Ste I
Affiliation City: San Marcos
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 92069
Affiliation Phone: Not reported

Affiliation Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title: Not reported
Affiliation Address: 1404 Descanso Ave Ste I
Affiliation City: San Marcos
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 92069

D & C AUTOBODY & PAINT (Continued) **S106060397**

Affiliation Phone: Not reported

Affiliation Type Desc: Identification Signer
Entity Name: XOCHILT ARELLANO
Entity Title: Owner
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: Legal Owner
Entity Name: XOCHILT ARELLANO
Entity Title: Not reported
Affiliation Address: 1404 Descanso Ave Ste I
Affiliation City: San Marcos
Affiliation State: CA
Affiliation Country: United States
Affiliation Zip: 92069
Affiliation Phone: (760) 670-9237

Affiliation Type Desc: Parent Corporation
Entity Name: J & X AUTO & BODY REPAIR
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: CUPA District
Entity Name: San Diego County Env Health
Entity Title: Not reported
Affiliation Address: PO Box 129261
Affiliation City: San Diego
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 92112-9261
Affiliation Phone: (858) 505-6880

Affiliation Type Desc: Document Preparer
Entity Name: XOCHILT ARELLANO
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: Operator
Entity Name: XOCHILT ARELLANO
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported

D & C AUTOBODY & PAINT (Continued) **S106060397**

Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: (760) 670-9237

Name: RADIATOR SHOP
Address: 1404 DESCANSO AVE STE C
City,State,Zip: SAN MARCOS, CA 92069
Site ID: 59917
CERS ID: 10376008
CERS Description: Chemical Storage Facilities

Violations:
Site ID: 59917
Site Name: RADIATOR SHOP
Violation Date: 02-23-2018
Citation: 22 CCR 12 66262.12 - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.12
Violation Description: Failure to obtain an Identification Number prior to treating, storing, disposing of, transporting or offering for transportation any hazardous waste.
Violation Notes: Not reported
Violation Division: San Diego County Department of Env Health
Violation Program: HW
Violation Source: CERS

Evaluation:
Eval General Type: Compliance Evaluation Inspection
Eval Date: 01-05-2021
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Inspector: Shaker Mirna Inspection ID:6389388
Eval Division: San Diego County Department of Env Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 02-23-2018
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Inspector: Zmily Zanalee Inspection ID:5872154
Eval Division: San Diego County Department of Env Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 02-23-2018
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Inspector: Zmily Zanalee Inspection ID:5872154
Eval Division: San Diego County Department of Env Health
Eval Program: HW
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 03-21-2016

D & C AUTOBODY & PAINT (Continued) **S106060397**

Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Inspector: Calcagno Leonardo Inspection ID:5411691
Eval Division: San Diego County Department of Env Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 03-21-2016
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Inspector: Calcagno Leonardo Inspection ID:5411691
Eval Division: San Diego County Department of Env Health
Eval Program: HW
Eval Source: CERS

Affiliation:
Affiliation Type Desc: CUPA District
Entity Name: San Diego County Env Health
Entity Title: Not reported
Affiliation Address: PO Box 129261
Affiliation City: San Diego
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 92112-9261
Affiliation Phone: (858) 505-6880

Affiliation Type Desc: Operator
Entity Name: ELEUTERIO JIMINEZ
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: (760) 736-3186

Affiliation Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title: Not reported
Affiliation Address: 1404 DESCANSO AV, #C
Affiliation City: SAN MARCOS
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 92069
Affiliation Phone: Not reported

Affiliation Type Desc: Environmental Contact
Entity Name: Eleuterio Jimenez
Entity Title: Not reported
Affiliation Address: 1415 massachusetts
Affiliation City: VISTA
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 92084
Affiliation Phone: Not reported

D & C AUTOBODY & PAINT (Continued) **S106060397**

Affiliation Type Desc:	Legal Owner
Entity Name:	Eleuterio Jimenez
Entity Title:	Not reported
Affiliation Address:	1415 massachusetts
Affiliation City:	Vista
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	92084
Affiliation Phone:	(760) 732-0796

Affiliation Type Desc:	Parent Corporation
Entity Name:	RADIATOR SHOP
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

Name:	D & C AUTOBODY & PAINT
Address:	1404 DESCANSO AVE STE B
City,State,Zip:	SAN MARCOS, CA 92069
Site ID:	86197
CERS ID:	10376374
CERS Description:	Chemical Storage Facilities

Violations:

Site ID:	86197
Site Name:	D & C Autobody & Paint
Violation Date:	12-18-2019
Citation:	HSC 6.5 Multiple - California Health and Safety Code, Chapter 6.5, Section(s) Multiple
Violation Description:	Hazardous Waste Generator Program - Administration/Documentation - General
Violation Notes:	Returned to compliance on 01/08/2020. Inspection Sequence ID:6405113;Violation:HMD0131 Unified Program Facility Permit not obtained &/or maintained for the generation of hazardous waste. SDCC 68.904; 68.905; 68.907.1
Violation Division:	San Diego County Department of Env Health
Violation Program:	HW
Violation Source:	CERS

Site ID:	86197
Site Name:	D & C Autobody & Paint
Violation Date:	05-04-2015
Citation:	HSC 6.5 Multiple - California Health and Safety Code, Chapter 6.5, Section(s) Multiple
Violation Description:	Haz Waste Generator Program - Administration/Documentation - General
Violation Notes:	Returned to compliance on 04/26/2017. Inspection Sequence ID:4113564;Violation:HMD0131 No Unified Program Facility (UPF) permit not obtained for the generation of hazardous waste. SDCC 68.905.
Violation Division:	San Diego County Department of Env Health
Violation Program:	HW
Violation Source:	CERS

Site ID:	86197

D & C AUTOBODY & PAINT (Continued) **S106060397**

Site Name:	D & C Autobody & Paint
Violation Date:	04-26-2017
Citation:	HSC 6.5 Multiple - California Health and Safety Code, Chapter 6.5, Section(s) Multiple
Violation Description:	Hazardous Waste Generator Program - Administration/Documentation - General
Violation Notes:	Returned to compliance on 12/24/2019. Inspection Sequence ID:5695148;Violation:HMD0131 Unified Program Facility Permit not obtained &/or maintained for the generation of hazardous waste. HSC 25404.1; SDCC 68.905
Violation Division:	San Diego County Department of Env Health
Violation Program:	HW
Violation Source:	CERS
Site ID:	86197
Site Name:	D & C Autobody & Paint
Violation Date:	12-18-2019
Citation:	22 CCR 12 66262.12 - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.12
Violation Description:	Failure to obtain an Identification Number prior to treating, storing, disposing of, transporting or offering for transportation any hazardous waste.
Violation Notes:	Returned to compliance on 12/20/2019. Inspection Sequence ID:6405113
Violation Division:	San Diego County Department of Env Health
Violation Program:	HW
Violation Source:	CERS
Site ID:	86197
Site Name:	D & C Autobody & Paint
Violation Date:	05-04-2015
Citation:	22 CCR 12 66262.40(a) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.40(a)
Violation Description:	Failure to maintain uniform hazardous waste manifest, consolidated manifest, or bills of lading copies for three years.
Violation Notes:	Returned to compliance on 06/03/2015. Inspection Sequence ID:4113564
Violation Division:	San Diego County Department of Env Health
Violation Program:	HW
Violation Source:	CERS

Evaluation:

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	04-26-2017
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Inspector: Kieu Bridget Inspection ID:5695148
Eval Division:	San Diego County Department of Env Health
Eval Program:	HW
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	05-04-2015
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Inspector: North HN004 Inspection ID:4113564
Eval Division:	San Diego County Department of Env Health
Eval Program:	HW
Eval Source:	CERS

D & C AUTOBODY & PAINT (Continued) **S106060397**

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	12-18-2019
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Inspector: Shaker Mirna Inspection ID:6405113
Eval Division:	San Diego County Department of Env Health
Eval Program:	HW
Eval Source:	CERS

Affiliation:

Affiliation Type Desc:	CUPA District
Entity Name:	San Diego County Env Health
Entity Title:	Not reported
Affiliation Address:	PO Box 129261
Affiliation City:	San Diego
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	92112-9261
Affiliation Phone:	(858) 505-6880

Affiliation Type Desc:	Facility Mailing Address
Entity Name:	Mailing Address
Entity Title:	Not reported
Affiliation Address:	1404 Descanso Ave
Affiliation City:	San Marcos
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	92069
Affiliation Phone:	Not reported

Affiliation Type Desc:	Legal Owner
Entity Name:	Juan Pena
Entity Title:	Not reported
Affiliation Address:	dcautobody95@yahoo.com
Affiliation City:	San Marcos
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	92069
Affiliation Phone:	(760) 591-4371

Affiliation Type Desc:	Document Preparer
Entity Name:	Juan Pena
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

Affiliation Type Desc:	Identification Signer
Entity Name:	Juan Pena
Entity Title:	Owner
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported

D & C AUTOBODY & PAINT (Continued) **S106060397**

Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: Parent Corporation
Entity Name: D and C Auto Body and Paint
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: Environmental Contact
Entity Name: Jorje Campos
Entity Title: Not reported
Affiliation Address: 1404 Descanso Ave
Affiliation City: San Marcos
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 92069
Affiliation Phone: Not reported

Affiliation Type Desc: Operator
Entity Name: Juan Pena
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: (760) 591-4371

Affiliation Type Desc: Property Owner
Entity Name: Mike Crain
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Fallbrook
Affiliation State: CA
Affiliation Country: United States
Affiliation Zip: 92028
Affiliation Phone: (760) 728-8410

HWTS:
Name: RADIATOR SHOP
Address: 1404 DESCANSO AVE STE C
Address 2: Not reported
City,State,Zip: SAN MARCOS, CA 920691325
EPA ID: CAL000358652
Inactive Date: Not reported
Create Date: 11/09/2010
Last Act Date: 09/08/2020
Mailing Name: Not reported
Mailing Address: 1404 DESCANSO SUITE C
Mailing Address 2: Not reported
Mailing City,State,Zip: SAN MARCOS, CA 920691325

D & C AUTOBODY & PAINT (Continued) **S106060397**

Owner Name: ELEUTERIO JIMENEZ
Owner Address: 1415 MASSACHUSETTS AVE
Owner Address 2: Not reported
Owner City,State,Zip: VISTA, CA 92083
Contact Name: ELEUTERIO JIMENEZ
Contact Address: 1404 DESCANSO AVE STE C
Contact Address 2: Not reported
City,State,Zip: SAN MARCOS, CA 92069

NAICS:
EPA ID: CAL000358652
Create Date: 2010-11-09 12:34:52.300
NAICS Code: 811111
NAICS Description: General Automotive Repair
Issued EPA ID Date: 2010-11-09 12:34:52.25300
Inactive Date: Not reported
Facility Name: RADIATOR SHOP
Facility Address: 1404 DESCANSO AVE STE C
Facility Address 2: Not reported
Facility City: SAN MARCOS
Facility County: Not reported
Facility State: CA
Facility Zip: 920691325

J48 **RADIATOR SHOP** **RCRA NonGen / NLR** **1024827908**
SSW **1404 DESCANSO AVE STE C** **CAL000358652**
1/8-1/4 **SAN MARCOS, CA 92069**
0.211 mi.
1114 ft. **Site 6 of 13 in cluster J**

Relative: **Lower**
Actual: **560 ft.**

RCRA NonGen / NLR:
Date Form Received by Agency: 2010-11-09 00:00:00.0
Handler Name: RADIATOR SHOP
Handler Address: 1404 DESCANSO AVE STE C
Handler City,State,Zip: SAN MARCOS, CA 92069-1325
EPA ID: CAL000358652
Contact Name: ELEUTERIO JIMENEZ
Contact Address: 1404 DESCANSO AVE STE C
Contact City,State,Zip: SAN MARCOS, CA 92069
Contact Telephone: 760-736-3186
Contact Fax: 000-000-0000
Contact Email: THERADIATORSHOP1@YAHOO.COM
Contact Title: Not reported
EPA Region: 09
Land Type: Not reported
Federal Waste Generator Description: Not a generator, verified
Non-Notifier: Not reported
Biennial Report Cycle: Not reported
Accessibility: Not reported
Active Site Indicator: Handler Activities
State District Owner: Not reported
State District: Not reported
Mailing Address: 1404 DESCANSO AVE STE C
Mailing City,State,Zip: SAN MARCOS, CA 92069-1325
Owner Name: ELEUTERIO JIMENEZ
Owner Type: Other
Operator Name: ELEUTERIO JIMENEZ

RADIATOR SHOP (Continued) **1024827908**

Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2018-09-05 20:33:45.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

RADIATOR SHOP (Continued) **1024827908**

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	ELEUTERIO JIMENEZ
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1415 MASSACHUSETTS AVE
Owner/Operator City,State,Zip:	VISTA, CA 92083
Owner/Operator Telephone:	760-736-3186
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name:	ELEUTERIO JIMENEZ
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1404 DESCANSO AVE STE C
Owner/Operator City,State,Zip:	SAN MARCOS, CA 92069
Owner/Operator Telephone:	760-736-3186
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	2010-11-09 00:00:00.0
Handler Name: RADIATOR SHOP	
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

List of NAICS Codes and Descriptions:

NAICS Code:	811111
NAICS Description:	GENERAL AUTOMOTIVE REPAIR

Facility Has Received Notices of Violations:

Violations:	No Violations Found

Evaluation Action Summary:

Evaluations:	No Evaluations Found

J49 **D&C AUTOBODY & PAINT** **RCRA NonGen / NLR** **1026055311**
SSW **1404 DESCANSO AVE STE B** **CAL000451493**
1/8-1/4 **SAN MARCOS, CA 92069**
0.211 mi.
1114 ft. **Site 7 of 13 in cluster J**

Relative: **Lower**
Actual: **560 ft.**

RCRA NonGen / NLR:

Date Form Received by Agency:		2019-12-20 00:00:00.0
Handler Name:	D&C AUTOBODY & PAINT	
Handler Address:		1404 DESCANSO AVE STE B
Handler City,State,Zip:		SAN MARCOS, CA 92069
EPA ID:		CAL000451493
Contact Name:		JUAN PENA
Contact Address:		1404 DESCANSO AVE STE B
Contact City,State,Zip:		SAN MARCOS, CA 92069
Contact Telephone:		760-591-4371
Contact Fax:		760-591-4415
Contact Email:		DCAUTOBODY95@YAHOO.COM
Contact Title:		Not reported
EPA Region:		09
Land Type:		Not reported
Federal Waste Generator Description:		Not a generator, verified
Non-Notifier:		Not reported
Biennial Report Cycle:		Not reported
Accessibility:		Not reported
Active Site Indicator:		Not reported
State District Owner:		Not reported
State District:		Not reported
Mailing Address:		1404 DESCANSO AVE STE B
Mailing City,State,Zip:		SAN MARCOS, CA 92069
Owner Name:		JUAN PENA
Owner Type:		Other
Operator Name:		JUAN PENA
Operator Type:		Other
Short-Term Generator Activity:		No
Importer Activity:		No
Mixed Waste Generator:		No
Transporter Activity:		No
Transfer Facility Activity:		No
Recycler Activity with Storage:		No
Small Quantity On-Site Burner Exemption:		No
Smelting Melting and Refining Furnace Exemption:		No
Underground Injection Control:		No
Off-Site Waste Receipt:		No
Universal Waste Indicator:		No
Universal Waste Destination Facility:		No
Federal Universal Waste:		No
Active Site Fed-Reg Treatment Storage and Disposal Facility:		Not reported
Active Site Converter Treatment storage and Disposal Facility:		Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:		Not reported
Active Site State-Reg Handler:		---
Federal Facility Indicator:		Not reported
Hazardous Secondary Material Indicator:		N
Sub-Part K Indicator:		Not reported
Commercial TSD Indicator:		No
Treatment Storage and Disposal Type:		Not reported
2018 GPRA Permit Baseline:		Not on the Baseline
2018 GPRA Renewals Baseline:		Not on the Baseline
Permit Renewals Workload Universe:		Not reported

D&C AUTOBODY & PAINT (Continued) **1026055311**

Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2020-02-10 17:54:03.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	JUAN PENA
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1404 DESCANSO AVE STE B
Owner/Operator City,State,Zip:	SAN MARCOS, CA 92069
Owner/Operator Telephone:	760-591-4371
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name:	JUAN PENA
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1404 DESCANSO AVE STE B
Owner/Operator City,State,Zip:	SAN MARCOS, CA 92069
Owner/Operator Telephone:	760-591-4371
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

D&C AUTOBODY & PAINT (Continued) **1026055311**

Historic Generators:
Receive Date: 2019-12-20 00:00:00.0
Handler Name: D&C AUTOBODY & PAINT
Federal Waste Generator Description: Not a generator, verified
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 811111
NAICS Description: GENERAL AUTOMOTIVE REPAIR

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

J50 **J&X AUTO N BODY REPAIR** **RCRA NonGen / NLR** **1024802088**
SSW **1404 DESCANSO AVE STE 1** **CAL000237894**
1/8-1/4 **SAN MARCOS, CA 92069**
0.211 mi.
1114 ft. **Site 8 of 13 in cluster J**

Relative: **Lower**
Actual: **560 ft.**

RCRA NonGen / NLR:
Date Form Received by Agency: 2001-10-05 00:00:00.0
Handler Name: J&X AUTO N BODY REPAIR
Handler Address: 1404 DESCANSO AVE STE 1
Handler City,State,Zip: SAN MARCOS, CA 92069-1325
EPA ID: CAL000237894
Contact Name: XOCHILT ARELLANO
Contact Address: 1404 DESCANSO AVE STE 1
Contact City,State,Zip: SAN MARCOS, CA 92069-1325
Contact Telephone: 760-471-0229
Contact Fax: Not reported
Contact Email: XOCHILT.ARELLANO@YAHOO.COM
Contact Title: Not reported
EPA Region: 09
Land Type: Not reported
Federal Waste Generator Description: Not a generator, verified
Non-Notifier: Not reported
Biennial Report Cycle: Not reported
Accessibility: Not reported
Active Site Indicator: Handler Activities
State District Owner: Not reported
State District: Not reported
Mailing Address: 1404 DESCANSO AVE STE 1
Mailing City,State,Zip: SAN MARCOS, CA 92069-1325
Owner Name: XOCHILT ARELLANO

J&X AUTO N BODY REPAIR (Continued) **1024802088**

Owner Type:	Other
Operator Name:	XOCHILT ARELLANO
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2018-10-01 18:39:07.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No

J&X AUTO N BODY REPAIR (Continued) **1024802088**

Sub-Part P Indicator: No

Handler - Owner Operator:
Owner/Operator Indicator: Operator
Owner/Operator Name: XOCHILT ARELLANO
Legal Status: Other
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: 1404 DESCANSO AVE STE 1
Owner/Operator City,State,Zip: SAN MARCOS, CA 92069-1325
Owner/Operator Telephone: 760-471-0229
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner
Owner/Operator Name: XOCHILT ARELLANO
Legal Status: Other
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: 1404 DESCANSO AVE STE 1
Owner/Operator City,State,Zip: SAN MARCOS, CA 92069-1325
Owner/Operator Telephone: 760-670-4237
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:
Receive Date: 2001-10-05 00:00:00.0
Handler Name: J&X AUTO N BODY REPAIR
Federal Waste Generator Description: Not a generator, verified
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 811111
NAICS Description: GENERAL AUTOMOTIVE REPAIR

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

J51 **ENVIRONMENTAL HEALTH SERVICE INC** **RCRA-SQG** **1000261671**
SW **1414 DESCANSO #H** **FINDS** **CAD981992522**
1/8-1/4 **SAN MARCOS, CA 92069** **ECHO**
0.221 mi.
1166 ft. **Site 9 of 13 in cluster J**

Relative: **Lower**
Actual: **560 ft.**

RCRA-SQG:

Date Form Received by Agency:	1996-09-01 00:00:00.0
Handler Name:	ENVIRONMENTAL HEALTH SERVICE INC
Handler Address:	1414 DESCANSO #H
Handler City,State,Zip:	SAN MARCOS, CA 92069
EPA ID:	CAD981992522
Contact Name:	Not reported
Contact Address:	Not reported
Contact City,State,Zip:	Not reported
Contact Telephone:	Not reported
Contact Fax:	Not reported
Contact Email:	Not reported
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Small Quantity Generator
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	CA
State District:	4
Mailing Address:	993 C SO SANTA FE 206
Mailing City,State,Zip:	VISTA, CA 92083
Owner Name:	Not reported
Owner Type:	Not reported
Operator Name:	NOT REQUIRED
Operator Type:	Private
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	NN
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported

ENVIRONMENTAL HEALTH SERVICE INC (Continued) **1000261671**

Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2002-06-27 03:31:59.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	Not reported
Manifest Broker:	Not reported
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Operator
Owner/Operator Name:	NOT REQUIRED
Legal Status:	Private
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	NOT REQUIRED
Owner/Operator City,State,Zip:	NOT REQUIRED, ME 99999
Owner/Operator Telephone:	415-555-1212
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name:	PIONEER BUSINESS IND PARK
Legal Status:	Private
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	NOT REQUIRED
Owner/Operator City,State,Zip:	NOT REQUIRED, ME 99999
Owner/Operator Telephone:	415-555-1212
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

ENVIRONMENTAL HEALTH SERVICE INC (Continued) **1000261671**

Historic Generators:

Receive Date:	1996-09-01 00:00:00.0
Handler Name:	ENVIRONMENTAL HEALTH SERVICE INC
Federal Waste Generator Description:	Small Quantity Generator
State District Owner:	CA
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

Receive Date:	1987-02-23 00:00:00.0
Handler Name:	ENVIRONMENTAL HEALTH SERVICE INC
Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	CA
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

List of NAICS Codes and Descriptions:
NAICS Codes: No NAICS Codes Found

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

FINDS:
Registry ID: 110002769451

Click Here:

Environmental Interest/Information System:
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1000261671
Registry ID: 110002769451

ENVIRONMENTAL HEALTH SERVICE INC (Continued) **1000261671**

DFR URL:	http://echo.epa.gov/detailed-facility-report?fid=110002769451
Name:	ENVIRONMENTAL HEALTH SERVICE INC
Address:	1414 DESCANSO #H
City,State,Zip:	SAN MARCOS, CA 92069

J52 **TERRY'S NISSAN SPECIALIST** **San Diego Co. HMMD** **S104890634**
SSW **1339 DESCANSO AVE** **CERS HAZ WASTE** **N/A**
1/8-1/4 **SAN MARCOS, CA 92069** **CERS**
0.224 mi.
1181 ft. **Site 10 of 13 in cluster J**

Relative: **Lower**
Actual: **560 ft.**

HMMD SAN DIEGO:

Name:	TERRY'S NISSAN SPECIALIST
Address:	1339 DESCANSO AVE
City,State,Zip:	SAN MARCOS, CA 92069
Permit Number:	Not reported
Business Type:	Not reported
EPA Id Number:	CAL000221808
APN:	Not reported
Last HMMD Inspection:	Not reported
Facility Telephone:	760-744-4084
Permit Status:	Permit Renewed
Permit Expiration:	Not reported
Date Last Updated:	05/23/2020
Facility Owner:	Not reported
Facility Mailing Address:	1339 Descanso Ave, San Marcos, CA 92069
Facility Mailing City:	Not reported
Facility Mailing State:	Not reported
Facility Mailing Zip:	Not reported
UST Owner:	N
Handle Regulated Hazmat:	Not reported
Own Or Operate UST:	Not reported
Subject To APSA:	Not reported
Generate Haz Waste:	Y
Treat Haz Waste:	N
Generate Medical Waste:	Not reported

Inspection Violation:

Record ID:	DEH2002-HUPFP-112523
Permit Status:	Permit Renewed
Active Permit:	Y
Facility Id Number:	37-000-112523
Program Element:	Hazardous Materials Release Response Plans
Inspection Type:	Routine
Inspection Number:	5957503
Return To Compliance Date:	2018-07-24T00:00:00.000
Nov:	No
Violation Classification:	Class II
Underground Storage Tank Id:	Not reported
Container/Tank Id:	Not reported
Last Update:	2020-05-23T01:15:10.000
Inspection Date:	2018-07-23T17:31:00.000
Violation Code:	1010008 HMBP not certified annually as complete and accurate in CERS. HSC 25508(a)(1)(A), 25508.2, 19 CCR 2654(b)

Record ID:	DEH2002-HUPFP-112523
Permit Status:	Permit Renewed
Active Permit:	Y

TERRY'S NISSAN SPECIALIST (Continued) **S104890634**

Facility Id Number:	37-000-112523
Program Element:	Hazardous Waste Generator
Inspection Type:	Routine
Inspection Number:	4086933
Return To Compliance Date:	2014-04-02T00:00:00.000
Nov:	No
Violation Classification:	Minor
Underground Storage Tank Id:	Not reported
Container/Tank Id:	Not reported
Last Update:	2020-05-23T01:15:10.000
Inspection Date:	2014-04-02T14:26:00.000
Violation Code:	3110005 RCRA:Failure to maintain uniform hazardous waste manifest, consolidated manifest, or bills of lading copies for three years.; 22 CCR 12 66262.40(a).

Record ID:	DEH2002-HUPFP-112523
Permit Status:	Permit Renewed
Active Permit:	Y
Facility Id Number:	37-000-112523
Program Element:	Hazardous Waste Generator
Inspection Type:	Routine
Inspection Number:	5957503
Return To Compliance Date:	2018-07-24T00:00:00.000
Nov:	No
Violation Classification:	Class II
Underground Storage Tank Id:	Not reported
Container/Tank Id:	Not reported
Last Update:	2020-05-23T01:15:10.000
Inspection Date:	2018-07-23T17:31:00.000
Violation Code:	HMD0152 +e-aFailed to report &/or update the required inventory information for hazardous waste(s) generated at the facility in CERS. +e-aSDCC 68.904(a)(2)

Record ID:	DEH2002-HUPFP-112523
Permit Status:	Permit Renewed
Active Permit:	Y
Facility Id Number:	37-000-112523
Program Element:	Hazardous Materials Release Response Plans
Inspection Type:	Routine
Inspection Number:	4086933
Return To Compliance Date:	2014-04-02T00:00:00.000
Nov:	No
Violation Classification:	Minor
Underground Storage Tank Id:	Not reported
Container/Tank Id:	Not reported
Last Update:	2020-05-23T01:15:10.000
Inspection Date:	2014-04-02T14:26:00.000
Violation Code:	1010008 Failure to submit inventory reports (Activities, Owner/Operator, Hazardous Materials Descriptions and Map pages, if required. Documentation must be resubmitted (for facilities which exceed EPCRA thresholds) or re-certified (for facilities which do not exceed EPCRA thresholds) by March 1; 19 CCR 4 2729.4(b), 2729.5.

Record ID:	DEH2002-HUPFP-112523
Permit Status:	Permit Renewed
Active Permit:	Y
Facility Id Number:	37-000-112523

TERRY'S NISSAN SPECIALIST (Continued) **S104890634**

Program Element:	Hazardous Materials Release Response Plans
Inspection Type:	Routine
Inspection Number:	5957503
Return To Compliance Date:	2018-07-23T00:00:00.000
Nov:	No
Violation Classification:	Class II
Underground Storage Tank Id:	Not reported
Container/Tank Id:	Not reported
Last Update:	2020-05-23T01:15:10.000
Inspection Date:	2018-07-23T17:31:00.000
Violation Code:	1020002 Initial &/or annual employee training not conducted in safety procedures for a hazardous material release or threatened release &/or employee training records not available or not maintained for 3 years. HSC 25505(a)(4); 19 CCR 2659(b)

Waste and Materials:

Record ID:	DEH2002-HUPFP-112523
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2018-HCHEM-0189150
Trade Secret:	N
Hazardous Material Type:	Mixture
Last Updated:	2020-04-29T02:34:57.000
Chemical Name:	MOTOR OIL
Common Name:	MOTOR OIL
Case Number:	8002-05-9

Record ID:	DEH2002-HUPFP-112523
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2018-HWAST-0163605
Trade Secret:	N
Hazardous Material Type:	Not reported
Last Updated:	2020-04-29T02:34:57.000
Chemical Name:	WASTE 221 WASTE OIL & MIXED OIL
Common Name:	USED OIL
Case Number:	Not reported

Record ID:	DEH2002-HUPFP-112523
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2016-HCHEM-0108970
Trade Secret:	N
Hazardous Material Type:	Mixture
Last Updated:	2018-04-20T02:32:25.000
Chemical Name:	MOTOR OIL
Common Name:	MOTOR OIL
Case Number:	8002-05-9

Record ID:	DEH2002-HUPFP-112523
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2016-HWAST-0090247
Trade Secret:	N
Hazardous Material Type:	Not reported
Last Updated:	2018-04-20T02:32:25.000
Chemical Name:	WASTE 342 ORGANIC LIQUIDS W/METALS

TERRY'S NISSAN SPECIALIST (Continued) **S104890634**

Common Name: WASTE ANTIFREEZE
Case Number: Not reported

Record ID: DEH2002-HUPFP-112523
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2016-HWAST-0090248
Trade Secret: N
Hazardous Material Type: Not reported
Last Updated: 2018-04-20T02:32:25.000
Chemical Name: WASTE 221 WASTE OIL & MIXED OIL
Common Name: USED OIL
Case Number: Not reported

Record ID: DEH2002-HUPFP-112523
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2016-HWAST-0090249
Trade Secret: N
Hazardous Material Type: Not reported
Last Updated: 2018-04-20T02:32:25.000
Chemical Name: PARTS WASHER
Common Name: PARTS WASHER
Case Number: Not reported

Record ID: DEH2002-HUPFP-112523
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2020-HWAST-0235511
Trade Secret: N
Hazardous Material Type: Not reported
Last Updated: 2020-05-23T01:15:14.000
Chemical Name: PARTS WASHER
Common Name: PARTS WASHER
Case Number: Not reported

Record ID: DEH2002-HUPFP-112523
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2020-HCHEM-0265081
Trade Secret: N
Hazardous Material Type: Mixture
Last Updated: 2020-05-23T01:15:13.000
Chemical Name: MOTOR OIL
Common Name: MOTOR OIL
Case Number: 8002-05-9

Record ID: DEH2002-HUPFP-112523
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2020-HWAST-0235509
Trade Secret: N
Hazardous Material Type: Not reported
Last Updated: 2020-05-23T01:15:14.000
Chemical Name: WASTE 342 ORGANIC LIQUIDS W/METALS
Common Name: WASTE ANTIFREEZE
Case Number: Not reported

TERRY'S NISSAN SPECIALIST (Continued) **S104890634**

Record ID:	DEH2002-HUPFP-112523
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2020-HWAST-0235510
Trade Secret:	N
Hazardous Material Type:	Not reported
Last Updated:	2020-05-23T01:15:14.000
Chemical Name:	WASTE 221 WASTE OIL & MIXED OIL
Common Name:	USED OIL
Case Number:	Not reported

Record ID:	DEH2002-HUPFP-112523
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2018-HWAST-0163604
Trade Secret:	N
Hazardous Material Type:	Not reported
Last Updated:	2020-04-29T02:34:57.000
Chemical Name:	WASTE 342 ORGANIC LIQUIDS W/METALS
Common Name:	WASTE ANTIFREEZE
Case Number:	Not reported

Record ID:	DEH2002-HUPFP-112523
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2018-HWAST-0163606
Trade Secret:	N
Hazardous Material Type:	Not reported
Last Updated:	2020-04-29T02:34:57.000
Chemical Name:	PARTS WASHER
Common Name:	PARTS WASHER
Case Number:	Not reported

Record ID:	DEH2002-HUPFP-112523
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2018-HWAST-0163607
Trade Secret:	N
Hazardous Material Type:	Not reported
Last Updated:	2020-04-29T02:34:57.000
Chemical Name:	Used Oil Filters (Drained)
Common Name:	Used Oil Filters (Drained)
Case Number:	Not reported

Record ID:	DEH2002-HUPFP-112523
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2020-HWAST-0235512
Trade Secret:	N
Hazardous Material Type:	Not reported
Last Updated:	2020-05-23T01:15:14.000
Chemical Name:	Used Oil Filters (Drained)
Common Name:	Used Oil Filters (Drained)
Case Number:	Not reported

Name: TERRY'S NISSAN SPECIALIST

TERRY'S NISSAN SPECIALIST (Continued) **S104890634**

Address:	1339 DESCANSO AV
City,State,Zip:	SAN MARCOS, CA 92069
Permit Number:	112523
Business Type:	6HK26
EPA Id Number:	CAL000221808
APN:	219-130-21-00
Last HMMD Inspection:	04/07/2010
Facility Telephone:	760-744-4084
Permit Status:	OPEN
Permit Expiration:	05/31/2013
Date Last Updated:	11/02/2012
Facility Owner:	TERRY LAU
Facility Mailing Address:	1339 DESCANSO
Facility Mailing City:	SAN MARCOS
Facility Mailing State:	CA
Facility Mailing Zip:	92069-1305
UST Owner:	Not reported
Handle Regulated Hazmat:	Y
Own Or Operate UST:	Not reported
Subject To APSA:	Not reported
Generate Haz Waste:	Y
Treat Haz Waste:	Not reported
Generate Medical Waste:	Not reported

Inventory Active Permits (not SQG Medical):

Permit Number:	112523
Update Date:	11/02/2012
Case Number:	8002-05-9
Name:	MOTOR OIL
Other Information:	Not reported
Material Waste:	Material
Hazardous Categories 1:	FIRE
Hazardous Categories 2:	Not reported

Permit Number:	112523
Update Date:	11/02/2012
Case Number:	Not reported
Name:	WASTE 221 WASTE OIL & MIXED OIL
Other Information:	USED OIL
Material Waste:	Waste
Hazardous Categories 1:	Not reported
Hazardous Categories 2:	Not reported

Permit Number:	112523
Update Date:	11/02/2012
Case Number:	Not reported
Name:	WASTE 223 UNSPEC OIL CONTAINING WASTE
Other Information:	PARTS CLEANER AQUEOUS
Material Waste:	Waste
Hazardous Categories 1:	Not reported
Hazardous Categories 2:	Not reported

Permit Number:	112523
Update Date:	11/02/2012
Case Number:	Not reported
Name:	WASTE 342 ORGANIC LIQUIDS W/METALS
Other Information:	WASTE ANTIFREEZE
Material Waste:	Waste

TERRY'S NISSAN SPECIALIST (Continued) **S104890634**

Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Permit Number: 112523
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 888 USED OIL FILTERS
Other Information: USED OIL FILTERS
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Violations Active Permits:
Permit Number: 112523
Update Date: 11/02/2012
Inspection Date: 10/14/2004
Violation Code: 6HV0131
Violation: UPF Permit NOT OBTAINED for HAZWASTE
Violation Citation: A Unified Program Facility permit has not been obtained for the generation of hazardous waste. 68.905
Activity: ACTIVE

CERS HAZ WASTE:
Name: TERRY'S NISSAN SPECIALIST
Address: 1339 DESCANSO AVE
City,State,Zip: SAN MARCOS, CA 92069
Site ID: 160225
CERS ID: 10375894
CERS Description: Hazardous Waste Generator

CERS:
Name: TERRY'S NISSAN SPECIALIST
Address: 1339 DESCANSO AVE
City,State,Zip: SAN MARCOS, CA 92069
Site ID: 160225
CERS ID: 10375894
CERS Description: Chemical Storage Facilities

Violations:
Site ID: 160225
Site Name: TERRY'S NISSAN SPECIALIST
Violation Date: 07-23-2018
Citation: HSC 6.5 Multiple - California Health and Safety Code, Chapter 6.5, Section(s) Multiple
Violation Description: Hazardous Waste Generator Program - Operations/Maintenance - General
Violation Notes: Returned to compliance on 07/24/2018. Inspection Sequence ID:5957503;Violation:HMD0152 + - Failed to report &/or update the required inventory information for hazardous waste(s) generated at the facility in CERS. + - SDCC 68.904(a)(2)
Violation Division: San Diego County Department of Env Health
Violation Program: HW
Violation Source: CERS

Site ID: 160225
Site Name: TERRY'S NISSAN SPECIALIST

TERRY'S NISSAN SPECIALIST (Continued) **S104890634**

Violation Date: 07-23-2018
Citation: HSC 6.95 25505(a)(4) - California Health and Safety Code, Chapter 6.95, Section(s) 25505(a)(4)
Violation Description: Failure to provide initial and annual training to all employees in safety procedures in the event of a release or threatened release of a hazardous material or failure to document and maintain training records for a minimum of three years.
Violation Notes: Returned to compliance on 07/23/2018. Inspection Sequence ID:5957503
Violation Division: San Diego County Department of Env Health
Violation Program: HMRRP
Violation Source: CERS

Site ID: 160225
Site Name: TERRY'S NISSAN SPECIALIST
Violation Date: 04-02-2014
Citation: 19 CCR 4 2729.5 - California Code of Regulations, Title 19, Chapter 4, Section(s) 2729.5
Violation Description: Failure to submit inventory reports (Activities, Owner/Operator, Hazardous Materials Descriptions and Map pages, if required. Documentation must be resubmitted (for facilities which exceed EPCRA thresholds) or re-certified (for facilities which do not exceed EPCRA thresholds) by March 1.
Violation Notes: Returned to compliance on 04/02/2014.
Violation Division: San Diego County Department of Env Health
Violation Program: HMRRP
Violation Source: CERS

Site ID: 160225
Site Name: TERRY'S NISSAN SPECIALIST
Violation Date: 07-23-2018
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description: Failure to annually review and electronically certify that the business plan is complete and accurate on or before the annual due date.
Violation Notes: Returned to compliance on 07/24/2018. Inspection Sequence ID:5957503
Violation Division: San Diego County Department of Env Health
Violation Program: HMRRP
Violation Source: CERS

Evaluation:
Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-27-2016
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Inspector: Calcagno Leonardo Inspection ID:5411685
Eval Division: San Diego County Department of Env Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-27-2016
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Inspector: Calcagno Leonardo Inspection ID:5411685
Eval Division: San Diego County Department of Env Health
Eval Program: HW

TERRY'S NISSAN SPECIALIST (Continued) **S104890634**

Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 04-02-2014
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Inspector: North HN004 Inspection ID:4086933
Eval Division: San Diego County Department of Env Health
Eval Program: HW
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 04-02-2014
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Inspector: North HN004 Inspection ID:4086933
Eval Division: San Diego County Department of Env Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-23-2018
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Inspector: Calcagno Leonardo Inspection ID:5957503
Eval Division: San Diego County Department of Env Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-23-2018
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Inspector: Calcagno Leonardo Inspection ID:5957503
Eval Division: San Diego County Department of Env Health
Eval Program: HW
Eval Source: CERS

Coordinates:
Site ID: 160225
Facility Name: TERRY'S NISSAN SPECIALIST
Env Int Type Code: HWG
Program ID: 10375894
Coord Name: Not reported
Ref Point Type Desc: Center of a facility or station.
Latitude: 33.146200
Longitude: -117.191220

Affiliation:
Affiliation Type Desc: Environmental Contact
Entity Name: Terry Lau
Entity Title: Not reported
Affiliation Address: 1339 Descanso Ave
Affiliation City: San Marcos
Affiliation State: CA
Affiliation Country: Not reported

TERRY'S NISSAN SPECIALIST (Continued) **S104890634**

Affiliation Zip:	92069
Affiliation Phone:	Not reported
Affiliation Type Desc:	Document Preparer
Entity Name:	Terry Lau
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported
Affiliation Type Desc:	CUPA District
Entity Name:	San Diego County Env Health
Entity Title:	Not reported
Affiliation Address:	PO Box 129261
Affiliation City:	San Diego
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	92112-9261
Affiliation Phone:	(858) 505-6880
Affiliation Type Desc:	Operator
Entity Name:	Terry Lau
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(760) 744-4084
Affiliation Type Desc:	Facility Mailing Address
Entity Name:	Mailing Address
Entity Title:	Not reported
Affiliation Address:	1339 Descanso Ave
Affiliation City:	San Marcos
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	92069
Affiliation Phone:	Not reported
Affiliation Type Desc:	Identification Signer
Entity Name:	TERRY LAU
Entity Title:	OWNER
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported
Affiliation Type Desc:	Legal Owner
Entity Name:	Terry Lau
Entity Title:	Not reported
Affiliation Address:	1339 Descanso Ave

TERRY'S NISSAN SPECIALIST (Continued) **S104890634**

Affiliation City:	San Marcos
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	92069
Affiliation Phone:	(760) 744-4084
Affiliation Type Desc:	Parent Corporation
Entity Name:	TERRY'S NISSAN SPECIALIST
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

J53 **TERRY'S NISSAN SPECIALIST** **RCRA NonGen / NLR** **1024800706**
SSW **1339 DESCANSO AVE** **CAL000221808**
1/8-1/4 **SAN MARCOS, CA 92069**
0.224 mi.
1181 ft. **Site 11 of 13 in cluster J**

Relative: RCRA NonGen / NLR:
Lower

Date Form Received by Agency:		2001-02-20 00:00:00.0
Handler Name:	TERRY'S NISSAN SPECIALIST	
Handler Address:		1339 DESCANSO AVE
Handler City,State,Zip:		SAN MARCOS, CA 92069-1305
EPA ID:		CAL000221808
Contact Name:		TERRY LAU
Contact Address:		1339 DESCANSO AVE
Contact City,State,Zip:		SAN MARCOS, CA 92069
Contact Telephone:		760-744-4084
Contact Fax:		000-000-0000
Contact Email:		TERRYLAU1953@GMAIL.COM
Contact Title:		Not reported
EPA Region:		09
Land Type:		Not reported
Federal Waste Generator Description:		Not a generator, verified
Non-Notifier:		Not reported
Biennial Report Cycle:		Not reported
Accessibility:		Not reported
Active Site Indicator:		Handler Activities
State District Owner:		Not reported
State District:		Not reported
Mailing Address:		1339 DESCANSO AVE
Mailing City,State,Zip:		SAN MARCOS, CA 92069-1305
Owner Name:		TERRY LAU
Owner Type:		Other
Operator Name:		TERRY LAU
Operator Type:		Other
Short-Term Generator Activity:		No
Importer Activity:		No
Mixed Waste Generator:		No
Transporter Activity:		No
Transfer Facility Activity:		No
Recycler Activity with Storage:		No
Small Quantity On-Site Burner Exemption:		No

Actual:
560 ft.

TERRY'S NISSAN SPECIALIST (Continued) **1024800706**

Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2018-09-05 15:45:19.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Operator
Owner/Operator Name:	TERRY LAU
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1339 DESCANSO AVE

TERRY'S NISSAN SPECIALIST (Continued) **1024800706**

Owner/Operator City,State,Zip:	SAN MARCOS, CA 92069
Owner/Operator Telephone:	760-744-4084
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Owner
Owner/Operator Name:	TERRY LAU
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1339 DESCANSO AVE
Owner/Operator City,State,Zip:	SAN MARCOS, CA 92069-1305
Owner/Operator Telephone:	760-744-4084
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	2001-02-20 00:00:00.0
Handler Name:	TERRY'S NISSAN SPECIALIST
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

List of NAICS Codes and Descriptions:

NAICS Code:	811111
NAICS Description:	GENERAL AUTOMOTIVE REPAIR

Facility Has Received Notices of Violations:

Violations:	No Violations Found

Evaluation Action Summary:

Evaluations:	No Evaluations Found

K54 **GAMA AUTO TIRE REPAIR** **RCRA NonGen / NLR** **1024842772**
SSW **1325 DESCANSO AVE** **CAL000393443**
1/8-1/4 **SAN MARCOS, CA 92069**
0.225 mi.
1188 ft. **Site 1 of 2 in cluster K**

Relative:
Lower

Actual:
560 ft.

RCRA NonGen / NLR:

Date Form Received by Agency:	2014-01-23 00:00:00.0
Handler Name:	GAMA AUTO TIRE REPAIR
Handler Address:	1325 DESCANSO AVE
Handler City,State,Zip:	SAN MARCOS, CA 92069
EPA ID:	CAL000393443
Contact Name:	RAMIRO GAMA

GAMA AUTO TIRE REPAIR (Continued) **1024842772**

Contact Address:	1325 DESCANSO AVE
Contact City,State,Zip:	SAN MARCOS, CA 92069
Contact Telephone:	760-458-5300
Contact Fax:	Not reported
Contact Email:	GAMARAMIROAUTO@GMAIL.COM
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	1325 DESCANSO AVE
Mailing City,State,Zip:	SAN MARCOS, CA 92069
Owner Name:	RAMIRO GAMA
Owner Type:	Other
Operator Name:	RAMIRO GAMA
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking

GAMA AUTO TIRE REPAIR (Continued) **1024842772**

Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2018-09-06 17:03:50.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Operator
Owner/Operator Name:	RAMIRO GAMA
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1325 DESCANSO AVE
Owner/Operator City,State,Zip:	SAN MARCOS, CA 92069
Owner/Operator Telephone:	760-458-5300
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name:	RAMIRO GAMA
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	549 WOODS DR
Owner/Operator City,State,Zip:	SAN MARCOS, CA 92069
Owner/Operator Telephone:	760-458-5300
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	2014-01-23 00:00:00.0
Handler Name: GAMA AUTO TIRE REPAIR	
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No

GAMA AUTO TIRE REPAIR (Continued) **1024842772**

Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 56299
NAICS Description: ALL OTHER WASTE MANAGEMENT SERVICES

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

J55 **ACCURATE AUTOWERKS** **RCRA NonGen / NLR** **1025868035**
SSW **1331 DESCANSO AVE** **CAL000346765**
1/8-1/4 **SAN MARCOS, CA 92069**
0.227 mi.
1197 ft. **Site 12 of 13 in cluster J**

Relative: **Lower**
Actual: **560 ft.**

RCRA NonGen / NLR:
Date Form Received by Agency: 2009-09-25 00:00:00.0
Handler Name: ACCURATE AUTOWERKS
Handler Address: 1331 DESCANSO AVE
Handler City,State,Zip: SAN MARCOS, CA 92069-1305
EPA ID: CAL000346765
Contact Name: DANIEL BURNHAM
Contact Address: 1331 DESCANSO AVE
Contact City,State,Zip: SAN MARCOS, CA 92069
Contact Telephone: 858-679-7986
Contact Fax: 000-000-0000
Contact Email: ACCURATEAUTOWERKS@GMAIL.COM
Contact Title: Not reported
EPA Region: 09
Land Type: Not reported
Federal Waste Generator Description: Not a generator, verified
Non-Notifier: Not reported
Biennial Report Cycle: Not reported
Accessibility: Not reported
Active Site Indicator: Handler Activities
State District Owner: Not reported
State District: Not reported
Mailing Address: 1331 DESCANSO AVE
Mailing City,State,Zip: SAN MARCOS, CA 92069-1305
Owner Name: DANIEL BURNHAM
Owner Type: Other
Operator Name: DANIEL BURNHAM
Operator Type: Other
Short-Term Generator Activity: No
Importer Activity: No
Mixed Waste Generator: No
Transporter Activity: No
Transfer Facility Activity: No
Recycler Activity with Storage: Yes
Small Quantity On-Site Burner Exemption: No

ACCURATE AUTOWERKS (Continued) **1025868035**

Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2019-06-28 17:06:41.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	DANIEL BURNHAM
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1331 DESCANSO AVE

ACCURATE AUTOWERKS (Continued) **1025868035**

Owner/Operator City,State,Zip:	SAN MARCOS, CA 92069
Owner/Operator Telephone:	760-591-3084
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Operator
Owner/Operator Name:	DANIEL BURNHAM
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1331 DESCANSO AVE
Owner/Operator City,State,Zip:	SAN MARCOS, CA 92069
Owner/Operator Telephone:	858-679-7986
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	2009-09-25 00:00:00.0
Handler Name: ACCURATE AUTOWERKS	
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	Not reported
Recognized Trader Exporter:	Not reported
Spent Lead Acid Battery Importer:	Not reported
Spent Lead Acid Battery Exporter:	Not reported
Current Record:	Yes
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

List of NAICS Codes and Descriptions:

NAICS Code:	811111
NAICS Description:	GENERAL AUTOMOTIVE REPAIR

Facility Has Received Notices of Violations:

Violations:	No Violations Found

Evaluation Action Summary:

Evaluations:	No Evaluations Found

J56 **ACCURATE AUTOWERKS** **San Diego Co. HMMD** **S113157186**
SSW **1331 DESCANSO AVE** **CERS HAZ WASTE** **N/A**
1/8-1/4 **SAN MARCOS, CA 92069** **HAZNET**
0.227 mi. **CERS**
1197 ft. **Site 13 of 13 in cluster J** **HWTS**

Relative:
Lower

Actual:
560 ft.

HMMD SAN DIEGO:

Name:	ACCURATE AUTOWERKS
Address:	1331 DESCANSO AVE
City,State,Zip:	SAN MARCOS, CA 92069
Permit Number:	Not reported
Business Type:	Not reported
EPA Id Number:	CAL000346765

ACCURATE AUTOWERKS (Continued) **S113157186**

APN:	Not reported
Last HMMD Inspection:	Not reported
Facility Telephone:	760-591-3084
Permit Status:	Permit Renewed
Permit Expiration:	Not reported
Date Last Updated:	06/18/2020
Facility Owner:	Not reported
Facility Mailing Address:	1331 Descanso Ave, San Marcos, CA 92069
Facility Mailing City:	Not reported
Facility Mailing State:	Not reported
Facility Mailing Zip:	Not reported
UST Owner:	N
Handle Regulated Hazmat:	Not reported
Own Or Operate UST:	Not reported
Subject To APSA:	Not reported
Generate Haz Waste:	Y
Treat Haz Waste:	N
Generate Medical Waste:	Not reported

Inspection Violation:

Record ID:	DEH2009-HUPFP-211548
Permit Status:	Permit Renewed
Active Permit:	Y
Facility Id Number:	37-000-211548
Program Element:	Hazardous Waste Generator
Inspection Type:	Routine
Inspection Number:	5411700
Return To Compliance Date:	2016-06-22T00:00:00.000
Nov:	No
Violation Classification:	Minor
Underground Storage Tank Id:	Not reported
Container/Tank Id:	Not reported
Last Update:	2020-06-18T00:00:00.000
Inspection Date:	2016-06-22T12:53:00.000
Violation Code:	3030007 Failed to properly label/date hazardous waste container and/or tank. 22 CCR 66262.34(f)

Record ID:	DEH2009-HUPFP-211548
Permit Status:	Permit Renewed
Active Permit:	Y
Facility Id Number:	37-000-211548
Program Element:	Hazardous Waste Generator
Inspection Type:	Routine
Inspection Number:	5411700
Return To Compliance Date:	2016-06-22T00:00:00.000
Nov:	No
Violation Classification:	Minor
Underground Storage Tank Id:	Not reported
Container/Tank Id:	Not reported
Last Update:	2020-06-18T00:00:00.000
Inspection Date:	2016-06-22T12:53:00.000
Violation Code:	HMD0226 Did not accumulate waste in a container or tank. (40 CFR 262.34(d)(2).) 22 CCR 66262.34(d)(2)

Record ID:	DEH2009-HUPFP-211548
Permit Status:	Permit Renewed
Active Permit:	Y
Facility Id Number:	37-000-211548

ACCURATE AUTOWERKS (Continued) **S113157186**

Program Element:	Hazardous Waste Generator
Inspection Type:	Routine
Inspection Number:	5411700
Return To Compliance Date:	2016-06-22T00:00:00.000
Nov:	No
Violation Classification:	Minor
Underground Storage Tank Id:	Not reported
Container/Tank Id:	Not reported
Last Update:	2020-06-18T00:00:00.000
Inspection Date:	2016-06-22T12:53:00.000
Violation Code:	HMD0150 Failed to submit complete and accurate Facility Information in CERS. HSC 25404(e)(4); 27 CCR 15188(b-c); SDCC 68.904(b)

Record ID:	DEH2009-HUPFP-211548
Permit Status:	Permit Renewed
Active Permit:	Y
Facility Id Number:	37-000-211548
Program Element:	Hazardous Waste Generator
Inspection Type:	Routine
Inspection Number:	5411700
Return To Compliance Date:	2016-06-22T00:00:00.000
Nov:	No
Violation Classification:	Minor
Underground Storage Tank Id:	Not reported
Container/Tank Id:	Not reported
Last Update:	2020-06-18T00:00:00.000
Inspection Date:	2016-06-22T12:53:00.000
Violation Code:	3030004 Failed to properly manage, store, label, and/or recycle used oil filters and/or used fuel filters. HSC 25250.22; 22 CCR 66266.130

Record ID:	DEH2009-HUPFP-211548
Permit Status:	Permit Renewed
Active Permit:	Y
Facility Id Number:	37-000-211548
Program Element:	Hazardous Waste Generator
Inspection Type:	Routine
Inspection Number:	5411700
Return To Compliance Date:	2016-10-06T00:00:00.000
Nov:	No
Violation Classification:	Minor
Underground Storage Tank Id:	Not reported
Container/Tank Id:	Not reported
Last Update:	2020-06-18T00:00:00.000
Inspection Date:	2016-06-22T12:53:00.000
Violation Code:	3030010 Accumulated waste too long (>180 or 270 days) (>90 days for an acutely hazardous waste). (40 CFR 262.34(e) and (f).) HSC 25201(a); 22 CCR 66262.34(d)

Record ID:	DEH2009-HUPFP-211548
Permit Status:	Permit Renewed
Active Permit:	Y
Facility Id Number:	37-000-211548
Program Element:	Hazardous Waste Generator
Inspection Type:	Routine
Inspection Number:	5933284
Return To Compliance Date:	2019-10-04T00:00:00.000
Nov:	No

ACCURATE AUTOWERKS (Continued) **S113157186**

Violation Classification:	Class II
Underground Storage Tank Id:	Not reported
Container/Tank Id:	Not reported
Last Update:	2020-06-18T00:00:00.000
Inspection Date:	2018-06-20T00:00:00.000
Violation Code:	3010002 Failed to obtain &/or maintain an active EPA ID Number. 22 CCR 66262.12(a)
Record ID:	DEH2009-HUPFP-211548
Permit Status:	Permit Renewed
Active Permit:	Y
Facility Id Number:	37-000-211548
Program Element:	Hazardous Waste Generator
Inspection Type:	Routine
Inspection Number:	5933284
Return To Compliance Date:	2018-12-14T00:00:00.000
Nov:	Yes
Violation Classification:	Class I
Underground Storage Tank Id:	Not reported
Container/Tank Id:	Not reported
Last Update:	2020-06-18T00:00:00.000
Inspection Date:	2018-06-20T00:00:00.000
Violation Code:	HMD0131 Unified Program Facility Permit not obtained &/or maintained for the generation of hazardous waste. SDCC 68.905
Record ID:	DEH2009-HUPFP-211548
Permit Status:	Permit Renewed
Active Permit:	Y
Facility Id Number:	37-000-211548
Program Element:	Hazardous Waste Generator
Inspection Type:	Routine
Inspection Number:	5933284
Return To Compliance Date:	2018-07-24T00:00:00.000
Nov:	No
Violation Classification:	Class II
Underground Storage Tank Id:	Not reported
Container/Tank Id:	Not reported
Last Update:	2020-06-18T00:00:00.000
Inspection Date:	2018-06-20T00:00:00.000
Violation Code:	3030010 Accumulated waste too long (>180 or 270 days) or (>90 days). HSC 25201(a), 25123.3(h)(1); 22 CCR 66262.34(d); 40 CFR 262.34(e) and/or (f)
Record ID:	DEH2009-HUPFP-211548
Permit Status:	Permit Renewed
Active Permit:	Y
Facility Id Number:	37-000-211548
Program Element:	Hazardous Materials Release Response Plans
Inspection Type:	Routine
Inspection Number:	5933284
Return To Compliance Date:	2018-12-14T00:00:00.000
Nov:	Yes
Violation Classification:	Class I
Underground Storage Tank Id:	Not reported
Container/Tank Id:	Not reported
Last Update:	2020-06-18T00:00:00.000
Inspection Date:	2018-06-20T00:00:00.000

ACCURATE AUTOWERKS (Continued) **S113157186**

Violation Code: HMD1001 Unified Program Facility permit not obtained for hazardous materials. SDCC 68.905; 68.906, 68.907

Record ID: DEH2009-HUPFP-211548
Permit Status: Permit Renewed
Active Permit: Y
Facility Id Number: 37-000-211548
Program Element: Hazardous Materials Release Response Plans
Inspection Type: Routine
Inspection Number: 5933284
Return To Compliance Date: 2018-06-20T00:00:00.000
Nov: No
Violation Classification: Class II
Underground Storage Tank Id: Not reported
Container/Tank Id: Not reported
Last Update: 2020-06-18T00:00:00.000
Inspection Date: 2018-06-20T00:00:00.000
Violation Code: 1010008 HMBP not certified annually as complete and accurate in CERS. HSC 25508(a)(1)(A), 25508.2, 19 CCR 2654(b)

Record ID: DEH2009-HUPFP-211548
Permit Status: Permit Renewed
Active Permit: Y
Facility Id Number: 37-000-211548
Program Element: Hazardous Waste Generator
Inspection Type: Routine
Inspection Number: 5411700
Return To Compliance Date: 2016-06-22T00:00:00.000
Nov: No
Violation Classification: Minor
Underground Storage Tank Id: Not reported
Container/Tank Id: Not reported
Last Update: 2020-06-18T00:00:00.000
Inspection Date: 2016-06-22T12:53:00.000
Violation Code: 3010002 Failed to obtain and/or maintain an active EPA ID. 22 CCR 66262.12

Record ID: DEH2009-HUPFP-211548
Permit Status: Permit Renewed
Active Permit: Y
Facility Id Number: 37-000-211548
Program Element: Hazardous Materials Release Response Plans
Inspection Type: Routine
Inspection Number: 5933284
Return To Compliance Date: 2018-06-20T00:00:00.000
Nov: No
Violation Classification: Class II
Underground Storage Tank Id: Not reported
Container/Tank Id: Not reported
Last Update: 2020-06-18T00:00:00.000
Inspection Date: 2018-06-20T00:00:00.000
Violation Code: 1010004 Chemical inventory incomplete or not submitted in CERS. HSC 25505(a)(1); 25507(a); 25508.1(a-b); 19 CCR 2654 (a) or (d)

Waste and Materials:
Record ID: DEH2009-HUPFP-211548
Permit Status: Permit Renewed

ACCURATE AUTOWERKS (Continued) **S113157186**

Active Permit: Y
Child Record Id: DEH2020-HWAST-0236821
Trade Secret: N
Hazardous Material Type: Not reported
Last Updated: 2020-06-18T02:30:31.000
Chemical Name: WASTE 221 WASTE OIL & MIXED OIL
Common Name: USED OIL
Case Number: Not reported

Record ID: DEH2009-HUPFP-211548
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2020-HWAST-0236822
Trade Secret: N
Hazardous Material Type: Not reported
Last Updated: 2020-06-18T02:30:31.000
Chemical Name: WASTE 342 ORGANIC LIQUIDS W/METALS
Common Name: USED ANTIFREEZE
Case Number: Not reported

Record ID: DEH2009-HUPFP-211548
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2020-HWAST-0236823
Trade Secret: N
Hazardous Material Type: Not reported
Last Updated: 2020-06-18T02:30:31.000
Chemical Name: USED OIL FILTERS (Non-Metal) & ABSORBENT MAT. W/OIL
Common Name: USED OIL FILTERS (Non-Metal) & ABSORBENT MAT. W/OIL
Case Number: Not reported

CERS HAZ WASTE:
Name: ACCURATE AUTOWERKS
Address: 1331 DESCANSO AVE
City,State,Zip: SAN MARCOS, CA 92069
Site ID: 2813
CERS ID: 10376422
CERS Description: Hazardous Waste Generator

HAZNET:
Name: ACCURATE AUTOWERKS
Address: 1331 DESCANSO AVE
Address 2: Not reported
City,State,Zip: SAN MARCOS, CA 920691305
Contact: DANIEL BURNHAM
Telephone: 8586797986
Mailing Name: Not reported
Mailing Address: 1331 DESCANSO AVE

Year: 2019
Gepaid: CAL000346765
TSD EPA ID: CAD097030993
CA Waste Code: 352 - Other organic solids
Disposal Method: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)

ACCURATE AUTOWERKS (Continued) **S113157186**

Tons: 0.05000

Year: 2009
Gepaid: CAL000346765
TSD EPA ID: CAT080013352
CA Waste Code: 343 - Unspecified organic liquid mixture
Disposal Method: -
Tons: Not reported

Year: 2009
Gepaid: CAL000346765
TSD EPA ID: CAT080013352
CA Waste Code: 343 - Unspecified organic liquid mixture
Disposal Method: H061 - Fuel Blending Prior To Energy Recovery At Another Site
Tons: 0.187

Additional Info:
Year: 2009
Gen EPA ID: CAL000346765

Shipment Date: 20091215
Creation Date: 3/11/2010 18:30:08
Receipt Date: 20091229
Manifest ID: 006510804JJK
Trans EPA ID: CAD028277036
Trans Name: ASBURY ENVIRONMENTAL SERVICES
Trans 2 EPA ID: Not reported
Trans 2 Name: Not reported
TSDF EPA ID: CAT080013352
Trans Name: DEMENNO / KERDOON
TSDF Alt EPA ID: Not reported
TSDF Alt Name: Not reported
Waste Code Description: 343 - Unspecified organic liquid mixture
RCRA Code: D018
Meth Code: H061 - Fuel Blending Prior To Energy Recovery At Another Site
Quantity Tons: 0.187
Waste Quantity: 55
Quantity Unit: G
Additional Code 1: D001
Additional Code 2: Not reported
Additional Code 3: Not reported
Additional Code 4: Not reported
Additional Code 5: Not reported

Shipment Date: 20091215
Creation Date: 3/11/2010 18:30:08
Receipt Date: 20091229
Manifest ID: 006510804JJK
Trans EPA ID: CAD028277036
Trans Name: ASBURY ENVIRONMENTAL SERVICES
Trans 2 EPA ID: Not reported
Trans 2 Name: Not reported
TSDF EPA ID: CAT080013352
Trans Name: DEMENNO / KERDOON
TSDF Alt EPA ID: Not reported
TSDF Alt Name: Not reported

ACCURATE AUTOWERKS (Continued) **S113157186**

Waste Code Description:	343 - Unspecified organic liquid mixture
RCRA Code:	D018
Meth Code:	- Not reported
Quantity Tons:	Not reported
Waste Quantity:	Not reported
Quantity Unit:	Not reported
Additional Code 1:	D001
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

CERS:

Name:	ACCURATE AUTOWERKS
Address:	1331 DESCANSO AVE
City,State,Zip:	SAN MARCOS, CA 92069
Site ID:	2813
CERS ID:	10376422
CERS Description:	Chemical Storage Facilities

Violations:

Site ID:	2813
Site Name:	ACCURATE AUTOWERKS
Violation Date:	06-20-2018
Citation:	22 CCR 12 66262.12 - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.12
Violation Description:	Failure to obtain an Identification Number prior to treating, storing, disposing of, transporting or offering for transportation any hazardous waste.
Violation Notes:	Returned to compliance on 10/04/2019. Inspection Sequence ID:5933284
Violation Division:	San Diego County Department of Env Health
Violation Program:	HW
Violation Source:	CERS

Site ID:	2813
Site Name:	ACCURATE AUTOWERKS
Violation Date:	06-22-2016
Citation:	22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f)
Violation Description:	Failure to properly label hazardous waste accumulation containers and portable tanks with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date.
Violation Notes:	Returned to compliance on 06/22/2016. Inspection Sequence ID:5411700
Violation Division:	San Diego County Department of Env Health
Violation Program:	HW
Violation Source:	CERS

Site ID:	2813
Site Name:	ACCURATE AUTOWERKS
Violation Date:	06-20-2018
Citation:	HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description:	Failure to complete and electronically submit hazardous material inventory information for all reportable hazardous materials on site at or above reportable quantities.

ACCURATE AUTOWERKS (Continued) **S113157186**

Violation Notes:	Returned to compliance on 06/20/2018. Inspection Sequence ID:5933284
Violation Division:	San Diego County Department of Env Health
Violation Program:	HMRRP
Violation Source:	CERS
Site ID:	2813
Site Name:	ACCURATE AUTOWERKS
Violation Date:	06-22-2016
Citation:	22 CCR 12 66262.34(d) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(d)
Violation Description:	Failure to send hazardous waste offsite for treatment, storage, or disposal within 180 days (or 270 days if waste is transported over 200 miles) for a generator who generates less than 1000 kilogram per month if all of the following conditions are met: (1) The quantity of hazardous waste accumulated onsite never exceeds 6,000 kilograms. (2) The generator complies with the requirements of 40 Code of Federal Regulations section 262.34(d), (e) and (f). (3) The generator does not hold acutely hazardous waste or extremely hazardous waste in an amount greater than one kilogram for more than 90 days.
Violation Notes:	Returned to compliance on 10/06/2016. Inspection Sequence ID:5411700
Violation Division:	San Diego County Department of Env Health
Violation Program:	HW
Violation Source:	CERS
Site ID:	2813
Site Name:	ACCURATE AUTOWERKS
Violation Date:	06-20-2018
Citation:	HSC 6.5 Multiple - California Health and Safety Code, Chapter 6.5, Section(s) Multiple
Violation Description:	Hazardous Waste Generator Program - Administration/Documentation - General
Violation Notes:	Returned to compliance on 12/14/2018. Inspection Sequence ID:5933284;Violation:HMD0131 Unified Program Facility Permit not obtained &/or maintained for the generation of hazardous waste. SDCC 68.905
Violation Division:	San Diego County Department of Env Health
Violation Program:	HW
Violation Source:	CERS
Site ID:	2813
Site Name:	ACCURATE AUTOWERKS
Violation Date:	06-22-2016
Citation:	HSC 6.5 Multiple - California Health and Safety Code, Chapter 6.5, Section(s) Multiple
Violation Description:	Hazardous Waste Generator Program - Administration/Documentation - General
Violation Notes:	Returned to compliance on 06/22/2016. Inspection Sequence ID:5411700;Violation:HMD0150 Failed to submit complete and accurate Facility Information in CERS. HSC 25404(e)(4); 27 CCR 15188(b-c); SDCC 68.904(b)
Violation Division:	San Diego County Department of Env Health
Violation Program:	HW
Violation Source:	CERS
Site ID:	2813
Site Name:	ACCURATE AUTOWERKS
Violation Date:	06-20-2018

ACCURATE AUTOWERKS (Continued) **S113157186**

Citation:	HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description:	Failure to annually review and electronically certify that the business plan is complete and accurate on or before the annual due date.
Violation Notes:	Returned to compliance on 06/20/2018. Inspection Sequence ID:5933284
Violation Division:	San Diego County Department of Env Health
Violation Program:	HMRRP
Violation Source:	CERS
Site ID:	2813
Site Name:	ACCURATE AUTOWERKS
Violation Date:	06-20-2018
Citation:	HSC 6.95 Multiple - California Health and Safety Code, Chapter 6.95, Section(s) Multiple
Violation Description:	Business Plan Program - Administration/Documentation - General
Violation Notes:	Returned to compliance on 12/14/2018. Inspection Sequence ID:5933284;Violation:HMD1001 Unified Program Facility permit not obtained for hazardous materials. SDCC 68.905; 68.906, 68.907
Violation Division:	San Diego County Department of Env Health
Violation Program:	HMRRP
Violation Source:	CERS
Site ID:	2813
Site Name:	ACCURATE AUTOWERKS
Violation Date:	06-22-2016
Citation:	22 CCR 12 66262.12 - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.12
Violation Description:	Failure to obtain an Identification Number prior to treating, storing, disposing of, transporting or offering for transportation any hazardous waste.
Violation Notes:	Returned to compliance on 06/22/2016. Inspection Sequence ID:5411700
Violation Division:	San Diego County Department of Env Health
Violation Program:	HW
Violation Source:	CERS
Site ID:	2813
Site Name:	ACCURATE AUTOWERKS
Violation Date:	06-20-2018
Citation:	HSC 6.5 25123.3(h)(1) - California Health and Safety Code, Chapter 6.5, Section(s) 25123.3(h)(1)
Violation Description:	Failure to send hazardous waste offsite for treatment, storage, or disposal within 180 days (or 270 days if waste is transported over 200 miles) for a generator who generates less than 1000 kilogram per month if all of the following conditions are met: (1) The quantity of hazardous waste accumulated onsite never exceeds 6,000 kilograms. (2) The generator complies with the requirements of 40 Code of Federal Regulations section 262.34(d), (e) and (f). (3) The generator does not hold acutely hazardous waste or extremely hazardous waste in an amount greater than one kilogram for more than 90 days.
Violation Notes:	Returned to compliance on 07/24/2018. Inspection Sequence ID:5933284
Violation Division:	San Diego County Department of Env Health
Violation Program:	HW
Violation Source:	CERS
Site ID:	2813
Site Name:	ACCURATE AUTOWERKS

ACCURATE AUTOWERKS (Continued) **S113157186**

Violation Date: 06-22-2016
Citation: HSC 6.5 25250.22 - California Health and Safety Code, Chapter 6.5, Section(s) 25250.22
Violation Description: Failure to properly manage used oil and/or fuel filters in accordance with the requirements.
Violation Notes: Returned to compliance on 06/22/2016. Inspection Sequence ID:5411700
Violation Division: San Diego County Department of Env Health
Violation Program: HW
Violation Source: CERS

Site ID: 2813
Site Name: ACCURATE AUTOWERKS
Violation Date: 06-22-2016
Citation: HSC 6.5 Multiple - California Health and Safety Code, Chapter 6.5, Section(s) Multiple
Violation Description: Hazardous Waste Generator Program - Operations/Maintenance - General
Violation Notes: Returned to compliance on 06/22/2016. Inspection Sequence ID:5411700;Violation:HMD0226 Did not accumulate waste in a container or tank. (40 CFR 262.34(d)(2).) 22 CCR 66262.34(d)(2)
Violation Division: San Diego County Department of Env Health
Violation Program: HW
Violation Source: CERS

Evaluation:
Eval General Type: Compliance Evaluation Inspection
Eval Date: 06-20-2018
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Inspector: Calcagno Leonardo Inspection ID:5933284
Eval Division: San Diego County Department of Env Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 06-20-2018
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Inspector: Calcagno Leonardo Inspection ID:5933284
Eval Division: San Diego County Department of Env Health
Eval Program: HW
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 06-22-2016
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Inspector: Fitzmaurice Mark Inspection ID:5411700
Eval Division: San Diego County Department of Env Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 06-22-2016
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Inspector: Fitzmaurice Mark Inspection ID:5411700
Eval Division: San Diego County Department of Env Health

ACCURATE AUTOWERKS (Continued) **S113157186**

Eval Program: HW
Eval Source: CERS

Coordinates:
Site ID: 2813
Facility Name: ACCURATE AUTOWERKS
Env Int Type Code: HWG
Program ID: 10376422
Coord Name: Not reported
Ref Point Type Desc: Center of a facility or station.
Latitude: 33.145950
Longitude: -117.191440

Affiliation:
Affiliation Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title: Not reported
Affiliation Address: 1331 Descanso Ave
Affiliation City: San Marcos
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 92069
Affiliation Phone: Not reported

Affiliation Type Desc: Operator
Entity Name: DANNY BURNHAM
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: (760) 591-3084

Affiliation Type Desc: Parent Corporation
Entity Name: ACCURATE AUTO WERKS
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: Environmental Contact
Entity Name: DANNY BURNHAM
Entity Title: Not reported
Affiliation Address: 1331 Descanso Ave
Affiliation City: San Marcos
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 92069
Affiliation Phone: Not reported

Affiliation Type Desc: Identification Signer
Entity Name: Danny Burnham

ACCURATE AUTOWERKS (Continued) **S113157186**

Entity Title:	OWNER
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported
Affiliation Type Desc:	Legal Owner
Entity Name:	Dennis Burnham
Entity Title:	Not reported
Affiliation Address:	1331 Descanso Ave
Affiliation City:	San Marcos
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	92069
Affiliation Phone:	(760) 591-3084
Affiliation Type Desc:	CUPA District
Entity Name:	San Diego County Env Health
Entity Title:	Not reported
Affiliation Address:	PO Box 129261
Affiliation City:	San Diego
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	92112-9261
Affiliation Phone:	(858) 505-6880
Affiliation Type Desc:	Document Preparer
Entity Name:	DANNY BURNHAM
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

HWTS:

Name:	ACCURATE AUTOWERKS
Address:	1331 DESCANSO AVE
Address 2:	Not reported
City,State,Zip:	SAN MARCOS, CA 920691305
EPA ID:	CAL000346765
Inactive Date:	Not reported
Create Date:	09/25/2009
Last Act Date:	10/19/2020
Mailing Name:	Not reported
Mailing Address:	1331 DESCANSO AVE
Mailing Address 2:	Not reported
Mailing City,State,Zip:	SAN MARCOS, CA 920691305
Owner Name:	DANIEL BURNHAM
Owner Address:	1331 DESCANSO AVE
Owner Address 2:	Not reported
Owner City,State,Zip:	SAN MARCOS, CA 92069
Contact Name:	DANIEL BURNHAM

ACCURATE AUTOWERKS (Continued) **S113157186**

Contact Address:	1331 DESCANSO AVE
Contact Address 2:	Not reported
City,State,Zip:	SAN MARCOS, CA 92069

NAICS:

EPA ID:	CAL000346765
Create Date:	2009-09-25 11:28:26.103
NAICS Code:	811111
NAICS Description:	General Automotive Repair
Issued EPA ID Date:	2009-09-25 11:28:26.09000
Inactive Date:	Not reported
Facility Name:	ACCURATE AUTOWERKS
Facility Address:	1331 DESCANSO AVE
Facility Address 2:	Not reported
Facility City:	SAN MARCOS
Facility County:	Not reported
Facility State:	CA
Facility Zip:	920691305

I57 **VECCHIO MONDO IMPORTS** **RCRA NonGen / NLR** **1024821696**
WSW **120 N PACIFIC ST STE L11** **CAL000338198**
1/8-1/4 **SAN MARCOS, CA 92069**
0.234 mi.
1237 ft. **Site 3 of 8 in cluster I**

Relative: **Lower**

Actual: **566 ft.**

RCRA NonGen / NLR:

Date Form Received by Agency:		2008-11-25 00:00:00.0
Handler Name:	VECCHIO MONDO IMPORTS	
Handler Address:		120 N PACIFIC ST STE L11
Handler City,State,Zip:		SAN MARCOS, CA 92069-1293
EPA ID:		CAL000338198
Contact Name:		EDDIE BOZZA
Contact Address:		3397 GOLFERS DR
Contact City,State,Zip:		OCEANSIDE, CA 92056
Contact Telephone:		858-229-3713
Contact Fax:		760-754-9424
Contact Email:		BOZZA@SBCGLOBAL.NET
Contact Title:		Not reported
EPA Region:		09
Land Type:		Not reported
Federal Waste Generator Description:		Not a generator, verified
Non-Notifier:		Not reported
Biennial Report Cycle:		Not reported
Accessibility:		Not reported
Active Site Indicator:		Handler Activities
State District Owner:		Not reported
State District:		Not reported
Mailing Address:		3397 GOLFERS DR
Mailing City,State,Zip:		OCEANSIDE, CA 92056-0000
Owner Name:		EDDIE BOZZA
Owner Type:		Other
Operator Name:		EDDIE BOZZA
Operator Type:		Other
Short-Term Generator Activity:		No
Importer Activity:		No
Mixed Waste Generator:		No
Transporter Activity:		No

VECCHIO MONDO IMPORTS (Continued) **1024821696**

Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2018-09-05 20:30:50.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Operator
Owner/Operator Name:	EDDIE BOZZA
Legal Status:	Other

VECCHIO MONDO IMPORTS (Continued) **1024821696**

Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	3397 GOLFERS DR
Owner/Operator City,State,Zip:	OCEANSIDE, CA 92056
Owner/Operator Telephone:	858-229-3713
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Owner
Owner/Operator Name:	EDDIE BOZZA
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	3397 GOLFERS DR
Owner/Operator City,State,Zip:	OCEANSIDE, CA 92056-0000
Owner/Operator Telephone:	858-229-3713
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	2008-11-25 00:00:00.0
Handler Name:	VECCHIO MONDO IMPORTS
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

List of NAICS Codes and Descriptions:

NAICS Code:	23521
NAICS Description:	PAINTING AND WALL COVERING CONTRACTORS

Facility Has Received Notices of Violations:

Violations:	No Violations Found

Evaluation Action Summary:

Evaluations:	No Evaluations Found

I58 **PIONEER INDUSTRIAL PARK** **RCRA-SQG** **1025878778**
WSW **120 N PACIFIC STE G3** **CAP000048090**
1/8-1/4 **SAN MARCOS, CA 92069**
0.234 mi.
1237 ft. **Site 4 of 8 in cluster I**

Relative: **Lower**
Actual: **566 ft.**

RCRA-SQG:

Date Form Received by Agency:	1999-02-01 00:00:00.0
Handler Name:	PIONEER INDUSTRIAL PARK
Handler Address:	120 N PACIFIC STE G3
Handler City,State,Zip:	SAN MARCOS, CA 92069
EPA ID:	CAP000048090
Contact Name:	NATALIE BLACKBURN
Contact Address:	120 N PACIFIC STE G3
Contact City,State,Zip:	SAN MARCOS, CA 92069
Contact Telephone:	760-471-6092
Contact Fax:	Not reported
Contact Email:	Not reported
Contact Title:	Not reported
EPA Region:	09
Land Type:	Private
Federal Waste Generator Description:	Small Quantity Generator
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	120 N PACIFIC STE G3
Mailing City,State,Zip:	SAN MARCOS, CA 92069
Owner Name:	120 N PACIFIC LLC
Owner Type:	Private
Operator Name:	Not reported
Operator Type:	Not reported
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported

PIONEER INDUSTRIAL PARK (Continued) **1025878778**

Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2002-10-22 12:10:26.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	120 N PACIFIC LLC
Legal Status:	Private
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	5959 MISSION GORGE RD NO 200
Owner/Operator City,State,Zip:	SAN DIEGO, CA 92120
Owner/Operator Telephone:	619-563-1198
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	1999-02-01 00:00:00.0
Handler Name: PIONEER INDUSTRIAL PARK	
Federal Waste Generator Description:	Small Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes

PIONEER INDUSTRIAL PARK (Continued) **1025878778**

Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Codes: No NAICS Codes Found

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

I59 **GERLAND MACHINE INC** **RCRA NonGen / NLR** **1024812766**
WSW **120 N PACIFIC ST STE L12** **CAL000301230**
1/8-1/4 **SAN MARCOS, CA 92069**
0.234 mi.
1237 ft. **Site 5 of 8 in cluster I**

Relative: **Lower**
Actual: **566 ft.**

RCRA NonGen / NLR:

Date Form Received by Agency:		2005-12-08 00:00:00.0
Handler Name:	GERLAND MACHINE INC	
Handler Address:		120 N PACIFIC ST STE L12
Handler City,State,Zip:		SAN MARCOS, CA 92069-1293
EPA ID:		CAL000301230
Contact Name:		KEITH A GERLAND
Contact Address:		120 N PACIFIC ST STE L-12
Contact City,State,Zip:		SAN MARCOS, CA 92069
Contact Telephone:		760-744-0821
Contact Fax:		760-744-0921
Contact Email:		QUALITY@GERLANDMACHINE.COM
Contact Title:		Not reported
EPA Region:		09
Land Type:		Not reported
Federal Waste Generator Description:		Not a generator, verified
Non-Notifier:		Not reported
Biennial Report Cycle:		Not reported
Accessibility:		Not reported
Active Site Indicator:		Handler Activities
State District Owner:		Not reported
State District:		Not reported
Mailing Address:		120 N PACIFIC ST STE L12
Mailing City,State,Zip:		SAN MARCOS, CA 92069-1293
Owner Name:		KEITH A GERLAND
Owner Type:		Other
Operator Name:		KEITH A GERLAND
Operator Type:		Other
Short-Term Generator Activity:		No
Importer Activity:		No
Mixed Waste Generator:		No
Transporter Activity:		No
Transfer Facility Activity:		No
Recycler Activity with Storage:		No
Small Quantity On-Site Burner Exemption:		No
Smelting Melting and Refining Furnace Exemption:		No
Underground Injection Control:		No

GERLAND MACHINE INC (Continued) **1024812766**

Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2018-09-05 20:27:49.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Operator
Owner/Operator Name:	KEITH A GERLAND
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	120 N PACIFIC ST STE L-12
Owner/Operator City,State,Zip:	SAN MARCOS, CA 92069
Owner/Operator Telephone:	760-744-0821

GERLAND MACHINE INC (Continued) **1024812766**

Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner
Owner/Operator Name: KEITH A GERLAND
Legal Status: Other
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: 120 N PACIFIC ST STE L12
Owner/Operator City,State,Zip: SAN MARCOS, CA 92069-1293
Owner/Operator Telephone: 619-857-7827
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:
Receive Date: 2005-12-08 00:00:00.0
Handler Name: GERLAND MACHINE INC
Federal Waste Generator Description: Not a generator, verified
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 33429
NAICS Description: OTHER COMMUNICATIONS EQUIPMENT MANUFACTURING

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

I60 **OLD FORD GARAGE** **RCRA-SQG** **1000114399**
WSW **120 N PACIFIC ST UNIT K6** **FINDS** **CAD121704688**
1/8-1/4 **SAN MARCOS, CA 92069** **ECHO**
0.234 mi.
1237 ft. **Site 6 of 8 in cluster I**

Relative: **Lower**
Actual: **566 ft.**

RCRA-SQG:
Date Form Received by Agency: 1996-09-01 00:00:00.0
Handler Name: OLD FORD GARAGE
Handler Address: 120 N PACIFIC ST UNIT K6
Handler City,State,Zip: SAN MARCOS, CA 92069
EPA ID: CAD121704688
Contact Name: Not reported
Contact Address: Not reported
Contact City,State,Zip: Not reported

OLD FORD GARAGE (Continued) **1000114399**

Contact Telephone:	Not reported
Contact Fax:	Not reported
Contact Email:	Not reported
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Small Quantity Generator
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	CA
State District:	4
Mailing Address:	N PACIFIC ST UNIT K6
Mailing City,State,Zip:	SAN MARCOS, CA 92069
Owner Name:	JAMES NORMAN
Owner Type:	Private
Operator Name:	NOT REQUIRED
Operator Type:	Private
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	NN
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No

OLD FORD GARAGE (Continued) **1000114399**

Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2000-09-15 17:29:23.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	Not reported
Manifest Broker:	Not reported
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Operator
Owner/Operator Name:	NOT REQUIRED
Legal Status:	Private
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	NOT REQUIRED
Owner/Operator City,State,Zip:	NOT REQUIRED, ME 99999
Owner/Operator Telephone:	415-555-1212
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name:	JAMES NORMAN
Legal Status:	Private
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	NOT REQUIRED
Owner/Operator City,State,Zip:	NOT REQUIRED, ME 99999
Owner/Operator Telephone:	415-555-1212
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	1996-09-01 00:00:00.0
Handler Name: OLD FORD GARAGE	
Federal Waste Generator Description:	Small Quantity Generator
State District Owner:	CA
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	Not reported

OLD FORD GARAGE (Continued) **1000114399**

Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Codes: No NAICS Codes Found

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

FINDS:
Registry ID: 110002668104

Click Here:

Environmental Interest/Information System:
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid:	1000114399
Registry ID:	110002668104
DFR URL:	http://echo.epa.gov/detailed-facility-report?fid=110002668104
Name:	OLD FORD GARAGE
Address:	120 N PACIFIC ST UNIT K6
City,State,Zip:	SAN MARCOS, CA 92069

I61 **BEST AUTO BODY AND FRAME** **RCRA-SQG** **1000455573**
WSW **120 N PACIFIC B3** **FINDS** **CAD982431512**
1/8-1/4 **SAN MARCOS, CA 92069** **ECHO**
0.234 mi. **HAZNET**
1237 ft. **Site 7 of 8 in cluster I** **HWTS**

Relative: **Lower**
Actual: **566 ft.**

RCRA-SQG:

Date Form Received by Agency:	1996-09-01 00:00:00.0
Handler Name:	BEST AUTO BODY AND FRAME
Handler Address:	120 N PACIFIC B3
Handler City,State,Zip:	SAN MARCOS, CA 92069
EPA ID:	CAD982431512
Contact Name:	Not reported
Contact Address:	Not reported
Contact City,State,Zip:	Not reported
Contact Telephone:	Not reported
Contact Fax:	Not reported
Contact Email:	Not reported
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported

BEST AUTO BODY AND FRAME (Continued) **1000455573**

Federal Waste Generator Description:	Small Quantity Generator
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	CA
State District:	4
Mailing Address:	N PACIFIC B3
Mailing City,State,Zip:	SAN MARCOS, CA 92069
Owner Name:	CHARLES CHAPPEL
Owner Type:	Private
Operator Name:	NOT REQUIRED
Operator Type:	Private
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	NN
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No

BEST AUTO BODY AND FRAME (Continued) **1000455573**

Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2000-09-15 17:30:20.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	Not reported
Manifest Broker:	Not reported
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	CHARLES CHAPPEL
Legal Status:	Private
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	NOT REQUIRED
Owner/Operator City,State,Zip:	NOT REQUIRED, ME 99999
Owner/Operator Telephone:	415-555-1212
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name:	NOT REQUIRED
Legal Status:	Private
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	NOT REQUIRED
Owner/Operator City,State,Zip:	NOT REQUIRED, ME 99999
Owner/Operator Telephone:	415-555-1212
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	1996-09-01 00:00:00.0
Handler Name:	BEST AUTO BODY AND FRAME
Federal Waste Generator Description:	Small Quantity Generator
State District Owner:	CA
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

List of NAICS Codes and Descriptions:

NAICS Codes:	No NAICS Codes Found

BEST AUTO BODY AND FRAME (Continued) **1000455573**

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

FINDS:
Registry ID: 110009545091

Click Here:

Environmental Interest/Information System:
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1000455573
Registry ID: 110009545091
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110009545091
Name: BEST AUTO BODY AND FRAME
Address: 120 N PACIFIC B3
City,State,Zip: SAN MARCOS, CA 92069

HAZNET:
Name: BEST AUTO BODY AND FRAME
Address: 120 N PACIFIC B3
Address 2: Not reported
City,State,Zip: SAN MARCOS, CA 920690000
Contact: CHARLES CHAPPEL/OWNER
Telephone: 6197442262
Mailing Name: Not reported
Mailing Address: 120 N PACIFIC ST STE B3

Year: 1993
Gepaid: CAD982431512
TSD EPA ID: CAD008252405
CA Waste Code: 214 - Unspecified solvent mixture
Disposal Method: R01 - Recycler
Tons: 0.2016

Year: 1993
Gepaid: CAD982431512
TSD EPA ID: CAD008252405
CA Waste Code: 214 - Unspecified solvent mixture
Disposal Method: -
Tons: 0.09

Year: 1992

BEST AUTO BODY AND FRAME (Continued) **1000455573**

Gepaid: CAD982431512
TSD EPA ID: CAD008252405
CA Waste Code: 214 - Unspecified solvent mixture
Disposal Method: R01 - Recycler
Tons: 0.6086

Year: 1991
Gepaid: CAD982431512
TSD EPA ID: CAD008252405
CA Waste Code: 212 - Oxygenated solvents (acetone, butanol, ethyl acetate, etc.)
Disposal Method: 01 -
Tons: 0.1459

Year: 1991
Gepaid: CAD982431512
TSD EPA ID: CAD008252405
CA Waste Code: 212 - Oxygenated solvents (acetone, butanol, ethyl acetate, etc.)
Disposal Method: R01 - Recycler
Tons: 0.2418

Year: 1991
Gepaid: CAD982431512
TSD EPA ID: CAD008252405
CA Waste Code: 212 - Oxygenated solvents (acetone, butanol, ethyl acetate, etc.)
Disposal Method: -
Tons: 0

Year: 1991
Gepaid: CAD982431512
TSD EPA ID: CAD008252405
CA Waste Code: 214 - Unspecified solvent mixture
Disposal Method: R01 - Recycler
Tons: 0.5462

Year: 1990
Gepaid: CAD982431512
TSD EPA ID: CAD008252405
CA Waste Code: 212 - Oxygenated solvents (acetone, butanol, ethyl acetate, etc.)
Disposal Method: -
Tons: 0

Year: 1990
Gepaid: CAD982431512
TSD EPA ID: CAD008252405
CA Waste Code: 212 - Oxygenated solvents (acetone, butanol, ethyl acetate, etc.)
Disposal Method: 01 -
Tons: 0.221

Additional Info:
Year: 1993
Gen EPA ID: CAD982431512

Shipment Date: 19930503
Creation Date: 9/7/1995 0:00:00
Receipt Date: 19930503
Manifest ID: 92515027

BEST AUTO BODY AND FRAME (Continued) **1000455573**

Trans EPA ID:	CAD008252405
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD008252405
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	214 - Unspecified solvent mixture
RCRA Code:	Not reported
Meth Code:	R01 - Recycler
Quantity Tons:	0.108
Waste Quantity:	30
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	19930315
Creation Date:	9/1/1995 0:00:00
Receipt Date:	19930315
Manifest ID:	92037485
Trans EPA ID:	CAD008252405
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD008252405
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	214 - Unspecified solvent mixture
RCRA Code:	Not reported
Meth Code:	R01 - Recycler
Quantity Tons:	0.0936
Waste Quantity:	26
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	19930210
Creation Date:	9/5/1995 0:00:00
Receipt Date:	Not reported
Manifest ID:	91767909
Trans EPA ID:	CAD008252405
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD008252405
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	214 - Unspecified solvent mixture

BEST AUTO BODY AND FRAME (Continued) **1000455573**

RCRA Code: Not reported
Meth Code: - Not reported
Quantity Tons: 0.09
Waste Quantity: 25
Quantity Unit: G
Additional Code 1: Not reported
Additional Code 2: Not reported
Additional Code 3: Not reported
Additional Code 4: Not reported
Additional Code 5: Not reported

HWTS:
Name: BEST AUTO BODY AND FRAME
Address: 120 N PACIFIC B3
Address 2: Not reported
City,State,Zip: SAN MARCOS, CA 920690000
EPA ID: CAD982431512
Inactive Date: 06/30/1997
Create Date: 09/04/1990
Last Act Date: 11/20/1997
Mailing Name: Not reported
Mailing Address: 120 N PACIFIC ST STE B3
Mailing Address 2: Not reported
Mailing City,State,Zip: SAN MARCOS, CA 920691260
Owner Name: CHARLES CHAPPEL
Owner Address: 120 N PACIFIC B3
Owner Address 2: Not reported
Owner City,State,Zip: SAN MARCOS, CA 920690000
Contact Name: CHARLES CHAPPEL/OWNER
Contact Address: UNDELIVERABLE VF97 LC
Contact Address 2: Not reported
City,State,Zip: SAN MARCOS, CA 920690000

I62 **CASEYS AUTO MACHINE** **RCRA-SQG** **1001967317**
WSW **120 N PACIFIC ST STE G3** **FINDS** **CAR000067124**
1/8-1/4 **SAN MARCOS, CA 92069** **ECHO**
0.234 mi.
1237 ft. **Site 8 of 8 in cluster I**

Relative: RCRA-SQG:
Lower
Date Form Received by Agency: 2000-03-07 00:00:00.0
Actual: Handler Name: CASEYS AUTO MACHINE
566 ft. Handler Address: 120 N PACIFIC ST STE G3
Handler City,State,Zip: SAN MARCOS, CA 92069
EPA ID: CAR000067124
Contact Name: CASEY RUMMERFIELD
Contact Address: 1416 SHADOW HILLS DR
Contact City,State,Zip: SAN MARCOS, CA 92069
Contact Telephone: 760-591-3450
Contact Fax: Not reported
Contact Email: Not reported
Contact Title: Not reported
EPA Region: 09
Land Type: Private
Federal Waste Generator Description: Small Quantity Generator
Non-Notifier: Not reported
Biennial Report Cycle: Not reported

CASEYS AUTO MACHINE (Continued) **1001967317**

Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	120 N PACIFIC ST STE G3
Mailing City,State,Zip:	SAN MARCOS, CA 92069
Owner Name:	CASEY RUMMERFIELD
Owner Type:	Private
Operator Name:	Not reported
Operator Type:	Not reported
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	NN
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported

CASEYS AUTO MACHINE (Continued) **1001967317**

Handler Date of Last Change:	2002-10-07 16:36:56.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	Not reported
Manifest Broker:	Not reported
Sub-Part P Indicator:	No

Hazardous Waste Summary:

Waste Code:	D039
Waste Description:	TETRACHLOROETHYLENE

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	CASEY RUMMERFIELD
Legal Status:	Private
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1416 SHADOW HILLS DR
Owner/Operator City,State,Zip:	SAN MARCOS, CA 92069
Owner/Operator Telephone:	760-741-4925
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	2000-03-07 00:00:00.0
Handler Name: CASEYS AUTO MACHINE	
Federal Waste Generator Description:	Small Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

List of NAICS Codes and Descriptions:

NAICS Codes:	No NAICS Codes Found

Facility Has Received Notices of Violations:

Violations:	No Violations Found

Evaluation Action Summary:

Evaluations:	No Evaluations Found

FINDS:

Registry ID:	110009554008

CASEYS AUTO MACHINE (Continued) **1001967317**

Click Here:

Environmental Interest/Information System:
California Hazardous Waste Tracking System - Datamart (HWTS-DATAMART) provides California with information on hazardous waste shipments for generators, transporters, and treatment, storage, and disposal facilities.
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid:	1001967317
Registry ID:	110009554008
DFR URL:	http://echo.epa.gov/detailed-facility-report?fid=110009554008
Name:	CASEYS AUTO MACHINE
Address:	120 N PACIFIC ST STE G3
City,State,Zip:	SAN MARCOS, CA 92069

L63 **NORTH COUNTY SHOOTING CENTER INC DBA NORTH COUNTY** **RCRA NonGen / NLR** **1024874019**
SW **1440 DESCANSO AVE** **CAL000442673**
1/8-1/4 **SAN MARCOS, CA 92069**
0.238 mi.
1258 ft. **Site 1 of 2 in cluster L**

Relative: **Lower**
Actual: **560 ft.**

RCRA NonGen / NLR:

Date Form Received by Agency:	2019-01-23 00:00:00.0
Handler Name:	NORTH COUNTY SHOOTING CENTER INC DBA NORTH COUNTY FIREARMS
Handler Address:	1440 DESCANSO AVE
Handler City,State,Zip:	SAN MARCOS, CA 92069
EPA ID:	CAL000442673
Contact Name:	DARIN PRINCE
Contact Address:	1440 DESCANSO AVE
Contact City,State,Zip:	SAN MARCOS, CA 92069
Contact Telephone:	760-798-7300
Contact Fax:	760-798-1112
Contact Email:	DARIN@NORTHCOUNTYSHOOTINGCENTER.COM
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	1440 DESCANSO AVE
Mailing City,State,Zip:	SAN MARCOS, CA 92069
Owner Name:	DARIN PRINCE OR STAN TUMA
Owner Type:	Other
Operator Name:	DARIN PRINCE

NORTH COUNTY SHOOTING CENTER INC DBA NORTH COUNTY FIREARMS (Continued) **1024874019**

Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2019-02-22 19:42:17.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

NORTH COUNTY SHOOTING CENTER INC DBA NORTH COUNTY FIREARMS (Continued) **1024874019**

Handler - Owner Operator:

Owner/Operator Indicator:	Operator
Owner/Operator Name:	DARIN PRINCE
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1440 DESCANSO AVE
Owner/Operator City,State,Zip:	SAN MARCOS, CA 92069
Owner/Operator Telephone:	760-798-7300
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name:	DARIN PRINCE OR STAN TUMA
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1440 DESCANSO AVE
Owner/Operator City,State,Zip:	SAN MARCOS, CA 92069
Owner/Operator Telephone:	760-798-7300
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	2019-01-23 00:00:00.0
Handler Name:	NORTH COUNTY SHOOTING CENTER INC DBA NORTH COUNTY FIREARMS
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

List of NAICS Codes and Descriptions:

NAICS Code:	812990
NAICS Description:	ALL OTHER PERSONAL SERVICES

Facility Has Received Notices of Violations:

Violations:	No Violations Found

Evaluation Action Summary:

Evaluations:	No Evaluations Found

L64 **GABRIEL P. CASTANO** **RCRA NonGen / NLR** **1025835425**
SW **1450 DESCANSO AVE** **CAC003015009**
1/8-1/4 **SAN MARCOS, CA 92069**
0.243 mi.
1281 ft. **Site 2 of 2 in cluster L**

Relative: **Lower**
Actual: **560 ft.**

RCRA NonGen / NLR:

Date Form Received by Agency:		2019-05-14 00:00:00.0
Handler Name:	GABRIEL P. CASTANO	
Handler Address:		1450 DESCANSO AVE
Handler City,State,Zip:		SAN MARCOS, CA 92069
EPA ID:		CAC003015009
Contact Name:		GABRIEL P. CASTANO
Contact Address:		1450 DESCANSO AVE
Contact City,State,Zip:		SAN MARCOS, CA 92069
Contact Telephone:		760-518-5816
Contact Fax:		Not reported
Contact Email:		GAUCHOGABE@AOL.COM
Contact Title:		Not reported
EPA Region:		09
Land Type:		Not reported
Federal Waste Generator Description:		Not a generator, verified
Non-Notifier:		Not reported
Biennial Report Cycle:		Not reported
Accessibility:		Not reported
Active Site Indicator:		Handler Activities
State District Owner:		Not reported
State District:		Not reported
Mailing Address:		P.O. BOX 53
Mailing City,State,Zip:		SAN MARCOS, CA 92079
Owner Name:		GABRIEL P. CASTANO
Owner Type:		Other
Operator Name:		GABRIEL P. CASTANO
Operator Type:		Other
Short-Term Generator Activity:		No
Importer Activity:		No
Mixed Waste Generator:		No
Transporter Activity:		No
Transfer Facility Activity:		No
Recycler Activity with Storage:		No
Small Quantity On-Site Burner Exemption:		No
Smelting Melting and Refining Furnace Exemption:		No
Underground Injection Control:		No
Off-Site Waste Receipt:		No
Universal Waste Indicator:		Yes
Universal Waste Destination Facility:		Yes
Federal Universal Waste:		No
Active Site Fed-Reg Treatment Storage and Disposal Facility:		Not reported
Active Site Converter Treatment storage and Disposal Facility:		Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:		Not reported
Active Site State-Reg Handler:		---
Federal Facility Indicator:		Not reported
Hazardous Secondary Material Indicator:		N
Sub-Part K Indicator:		Not reported
Commercial TSD Indicator:		No
Treatment Storage and Disposal Type:		Not reported
2018 GPRA Permit Baseline:		Not on the Baseline
2018 GPRA Renewals Baseline:		Not on the Baseline
Permit Renewals Workload Universe:		Not reported

GABRIEL P. CASTANO (Continued) **1025835425**

Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2019-06-27 11:35:10.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	GABRIEL P. CASTANO
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1450 DESCANSO AVE
Owner/Operator City,State,Zip:	SAN MARCOS, CA 92069
Owner/Operator Telephone:	760-518-5816
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name:	GABRIEL P. CASTANO
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1450 DESCANSO AVE
Owner/Operator City,State,Zip:	SAN MARCOS, CA 92069
Owner/Operator Telephone:	760-518-5816
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

GABRIEL P. CASTANO (Continued) **1025835425**

Historic Generators:
- Receive Date: 2019-05-14 00:00:00.0
- Handler Name: GABRIEL P. CASTANO
- Federal Waste Generator Description: Not a generator, verified
- State District Owner: Not reported
- Large Quantity Handler of Universal Waste: No
- Recognized Trader Importer: No
- Recognized Trader Exporter: No
- Spent Lead Acid Battery Importer: No
- Spent Lead Acid Battery Exporter: No
- Current Record: Yes
- Non Storage Recycler Activity: Not reported
- Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
- NAICS Code: 56299
- NAICS Description: ALL OTHER WASTE MANAGEMENT SERVICES

Facility Has Received Notices of Violations:
- Violations: No Violations Found

Evaluation Action Summary:
- Evaluations: No Evaluations Found

K65 **MATTS NEWBORN AUTO PAINT WORKS** **RCRA-SQG** **1000420689**
South **148 LAS POSAS RD** **FINDS** **CAD981160203**
1/8-1/4 **SAN MARCOS, CA 92069** **ECHO**
0.243 mi.
1285 ft. **Site 2 of 2 in cluster K**

Relative: **Lower**
Actual: **560 ft.**

RCRA-SQG:
- Date Form Received by Agency: 1996-09-01 00:00:00.0
- Handler Name: MATTS NEWBORN AUTO PAINT WORKS
- Handler Address: 148 LAS POSAS RD
- Handler City,State,Zip: SAN MARCOS, CA 92069
- EPA ID: CAD981160203
- Contact Name: Not reported
- Contact Address: Not reported
- Contact City,State,Zip: Not reported
- Contact Telephone: Not reported
- Contact Fax: Not reported
- Contact Email: Not reported
- Contact Title: Not reported
- EPA Region: 09
- Land Type: Not reported
- Federal Waste Generator Description: Small Quantity Generator
- Non-Notifier: Not reported
- Biennial Report Cycle: Not reported
- Accessibility: Not reported
- Active Site Indicator: Handler Activities
- State District Owner: CA
- State District: 4
- Mailing Address: LAS POSAS RD
- Mailing City,State,Zip: SAN MARCOS, CA 92069
- Owner Name: R & M PECK

MATTS NEWBORN AUTO PAINT WORKS (Continued) **1000420689**

Owner Type:	Private
Operator Name:	NOT REQUIRED
Operator Type:	Private
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	NN
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2000-09-15 17:29:26.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	Not reported
Manifest Broker:	Not reported

MATTS NEWBORN AUTO PAINT WORKS (Continued) **1000420689**

Sub-Part P Indicator: No

Handler - Owner Operator:

Owner/Operator Indicator:	Operator
Owner/Operator Name:	NOT REQUIRED
Legal Status:	Private
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	NOT REQUIRED
Owner/Operator City,State,Zip:	NOT REQUIRED, ME 99999
Owner/Operator Telephone:	415-555-1212
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name:	R & M PECK
Legal Status:	Private
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	NOT REQUIRED
Owner/Operator City,State,Zip:	NOT REQUIRED, ME 99999
Owner/Operator Telephone:	415-555-1212
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	1996-09-01 00:00:00.0
Handler Name:	MATTS NEWBORN AUTO PAINT WORKS
Federal Waste Generator Description:	Small Quantity Generator
State District Owner:	CA
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

List of NAICS Codes and Descriptions:

NAICS Codes: No NAICS Codes Found

Facility Has Received Notices of Violations:

Violations: No Violations Found

Evaluation Action Summary:

Evaluations: No Evaluations Found

FINDS:

Registry ID: 110002677924

MATTS NEWBORN AUTO PAINT WORKS (Continued) **1000420689**

Click Here:

Environmental Interest/Information System:
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid:	1000420689
Registry ID:	110002677924
DFR URL:	http://echo.epa.gov/detailed-facility-report?fid=110002677924
Name:	MATTS NEWBORN AUTO PAINT WORKS
Address:	148 LAS POSAS RD
City,State,Zip:	SAN MARCOS, CA 92069

66
SSE
1/4-1/2
0.309 mi.
1629 ft.

Relative:
Lower

Actual:
560 ft.

CREST BEVERAGE
1152 ARMORLITE DR
SAN MARCOS, CA 92069

LUST **S102428480**
SAN DIEGO CO. SAM **N/A**
San Diego Co. HMMD
SWEEPS UST
Cortese
HIST CORTESE
NPDES
SAN DIEGO CO LOP
CIWQS
CERS

LUST:

Name:	SAN DIEGO UNION TRIBUNE
Address:	1152 ARMORLITE DR
City,State,Zip:	SAN MARCOS, CA 920691441
Lead Agency:	SAN DIEGO COUNTY LOP
Case Type:	LUST Cleanup Site
Geo Track:	http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0607300256
Global Id:	T0607300256
Latitude:	33.14619
Longitude:	-117.185708
Status:	Completed - Case Closed
Status Date:	05/31/1990
Case Worker:	Not reported
RB Case Number:	9UT1422
Local Agency:	Not reported
File Location:	Local Agency
Local Case Number:	H20781-001
Potential Media Affect:	Aquifer used for drinking water supply
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

LUST:

Global Id:	T0607300256
Action Type:	Other
Date:	11/15/1988
Action:	Leak Began

CREST BEVERAGE (Continued) **S102428480**

Global Id: T0607300256
Action Type: Other
Date: 11/15/1988
Action: Leak Discovery

Global Id: T0607300256
Action Type: Other
Date: 03/27/1989
Action: Leak Stopped

Global Id: T0607300256
Action Type: Other
Date: 03/27/1989
Action: Leak Reported

LUST:
Global Id: T0607300256
Status: Open - Case Begin Date
Status Date: 11/15/1988

Global Id: T0607300256
Status: Completed - Case Closed
Status Date: 05/31/1990

LUST REG 9:
Region: 9
Status: Case Closed
Case Number: 9UT1422
Local Case: H20781-001
Substance: Gasoline
Qty Leaked: Not reported
Abate Method: No Action Required - incident is minor, requiring no remedial action
Local Agency: San Diego
How Found: Tank Closure
How Stopped: Close Tank
Source: Not reported
Cause: Not reported
Lead Agency: Local Agency
Case Type: Aquifer affected
Date Found: 03/27/1989
Date Stopped: 03/27/1989
Confirm Date: 03/27/1989
Submit Workplan: Not reported
Prelim Assess: 06/08/1989
Desc Pollution: Not reported
Remed Plan: / /
Remed Action: Not reported
Began Monitor: Not reported
Release Date: 06/08/1989
Enforce Date: Not reported
Closed Date: 5/31/90
Enforce Type: Not reported
Pilot Program: LOP
Basin Number: 904.52
GW Depth: 10’

CREST BEVERAGE (Continued) **S102428480**

Beneficial Use: Municipal groundwater use
NPDES Number: Not reported
Priority: High priority
File Dispn: File discarded, case closed
Interim Remedial Actions: Yes
Cleanup and Abatement order Number: Not reported
Waste Discharge Requirement Number: Not reported

SAN DIEGO CO. SAM:
Name: SAN DIEGO UNION TRIBUNE
Address: 1152 ARMORLITE DR
City,State,Zip: SAN MARCOS, CA 920691441
Case Number: H20781-001
Agency: DEH Site Assessment & Mitigation
Funding: **LOP - Federal Fund**
Facility Type: Drinking Water Aquifer Impacted
Facility Status: Closed Case
Date: 5/31/1990
Date Began: 11/15/1988

HMMD SAN DIEGO:
Name: SAN DIEGO UNION TRIBUNE
Address: 1152 ARMORLITE DR
City,State,Zip: SAN MARCOS, CA 92069
Permit Number: 120781
Business Type: 6HK15
EPA Id Number: CAL912495571
APN: 219-162-19-00
Last HMMD Inspection: 09/08/1999
Facility Telephone: 858-752-6772
Permit Status: INAC
Permit Expiration: 10/31/2004
Date Last Updated: 11/02/2012
Facility Owner: SAN DIEGO UNION TRIBUNE
Facility Mailing Address: 350 CAMINO DE LA REINA
Facility Mailing City: SAN DIEGO
Facility Mailing State: CA
Facility Mailing Zip: 92108-3003
UST Owner: ARMORLITE ASSOCIATES
Handle Regulated Hazmat: Not reported
Own Or Operate UST: Not reported
Subject To APSA: Not reported
Generate Haz Waste: Y
Treat Haz Waste: Not reported
Generate Medical Waste: Not reported

UST:
UST Name: UNDERGROUND TANK 120781 T001
Last Update: 2012-11-02 14:17:38
Permit Number: 120781
Tank Type: DOUBLE WALL
Additional Id: 1
Capacity Gallons: 10000
UST Contents: REGULAR UNLEADED
Other Content Info: REGULAR UNLEADED
Reg Status: REMOVED
Remove Close Date: 1989-03-27 00:00:00

CREST BEVERAGE (Continued) **S102428480**

Year Installed:	1985-01-01 00:00:00
Pipe Type:	LINED TRENCH
Delivery System:	PRESSURE
Monitor Code:	25
UST Monitor Method:	EXTERNAL MONITOR : CONTINUOUS VADOSE ZONE VAPOR MONITORS AND / OR WEEKLY (MINIMUM) VADOSE ZONE LIQUID MONITORING
UST Name:	UNDERGROUND TANK 120781 T002
Last Update:	2012-11-02 14:17:38
Permit Number:	120781
Tank Type:	DOUBLE WALL
Additional Id:	2
Capacity Gallons:	5000
UST Contents:	DIESEL
Other Content Info:	DIESEL
Reg Status:	REMOVED
Remove Close Date:	1989-03-27 00:00:00
Year Installed:	1985-01-01 00:00:00
Pipe Type:	LINED TRENCH
Delivery System:	PRESSURE
Monitor Code:	25
UST Monitor Method:	EXTERNAL MONITOR : CONTINUOUS VADOSE ZONE VAPOR MONITORS AND / OR WEEKLY (MINIMUM) VADOSE ZONE LIQUID MONITORING

SWEEPS UST:

Name:	SAN DIEGO UNION TRIBUNE
Address:	1152 ARMORLITE DR
City:	SAN MARCOS
Status:	Active
Comp Number:	20781
Number:	9
Board Of Equalization:	44-023328
Referral Date:	Not reported
Action Date:	06-26-92
Created Date:	02-29-88
Owner Tank Id:	Not reported
SWRCB Tank Id:	Not reported
Tank Status:	Not reported
Capacity:	Not reported
Active Date:	Not reported
Tank Use:	Not reported
STG:	Not reported
Content:	Not reported
Number Of Tanks:	Not reported

Name:	SAN DIEGO UNION TRIBUNE
Address:	1152 ARMORLITE DR
City:	SAN MARCOS
Status:	Not reported
Comp Number:	20781
Number:	Not reported
Board Of Equalization:	44-023328
Referral Date:	Not reported
Action Date:	Not reported
Created Date:	Not reported
Owner Tank Id:	Not reported

CREST BEVERAGE (Continued) **S102428480**

SWRCB Tank Id:	37-000-020781-000001
Tank Status:	Not reported
Capacity:	10000
Active Date:	Not reported
Tank Use:	M.V. FUEL
STG:	PRODUCT
Content:	REG UNLEADED
Number Of Tanks:	2

Name:	SAN DIEGO UNION TRIBUNE
Address:	1152 ARMORLITE DR
City:	SAN MARCOS
Status:	Not reported
Comp Number:	20781
Number:	Not reported
Board Of Equalization:	44-023328
Referral Date:	Not reported
Action Date:	Not reported
Created Date:	Not reported
Owner Tank Id:	Not reported
SWRCB Tank Id:	37-000-020781-000002
Tank Status:	Not reported
Capacity:	5000
Active Date:	Not reported
Tank Use:	M.V. FUEL
STG:	PRODUCT
Content:	OTHER
Number Of Tanks:	Not reported

CORTESE:

Name:	SAN DIEGO UNION TRIBUNE
Address:	1152 ARMORLITE DR
City,State,Zip:	SAN MARCOS, CA 920691441
Region:	CORTESE
Envirostor Id:	Not reported
Global ID:	T0607300256
Site/Facility Type:	LUST CLEANUP SITE
Cleanup Status:	COMPLETED - CASE CLOSED
Status Date:	Not reported
Site Code:	Not reported
Latitude:	Not reported
Longitude:	Not reported
Owner:	Not reported
Enf Type:	Not reported
Swat R:	Not reported
Flag:	active
Order No:	Not reported
Waste Discharge System No:	Not reported
Effective Date:	Not reported
Region 2:	Not reported
WID Id:	Not reported
Solid Waste Id No:	Not reported
Waste Management Uit Name:	Not reported
File Name:	Active Open

HIST CORTESE:

CREST BEVERAGE (Continued) **S102428480**

edr_fname:	CREST BEVERAGE
edr_fadd1:	1152 ARMORLITE
City,State,Zip:	SAN MARCOS, CA 94608
Region:	CORTESE
Facility County Code:	37
Reg By:	LTNKA
Reg Id:	9UT1422

NPDES:

Name:	ARMORLITE DRIVE NEW NOI
Address:	1152 ARMORLITE DRIVE
City,State,Zip:	SAN MARCOS, CA 92069
Facility Status:	Not reported
NPDES Number:	Not reported
Region:	Not reported
Agency Number:	Not reported
Regulatory Measure ID:	Not reported
Place ID:	Not reported
Order Number:	Not reported
WDID:	9 37C374345
Regulatory Measure Type:	Construction
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Discharge Address:	Not reported
Discharge Name:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
Status:	Terminated
Status Date:	09/15/2016
Operator Name:	San Marcos City
Operator Address:	1 Civic Center Dr
Operator City:	San Marcos
Operator State:	California
Operator Zip:	92069

NPDES as of 03/2018:

NPDES Number:	CAS000002
Status:	Terminated
Agency Number:	0
Region:	9
Regulatory Measure ID:	462853
Order Number:	2009-0009-DWQ
Regulatory Measure Type:	Enrollee
Place ID:	Not reported
WDID:	9 37C374345
Program Type:	Construction
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	10/20/2015
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	09/15/2016
Discharge Name:	San Marcos City
Discharge Address:	1 Civic Center Dr
Discharge City:	San Marcos

CREST BEVERAGE (Continued) **S102428480**

Discharge State:	California
Discharge Zip:	92069
Received Date:	Not reported
Processed Date:	Not reported
Status:	Not reported
Status Date:	Not reported
Place Size:	Not reported
Place Size Unit:	Not reported
Contact:	Not reported
Contact Title:	Not reported
Contact Phone:	Not reported
Contact Phone Ext:	Not reported
Contact Email:	Not reported
Operator Name:	Not reported
Operator Address:	Not reported
Operator City:	Not reported
Operator State:	Not reported
Operator Zip:	Not reported
Operator Contact:	Not reported
Operator Contact Title:	Not reported
Operator Contact Phone:	Not reported
Operator Contact Phone Ext:	Not reported
Operator Contact Email:	Not reported
Operator Type:	Not reported
Developer:	Not reported
Developer Address:	Not reported
Developer City:	Not reported
Developer State:	Not reported
Developer Zip:	Not reported
Developer Contact:	Not reported
Developer Contact Title:	Not reported
Constype Linear Utility Ind:	Not reported
Emergency Phone:	Not reported
Emergency Phone Ext:	Not reported
Constype Above Ground Ind:	Not reported
Constype Below Ground Ind:	Not reported
Constype Cable Line Ind:	Not reported
Constype Comm Line Ind:	Not reported
Constype Commertial Ind:	Not reported
Constype Electrical Line Ind:	Not reported
Constype Gas Line Ind:	Not reported
Constype Industrial Ind:	Not reported
Constype Other Description:	Not reported
Constype Other Ind:	Not reported
Constype Recons Ind:	Not reported
Constype Residential Ind:	Not reported
Constype Transport Ind:	Not reported
Constype Utility Description:	Not reported
Constype Utility Ind:	Not reported
Constype Water Sewer Ind:	Not reported
Dir Discharge Uswater Ind:	Not reported
Receiving Water Name:	Not reported
Certifier:	Not reported
Certifier Title:	Not reported
Certification Date:	Not reported
Primary Sic:	Not reported
Secondary Sic:	Not reported

CREST BEVERAGE (Continued) **S102428480**

Tertiary Sic:	Not reported
NPDES Number:	Not reported
Status:	Not reported
Agency Number:	Not reported
Region:	9
Regulatory Measure ID:	462853
Order Number:	Not reported
Regulatory Measure Type:	Construction
Place ID:	Not reported
WDID:	9 37C374345
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	09/15/2016
Discharge Name:	Not reported
Discharge Address:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
Received Date:	10/07/2015
Processed Date:	10/20/2015
Status:	Terminated
Status Date:	09/15/2016
Place Size:	3.3
Place Size Unit:	Acres
Contact:	Reed Thornberry
Contact Title:	Not reported
Contact Phone:	760-744-1050
Contact Phone Ext:	Not reported
Contact Email:	rthornberry@san-marcos.net
Operator Name:	San Marcos City
Operator Address:	1 Civic Center Dr
Operator City:	San Marcos
Operator State:	California
Operator Zip:	92069
Operator Contact:	Reed Thornberry
Operator Contact Title:	Not reported
Operator Contact Phone:	760-744-1050
Operator Contact Phone Ext:	Not reported
Operator Contact Email:	rthornberry@san-marcos.net
Operator Type:	City/Town Agency
Developer:	San Marcos City
Developer Address:	1 Civic Center Dr
Developer City:	San Marcos
Developer State:	California
Developer Zip:	92069
Developer Contact:	Reed Thornberry
Developer Contact Title:	Not reported
Constype Linear Utility Ind:	N
Emergency Phone:	Not reported
Emergency Phone Ext:	Not reported
Constype Above Ground Ind:	N
Constype Below Ground Ind:	N
Constype Cable Line Ind:	N
Constype Comm Line Ind:	N

CREST BEVERAGE (Continued) **S102428480**

Constype Commertial Ind:	N
Constype Electrical Line Ind:	N
Constype Gas Line Ind:	N
Constype Industrial Ind:	N
Constype Other Description:	Not reported
Constype Other Ind:	N
Constype Recons Ind:	N
Constype Residential Ind:	N
Constype Transport Ind:	N
Constype Utility Description:	Not reported
Constype Utility Ind:	N
Constype Water Sewer Ind:	N
Dir Discharge Uswater Ind:	N
Receiving Water Name:	San Marcos Creek
Certifier:	Reed Thornberry
Certifier Title:	Stormwater Program Manager
Certification Date:	07-OCT-15
Primary Sic:	Not reported
Secondary Sic:	Not reported
Tertiary Sic:	Not reported

Name:	ARMORLITE DRIVE WAIVER
Address:	1152 ARMORLITE DRIVE
City,State,Zip:	SAN MARCOS, CA 92069
Facility Status:	Not reported
NPDES Number:	Not reported
Region:	Not reported
Agency Number:	Not reported
Regulatory Measure ID:	Not reported
Place ID:	Not reported
Order Number:	Not reported
WDID:	9 37W002088
Regulatory Measure Type:	Construction
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Discharge Address:	Not reported
Discharge Name:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
Status:	Expired
Status Date:	11/11/2015
Operator Name:	San Marcos City
Operator Address:	1 Civic Center Dr
Operator City:	San Marcos
Operator State:	California
Operator Zip:	92069

SAN DIEGO CO LOP:

Name:	SAN DIEGO UNION TRIBUNE
Address:	1152 ARMORLITE DR
City,State,Zip:	SAN MARCOS, CA 92069
Record ID:	DEH1989-LSAM-H20781-001

CREST BEVERAGE (Continued) **S102428480**

Record Status:	Completed
Opened Date:	03/27/1989
Parcel Number:	219-162-19-00
Case Type:	LOP - Local Oversight Program
Historical Name:	CREST BEVERAGE COMPANY
SWRCB Global ID:	T0607300256
Funding:	F - LOP Federal Fund
Lead Agency:	DEH/SAM
Lead Agency Date:	05/19/1989
Census Tract:	200.29
Community:	San Marcos
Jurisdiction:	SAN MARCOS
Watershed Basin Number:	904.52
Water Purveyor:	VALLECITOS WATER DISTRICT
Fire Agency:	SAN MARCOS FIRE PROT DIST
Latitude:	33.1462048
Longitude:	-117.1857160
X MapCoord:	6275260.829
Y MapCoord:	1998101.993

CIWQS:

Name:	ARMORLITE DRIVE NEW NOI
Address:	1152 ARMORLITE DRIVE
City,State,Zip:	SAN MARCOS, CA 92069
Agency:	San Marcos City
Agency Address:	1 Civic Center Dr, San Marcos, CA 92069
Place/Project Type:	Construction
SIC/NAICS:	Not reported
Region:	9
Program:	CONSTW
Regulatory Measure Status:	Terminated
Regulatory Measure Type:	Storm water construction
Order Number:	2009-0009-DWQ
WDID:	9 37C374345
NPDES Number:	CAS000002
Adoption Date:	01/01/1900
Effective Date:	10/20/2015
Termination Date:	09/15/2016
Expiration/Review Date:	01/01/1900
Design Flow:	Not reported
Major/Minor:	Not reported
Complexity:	Not reported
TTWQ:	Not reported
Enforcement Actions within 5 years:	0
Violations within 5 years:	0
Latitude:	33.146205
Longitude:	-117.185716

CERS:

Name:	SAN DIEGO UNION TRIBUNE
Address:	1152 ARMORLITE DR
City,State,Zip:	SAN MARCOS, CA 920691441
Site ID:	237433
CERS ID:	T0607300256
CERS Description:	Leaking Underground Storage Tank Cleanup Site

67
South
1/4-1/2
0.330 mi.
1740 ft.

MOYER CHEMICAL
1227 LOS VALLECITOS RD
SAN MARCOS, CA 92069

SEMS-ARCHIVE

1003878787
CAD980892723

Relative:
Lower

Actual:
560 ft.

SEMS Archive:

Site ID:	0902217
EPA ID:	CAD980892723
Name:	MOYER CHEMICAL
Address:	1227 LOS VALLECITOS RD
Address 2:	Not reported
City,State,Zip:	SAN MARCOS, CA 92069
Cong District:	43
FIPS Code:	06073
FF:	N
NPL:	Not on the NPL
Non NPL Status:	NFRAP-Site does not qualify for the NPL based on existing information

SEMS Archive Detail:

Region:	09
Site ID:	0902217
EPA ID:	CAD980892723
Site Name:	MOYER CHEMICAL
NPL:	N
FF:	N
OU:	00
Action Code:	VS
Action Name:	ARCH SITE
SEQ:	1
Start Date:	Not reported
Finish Date:	1987-12-01 05:00:00
Qual:	Not reported
Current Action Lead:	EPA Perf In-Hse

Region:	09
Site ID:	0902217
EPA ID:	CAD980892723
Site Name:	MOYER CHEMICAL
NPL:	N
FF:	N
OU:	00
Action Code:	PA
Action Name:	PA
SEQ:	1
Start Date:	1985-04-09 06:00:00
Finish Date:	1987-12-01 05:00:00
Qual:	N
Current Action Lead:	St Perf

Region:	09
Site ID:	0902217
EPA ID:	CAD980892723
Site Name:	MOYER CHEMICAL
NPL:	N
FF:	N
OU:	00
Action Code:	DS
Action Name:	DISCVRY
SEQ:	1

MOYER CHEMICAL (Continued) **1003878787**

Start Date:	1985-04-01 06:00:00
Finish Date:	1985-04-01 06:00:00
Qual:	Not reported
Current Action Lead:	St Perf

M68 **SAN MARCOS ROAD STATION** **LUST** **S104025596**
WSW **1600 DESCANSO AVE** **N/A**
1/4-1/2 **SAN MARCOS, CA 92069**
0.369 mi.
1946 ft. **Site 1 of 3 in cluster M**

Relative: **Lower**

Actual: **567 ft.**

LUST REG 9:

Region:	9
Status:	Preliminary site assessment workplan submitted
Case Number:	9UT3937
Local Case:	H04814-002
Substance:	Gasoline
Qty Leaked:	0
Abate Method:	Not reported
Local Agency:	San Diego
How Found:	Tank Closure
How Stopped:	Close Tank
Source:	Unknown
Cause:	Unknown
Lead Agency:	Local Agency
Case Type:	Soil only
Date Found:	05/14/1999
Date Stopped:	05/14/1999
Confirm Date:	06/29/1999
Submit Workplan:	7/8/99
Prelim Assess:	/ /
Desc Pollution:	Not reported
Remed Plan:	/ /
Remed Action:	Not reported
Began Monitor:	Not reported
Release Date:	06/02/1999
Enforce Date:	Not reported
Closed Date:	Not reported
Enforce Type:	Not reported
Pilot Program:	LOP
Basin Number:	904.32
GW Depth:	Not reported
Beneficial Use:	MUNBU
NPDES Number:	Not reported
Priority:	2B
File Dispn:	Administratively opened on database, however no file physically exists
Interim Remedial Actions:	Not reported
Cleanup and Abatement order Number:	Not reported
Waste Discharge Requirement Number:	Not reported

M69 **COUNTY OF SD/DIVISION 3 HQ** **LUST** **S100944147**
WSW **1600 DESCANSO AVE** **SWEEPS UST** **N/A**
1/4-1/2 **SAN MARCOS, CA 92069**
0.369 mi.
1946 ft. **Site 2 of 3 in cluster M**

Relative:
Lower

Actual:
567 ft.

LUST REG 9:

Region:	9
Status:	Preliminary site assessment underway
Case Number:	9UT3514
Local Case:	H04814-001
Substance:	Diesel
Qty Leaked:	0
Abate Method:	Not reported
Local Agency:	San Diego
How Found:	Tank Closure
How Stopped:	Close Tank
Source:	Tank
Cause:	Corrosion
Lead Agency:	Local Agency
Case Type:	Other ground water affected
Date Found:	07/09/1997
Date Stopped:	07/09/1997
Confirm Date:	/ /
Submit Workplan:	Not reported
Prelim Assess:	07/09/1997
Desc Pollution:	Not reported
Remed Plan:	/ /
Remed Action:	Not reported
Began Monitor:	Not reported
Release Date:	07/09/1997
Enforce Date:	Not reported
Closed Date:	Not reported
Enforce Type:	Not reported
Pilot Program:	LOP
Basin Number:	904.32
GW Depth:	11’
Beneficial Use:	Municipal groundwater use
NPDES Number:	Not reported
Priority:	1B
File Dispn:	Administratively opened on database, however no file physically exists
Interim Remedial Actions:	Not reported
Cleanup and Abatement order Number:	Not reported
Waste Discharge Requirement Number:	Not reported

SWEEPS UST:

Name:	COUNTY OF SD/DIVISION 3 HQ
Address:	1600 DESCANSO AVE
City:	SAN MARCOS
Status:	Active
Comp Number:	4814
Number:	9
Board Of Equalization:	44-022036
Referral Date:	Not reported
Action Date:	06-26-92
Created Date:	02-29-88
Owner Tank Id:	Not reported
SWRCB Tank Id:	37-000-004814-000001
Tank Status:	A

COUNTY OF SD/DIVISION 3 HQ (Continued) **S100944147**

Capacity: 2000
Active Date: Not reported
Tank Use: M.V. FUEL
STG: P
Content: REG UNLEADED
Number Of Tanks: 5

Name: COUNTY OF SD/DIVISION 3 HQ
Address: 1600 DESCANSO AVE
City: SAN MARCOS
Status: Active
Comp Number: 4814
Number: 9
Board Of Equalization: 44-022036
Referral Date: Not reported
Action Date: 06-26-92
Created Date: 02-29-88
Owner Tank Id: Not reported
SWRCB Tank Id: 37-000-004814-000002
Tank Status: A
Capacity: 8000
Active Date: Not reported
Tank Use: M.V. FUEL
STG: P
Content: REG UNLEADED
Number Of Tanks: Not reported

Name: COUNTY OF SD/DIVISION 3 HQ
Address: 1600 DESCANSO AVE
City: SAN MARCOS
Status: Active
Comp Number: 4814
Number: 9
Board Of Equalization: 44-022036
Referral Date: Not reported
Action Date: 06-26-92
Created Date: 02-29-88
Owner Tank Id: Not reported
SWRCB Tank Id: 37-000-004814-000003
Tank Status: A
Capacity: 4000
Active Date: Not reported
Tank Use: M.V. FUEL
STG: P
Content: OTHER
Number Of Tanks: Not reported

Name: COUNTY OF SD/DIVISION 3 HQ
Address: 1600 DESCANSO AVE
City: SAN MARCOS
Status: Active
Comp Number: 4814
Number: 9
Board Of Equalization: 44-022036
Referral Date: Not reported
Action Date: 06-26-92
Created Date: 02-29-88

COUNTY OF SD/DIVISION 3 HQ (Continued) **S100944147**

Owner Tank Id:	Not reported
SWRCB Tank Id:	37-000-004814-000004
Tank Status:	A
Capacity:	6000
Active Date:	Not reported
Tank Use:	M.V. FUEL
STG:	P
Content:	OTHER
Number Of Tanks:	Not reported
Name:	COUNTY OF SD/DIVISION 3 HQ
Address:	1600 DESCANSO AVE
City:	SAN MARCOS
Status:	Active
Comp Number:	4814
Number:	9
Board Of Equalization:	44-022036
Referral Date:	Not reported
Action Date:	06-26-92
Created Date:	02-29-88
Owner Tank Id:	Not reported
SWRCB Tank Id:	37-000-004814-000005
Tank Status:	A
Capacity:	550
Active Date:	Not reported
Tank Use:	PETROLEUM
STG:	W
Content:	Not reported
Number Of Tanks:	Not reported

M70 **SAN MARCOS ROAD STATION** **HIST CORTESE** **1000110719**
WSW **1600 DESCANSO** **N/A**
1/4-1/2 **SAN MARCOS, CA 92059**
0.369 mi.
1946 ft. **Site 3 of 3 in cluster M**

Relative: **Lower**

Actual: **567 ft.**

HIST CORTESE:

edr_fname:	COUNTY OF SD-PUBLIC WORKS
edr_fadd1:	1600 DESCANSO
City,State,Zip:	SAN MARCOS, CA 92059
Region:	CORTESE
Facility County Code:	37
Reg By:	LTNKA
Reg Id:	9UT3514
edr_fname:	SAN MARCOS ROAD STATION
edr_fadd1:	1600 DESCANSO
City,State,Zip:	SAN MARCOS, CA 92059
Region:	CORTESE
Facility County Code:	37
Reg By:	LTNKA
Reg Id:	9UT3937

N71 **SAN MARCOS AMPM** **SAN DIEGO CO. SAM** **U003939962**
West **125 N RANCHO SANTA FE RD** **UST** **N/A**
1/4-1/2 **SAN MARCOS, CA 92069** **Cortese**
0.404 mi.
2133 ft. **Site 1 of 4 in cluster N**

Relative:
Higher

Actual:
613 ft.

SAN DIEGO CO. SAM:

Name:	GLENN YOUNG ARCO #6200
Address:	125 N RANCHO SANTA FE RD
City,State,Zip:	SAN MARCOS, CA 920691217
Case Number:	H05181-002
Agency:	DEH Site Assessment & Mitigation
Funding:	**LOP - State Fund**
Facility Type:	Soils Only
Facility Status:	Closed Case
Date:	6/20/1991
Date Began:	9/12/1989

Name:	GLENN YOUNG ARCO #6200
Address:	125 N RANCHO SANTA FE RD
City,State,Zip:	SAN MARCOS, CA 920691217
Case Number:	H05181-003
Agency:	DEH Site Assessment & Mitigation
Funding:	**Non Billable**
Facility Type:	Failed Integrity Test
Facility Status:	Closed Case
Date:	8/6/1991
Date Began:	10/16/1986

Name:	GLENN YOUNG ARCO #6200
Address:	125 N RANCHO SANTA FE RD
City,State,Zip:	SAN MARCOS, CA 920691217
Case Number:	H05181-004
Agency:	DEH Site Assessment & Mitigation
Funding:	**LOP - State Fund**
Facility Type:	Drinking Water Aquifer Impacted
Facility Status:	Remedial Investigation
Date:	5/18/2004
Date Began:	6/21/1993

Name:	GLENN YOUNG ARCO #6200
Address:	125 N RANCHO SANTA FE RD
City,State,Zip:	SAN MARCOS, CA 920691217
Case Number:	H05181-001
Agency:	DEH Site Assessment & Mitigation
Funding:	**Non Billable**
Facility Type:	Failed Integrity Test
Facility Status:	Closed Case
Date:	7/12/1991
Date Began:	1/30/1987

UST:

Name:	SAN MARCOS AMPM
Address:	125 N RANCHO SANTA FE RD
City,State,Zip:	SAN MARCOS, CA 92069
Facility ID:	37-000-105181
Permitting Agency:	San Diego County Department of Environmental Health
Latitude:	33.15083
Longitude:	-117.19746

SAN MARCOS AMPM (Continued) **U003939962**

Name: GLENN YOUNG ARCO #6200
Address: 125 N RANCHO SANTA FE RD
City,State,Zip: SAN MARCOS, CA 92069
Facility ID: H05181
Permitting Agency: SAN DIEGO COUNTY
Latitude: 33.152182
Longitude: -117.196116

CORTESE:
Name: GLENN YOUNG ARCO #6200
Address: 125 N RANCHO SANTA FE RD
City,State,Zip: SAN MARCOS, CA 920691217
Region: CORTESE
Envirostor Id: Not reported
Global ID: T0607300398
Site/Facility Type: LUST CLEANUP SITE
Cleanup Status: COMPLETED - CASE CLOSED
Status Date: Not reported
Site Code: Not reported
Latitude: Not reported
Longitude: Not reported
Owner: Not reported
Enf Type: Not reported
Swat R: Not reported
Flag: active
Order No: Not reported
Waste Discharge System No: Not reported
Effective Date: Not reported
Region 2: Not reported
WID Id: Not reported
Solid Waste Id No: Not reported
Waste Management Uit Name: Not reported
File Name: Active Open

Name: GLENN YOUNG ARCO #6200
Address: 125 N RANCHO SANTA FE RD
City,State,Zip: SAN MARCOS, CA 920691217
Region: CORTESE
Envirostor Id: Not reported
Global ID: T0607301273
Site/Facility Type: LUST CLEANUP SITE
Cleanup Status: COMPLETED - CASE CLOSED
Status Date: Not reported
Site Code: Not reported
Latitude: Not reported
Longitude: Not reported
Owner: Not reported
Enf Type: Not reported
Swat R: Not reported
Flag: active
Order No: Not reported
Waste Discharge System No: Not reported
Effective Date: Not reported
Region 2: Not reported
WID Id: Not reported
Solid Waste Id No: Not reported
Waste Management Uit Name: Not reported

SAN MARCOS AMPM (Continued) **U003939962**

File Name: Active Open

N72 **GLENN YOUNG** **LUST** **U001572203**
West **125 N RANCHO SANTA FE RD** **CPS-SLIC** **N/A**
1/4-1/2 **SAN MARCOS, CA 92069** **HIST UST**
0.404 mi. **SAN DIEGO CO LOP**
2133 ft. **Site 2 of 4 in cluster N** **CERS**

Relative: **Higher**

Actual: **613 ft.**

LUST:

Name:	GLENN YOUNG ARCO #6200
Address:	125 N RANCHO SANTA FE RD
City,State,Zip:	SAN MARCOS, CA 920691217
Lead Agency:	SAN DIEGO COUNTY LOP
Case Type:	LUST Cleanup Site
Geo Track:	http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0607301273
Global Id:	T0607301273
Latitude:	33.1509337
Longitude:	-117.1977579
Status:	Completed - Case Closed
Status Date:	05/16/2018
Case Worker:	JC
RB Case Number:	9UT2527
Local Agency:	SAN DIEGO COUNTY LOP
File Location:	Local Agency
Local Case Number:	H05181-004
Potential Media Affect:	Aquifer used for drinking water supply
Potential Contaminants of Concern:	Gasoline
Site History:	The Site is an active gasoline station and mini-market at 125 North Ranch Santa Fe Road in San Marcos, California. Station facilities consist of four underground storage tanks (USTs), two dispenser islands, a building, parking, and a landscaped area (southern portion of the Site). The USTs, associated dispensers and product piping were replaced in October 1993 and the dispensers and product piping were replaced again in November 2003. Based on the results of soil sampling, Unauthorized Release Case H05181-004 was opened. Soil removed during the 1993 UST removal was placed back in the excavation area for future remediation. In addition, soil was excavated for the current UST area, which is adjacent and to the west of the former USTs. Most of the soil removed was transported off-site for disposal, but 80-100 cubic yards of soil removed between 5 and 15 feet bgs from the southern portion of the current UST area was reportedly used to complete backfilling the former UST area. A total of approximately 1,100 cubic yards (1,479 tons) of soil have been removed from the Site to date. Measurable free product have previously been reported in wells MW-1, MW-2, MW-3, MW-6 and MW-8. LPH was last reported in well MW-1 (sheen detected during well purging) in May 2008. Approximately 132 gallons of LPH have been reportedly removed from Site wells to date using a vacuum truck, petro trap and rubberizer boom, and by hand bailing. An unknown amount has been removed from the use of absorbent socks, previous remedial system operation, and 2003 high vacuum dual-phase extraction (HVDPE) feasibility testing. In March 2011, extraction well EW-1 and injection wells IW-1, IW-2, IW-3 were installed, for use during the feasibility testing. From September 13 through 16, 2011, an in situ chemical oxidation (ISCO) test was conducted, which involved the injection of approximately 1,436 gallons of a 12% solution of sodium persulfate, approximately 15.5 gallons of a 6% solution of hydrogen peroxide into IW-1, IW-2 and IW-3, and approximately 20.5 gallons of a 3% solution of hydrogen

GLENN YOUNG (Continued) **U001572203**

peroxide into wells IW-1 and IW-3. The high vacuum dual-phase extraction (HVDPE) testing involved three events that were performed during three consecutive months, utilizing EW-1 for extraction. A 117-hour event was performed in November, a 90-hour HVDPE event in December 2011 and a 90-hour event in January 2012, resulting in the removal of a total of approximately 2,190 gallons of groundwater and 26 pounds of gasoline range organics (GRO) as vapor. In August 2003, a CAP was submitted, recommending soil vapor extraction (SVE), followed by remediation by natural attenuation (RNA) as the most cost-effective remedial action for the Site. In January 2004, a SVE system was installed at the Site and operation began. Due to asymptotic vapor concentrations from source wells, SECOR discontinued system operation in January 2006. The system removed and treated approximately 2,762 pounds of GRO (also reported as volatile fuel hydrocarbons in previous reports), 1.34 pounds of benzene and 2.9 pounds of MTBE from wells VE-1, VE-2, MW-1, MW-2, MW-3, MW-4, MW-8, and MW-9. In June 2008, four vapor points were installed around the station building, as part of a vapor risk assessment (VRA). Based on the soil vapor sample data, none of the analyzed VOCs that were listed in the VRA model were detected at or above laboratory reporting limits. The excess cancer risk to workers and customers in the existing or possible future buildings on the site was determined to be less than the one-in-a-million level. In March 2003, a high-vacuum dual-phase extraction (HVDPE) feasibility testing was performed using a mobile remediation system. A 24-hour test was performed using MW-2 as the extraction well and a 23-hour test was performed using MW-3 as the extraction well. Based on the testing data, HVDPE appeared to be an effective method to remove subsurface hydrocarbons beneath the site, but the groundwater recovery was slow and inconsistent. Approximately 400 gallons of fluids and 273 pounds of hydrocarbons as vapor were removed during testing, with an average groundwater removal rate of 0.14 gallons per minute (per well). Evaluation of benzene and MTBE concentration trends using linear regression trend lines, consideration of decreasing average benzene and MTBE concentrations, and BIOSCREEN modeling provide converging lines of evidence that RNA is occurring at the site and benzene and MTBE concentrations will reach MCLs through RNA processes. Estimates of the time needed for benzene and MTBE to reach MCLs (derived from estimates based on BIOSCREEN) are less than 50 years for benzene and less than 25 years for MTBE. These appear to correlate well with the estimates for near-source area wells MW-1 and MW-3 from linear regression trend lines with benzene ranging from 6 to 49 years, and MTBE ranging from <1 to 24 years. Based on the pounds of hydrocarbons removed during SVE and the HVDPE test, the estimated hydrocarbon mass remaining in soil is 2,075 pounds.

LUST:

Global Id:	T0607301273
Contact Type:	Local Agency Caseworker
Contact Name:	JAMES CLAY
Organization Name:	SAN DIEGO COUNTY LOP
Address:	P.O. Box 129261
City:	San Diego
Email:	james.clay@sdcounty.ca.gov
Phone Number:	Not reported

LUST:

GLENN YOUNG (Continued) **U001572203**

Global Id: T0607301273
Action Type: RESPONSE
Date: 10/30/2013
Action: Site Assessment Report

Global Id: T0607301273
Action Type: RESPONSE
Date: 07/30/2011
Action: Monitoring Report - Semi-Annually

Global Id: T0607301273
Action Type: RESPONSE
Date: 01/30/2012
Action: NPDES / WDR Reports

Global Id: T0607301273
Action Type: RESPONSE
Date: 07/30/2012
Action: NPDES / WDR Reports

Global Id: T0607301273
Action Type: RESPONSE
Date: 01/30/2012
Action: Monitoring Report - Semi-Annually

Global Id: T0607301273
Action Type: RESPONSE
Date: 04/30/2012
Action: NPDES / WDR Reports

Global Id: T0607301273
Action Type: RESPONSE
Date: 06/30/2012
Action: Monitoring Report - Semi-Annually

Global Id: T0607301273
Action Type: RESPONSE
Date: 07/30/2016
Action: Monitoring Report - Semi-Annually

Global Id: T0607301273
Action Type: RESPONSE
Date: 10/30/2011
Action: NPDES / WDR Reports

Global Id: T0607301273
Action Type: RESPONSE
Date: 06/01/2016
Action: Other Report / Document

Global Id: T0607301273
Action Type: ENFORCEMENT
Date: 02/18/2011
Action: Technical Correspondence / Assistance / Other

Global Id: T0607301273
Action Type: ENFORCEMENT

GLENN YOUNG (Continued) **U001572203**

Date: 08/04/2010
Action: Technical Correspondence / Assistance / Other

Global Id: T0607301273
Action Type: RESPONSE
Date: 10/30/2012
Action: NPDES / WDR Reports

Global Id: T0607301273
Action Type: RESPONSE
Date: 06/22/2016
Action: Email Correspondence

Global Id: T0607301273
Action Type: RESPONSE
Date: 02/18/2011
Action: Other Report / Document - Regulator Responded

Global Id: T0607301273
Action Type: ENFORCEMENT
Date: 07/27/2010
Action: Technical Correspondence / Assistance / Other

Global Id: T0607301273
Action Type: ENFORCEMENT
Date: 12/09/2016
Action: Technical Correspondence / Assistance / Other

Global Id: T0607301273
Action Type: RESPONSE
Date: 01/30/2013
Action: Monitoring Report - Semi-Annually

Global Id: T0607301273
Action Type: RESPONSE
Date: 01/30/2013
Action: NPDES / WDR Reports

Global Id: T0607301273
Action Type: RESPONSE
Date: 09/08/2016
Action: Correspondence

Global Id: T0607301273
Action Type: RESPONSE
Date: 06/29/2012
Action: CAP/RAP - Other Report - Regulator Responded

Global Id: T0607301273
Action Type: ENFORCEMENT
Date: 08/05/1993
Action: Notice of Responsibility

Global Id: T0607301273
Action Type: ENFORCEMENT
Date: 08/31/2016
Action: Technical Correspondence / Assistance / Other

GLENN YOUNG (Continued) **U001572203**

Global Id: T0607301273
Action Type: ENFORCEMENT
Date: 04/28/2017
Action: Technical Correspondence / Assistance / Other

Global Id: T0607301273
Action Type: ENFORCEMENT
Date: 05/16/2018
Action: Closure/No Further Action Letter

Global Id: T0607301273
Action Type: RESPONSE
Date: 07/30/2013
Action: Monitoring Report - Semi-Annually

Global Id: T0607301273
Action Type: RESPONSE
Date: 07/30/2014
Action: Monitoring Report - Semi-Annually - Regulator Responded

Global Id: T0607301273
Action Type: RESPONSE
Date: 09/15/2015
Action: CAP/RAP - Other Report - Regulator Responded

Global Id: T0607301273
Action Type: RESPONSE
Date: 11/05/2015
Action: Other Report / Document - Regulator Responded

Global Id: T0607301273
Action Type: RESPONSE
Date: 12/15/2015
Action: CAP/RAP - Other Report - Regulator Responded

Global Id: T0607301273
Action Type: Other
Date: 06/21/1993
Action: Leak Began

Global Id: T0607301273
Action Type: Other
Date: 06/21/1993
Action: Leak Discovery

Global Id: T0607301273
Action Type: Other
Date: 06/21/1993
Action: Leak Stopped

Global Id: T0607301273
Action Type: Other
Date: 06/21/1993
Action: Leak Reported

Global Id: T0607301273
Action Type: RESPONSE

GLENN YOUNG (Continued) **U001572203**

Date: 10/30/2009
Action: Monitoring Report - Quarterly

Global Id: T0607301273
Action Type: RESPONSE
Date: 07/27/2016
Action: Other Report / Document - Regulator Responded

Global Id: T0607301273
Action Type: RESPONSE
Date: 02/28/2010
Action: CAP/RAP - Other Report

Global Id: T0607301273
Action Type: RESPONSE
Date: 05/04/2009
Action: Monitoring Report - Quarterly

Global Id: T0607301273
Action Type: RESPONSE
Date: 07/31/2009
Action: Monitoring Report - Quarterly

Global Id: T0607301273
Action Type: RESPONSE
Date: 01/27/2009
Action: Monitoring Report - Quarterly

Global Id: T0607301273
Action Type: RESPONSE
Date: 01/30/2009
Action: Risk Assessment Report

Global Id: T0607301273
Action Type: RESPONSE
Date: 01/30/2010
Action: Monitoring Report - Quarterly

Global Id: T0607301273
Action Type: RESPONSE
Date: 01/30/2014
Action: Monitoring Report - Semi-Annually

Global Id: T0607301273
Action Type: RESPONSE
Date: 07/30/2010
Action: Monitoring Report - Semi-Annually

Global Id: T0607301273
Action Type: RESPONSE
Date: 06/30/2015
Action: Monitoring Report - Semi-Annually

Global Id: T0607301273
Action Type: RESPONSE
Date: 01/30/2016
Action: Monitoring Report - Semi-Annually

GLENN YOUNG (Continued) **U001572203**

Global Id: T0607301273
Action Type: REMEDIATION
Date: 11/01/2011
Action: Dual Phase Extraction

Global Id: T0607301273
Action Type: REMEDIATION
Date: 11/01/2011
Action: Dual Phase Extraction

Global Id: T0607301273
Action Type: REMEDIATION
Date: 10/01/1993
Action: Excavation

Global Id: T0607301273
Action Type: REMEDIATION
Date: 01/01/2004
Action: Soil Vapor Extraction (SVE)

Global Id: T0607301273
Action Type: ENFORCEMENT
Date: 04/09/2013
Action: Technical Correspondence / Assistance / Other

Global Id: T0607301273
Action Type: RESPONSE
Date: 01/30/2011
Action: Monitoring Report - Semi-Annually

Global Id: T0607301273
Action Type: RESPONSE
Date: 03/21/2016
Action: Monitoring Report - Other

Global Id: T0607301273
Action Type: REMEDIATION
Date: 09/13/2011
Action: In Situ Physical/Chemical Treatment (other than SVE)

Global Id: T0607301273
Action Type: REMEDIATION
Date: 05/01/2008
Action: Free Product Removal

Global Id: T0607301273
Action Type: ENFORCEMENT
Date: 05/26/2009
Action: Technical Correspondence / Assistance / Other

Global Id: T0607301273
Action Type: ENFORCEMENT
Date: 07/15/2009
Action: Letter - Notice

LUST:
Global Id: T0607301273

GLENN YOUNG (Continued) **U001572203**

Status: Open - Case Begin Date
Status Date: 06/21/1993

Global Id: T0607301273
Status: Open - Remediation
Status Date: 01/01/1994

Global Id: T0607301273
Status: Completed - Case Closed
Status Date: 05/16/2018

Name: GLENN YOUNG ARCO #6200
Address: 125 N RANCHO SANTA FE RD
City,State,Zip: SAN MARCOS, CA 920691217
Lead Agency: SAN DIEGO COUNTY LOP
Case Type: LUST Cleanup Site
Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0607300398
Global Id: T0607300398
Latitude: 33.150833
Longitude: -117.197446
Status: Completed - Case Closed
Status Date: 06/20/1991
Case Worker: NS
RB Case Number: 9UT1578
Local Agency: SAN DIEGO COUNTY LOP
File Location: Local Agency
Local Case Number: H05181-002
Potential Media Affect: Soil
Potential Contaminants of Concern: Gasoline
Site History: Not reported

LUST:
Global Id: T0607300398
Contact Type: Local Agency Caseworker
Contact Name: NASSER SIONIT
Organization Name: SAN DIEGO COUNTY LOP
Address: P.O. Box 129261
City: San Diego
Email: nasser.sionit@sdcounty.ca.gov
Phone Number: Not reported

LUST:
Global Id: T0607300398
Action Type: Other
Date: 09/12/1989
Action: Leak Began

Global Id: T0607300398
Action Type: Other
Date: 09/12/1989
Action: Leak Discovery

Global Id: T0607300398
Action Type: Other
Date: 09/12/1989
Action: Leak Stopped

GLENN YOUNG (Continued) **U001572203**

Global Id: T0607300398
Action Type: Other
Date: 09/13/1989
Action: Leak Reported

LUST:
Global Id: T0607300398
Status: Open - Case Begin Date
Status Date: 09/12/1989

Global Id: T0607300398
Status: Completed - Case Closed
Status Date: 06/20/1991

CPS-SLIC:
Name: GLENN YOUNG ARCO #6200
Address: 125 N RANCHO SANTA FE RD
City,State,Zip: SAN MARCOS, CA 920691217
Region: STATE
Facility Status: **Completed - Case Closed**
Status Date: 08/06/1991
Global Id: T0608148767
Lead Agency: SAN DIEGO COUNTY LOP
Lead Agency Case Number: H05181-003
Latitude: 33.150832
Longitude: -117.197464
Case Type: Cleanup Program Site
Case Worker: Not reported
Local Agency: Not reported
RB Case Number: Not reported
File Location: Local Agency
Potential Media Affected: Under Investigation
Potential Contaminants of Concern: Gasoline
Site History: Not reported

Click here to access the California GeoTracker records for this facility:

Name: GLENN YOUNG ARCO #6200
Address: 125 N RANCHO SANTA FE RD
City,State,Zip: SAN MARCOS, CA 920691217
Region: STATE
Facility Status: **Completed - Case Closed**
Status Date: 07/12/1991
Global Id: T0608153478
Lead Agency: SAN DIEGO COUNTY LOP
Lead Agency Case Number: H05181-001
Latitude: 33.150832
Longitude: -117.197464
Case Type: Cleanup Program Site
Case Worker: NS
Local Agency: SAN DIEGO COUNTY LOP
RB Case Number: Not reported
File Location: Local Agency
Potential Media Affected: Not reported
Potential Contaminants of Concern: Not reported

GLENN YOUNG (Continued) **U001572203**

Site History: Not reported

Click here to access the California GeoTracker records for this facility:

HIST UST:

Name:	GLENN YOUNG
Address:	125 N RANCHO SANTA FE RD
City,State,Zip:	SAN MARCOS, CA 92069
File Number:	0002AC09
URL:	http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0002AC09.pdf
Region:	STATE
Facility ID:	00000026887
Facility Type:	Gas Station
Other Type:	Not reported
Contact Name:	Not reported
Telephone:	0000000000
Owner Name:	ARCO PETROLEUM PRODUCTS CO.
Owner Address:	515 SOUTH FLOWER STREET
Owner City,St,Zip:	LOS ANGELES, CA 90071
Total Tanks:	0004
Tank Num:	001
Container Num:	0000000001
Year Installed:	1971
Tank Capacity:	00008000
Tank Used for:	PRODUCT
Type of Fuel:	PREMIUM
Container Construction Thickness:	0000240
Leak Detection:	Stock Inventor, 10
Tank Num:	002
Container Num:	0000000002
Year Installed:	1971
Tank Capacity:	00008000
Tank Used for:	PRODUCT
Type of Fuel:	UNLEADED
Container Construction Thickness:	0000240
Leak Detection:	Stock Inventor, 10
Tank Num:	003
Container Num:	0000000003
Year Installed:	1971
Tank Capacity:	00006000
Tank Used for:	PRODUCT
Type of Fuel:	UNLEADED
Container Construction Thickness:	0000240
Leak Detection:	Stock Inventor, 10
Tank Num:	004
Container Num:	0000000004
Year Installed:	1984
Tank Capacity:	00012000
Tank Used for:	PRODUCT
Type of Fuel:	REGULAR
Container Construction Thickness:	Not reported
Leak Detection:	Stock Inventor, 10

GLENN YOUNG (Continued) **U001572203**

Click here for Geo Tracker PDF:

SAN DIEGO CO LOP:

Name:	GLENN YOUNG ARCO #6200
Address:	125 N RANCHO SANTA FE RD
City,State,Zip:	SAN MARCOS, CA 92069
Record ID:	DEH1987-LSAM-H05181-001
Record Status:	Completed
Opened Date:	01/30/1987
Parcel Number:	219-116-13-00
Case Type:	FIT - Failed Integrity Test
Historical Name:	GLENN YOUNG
SWRCB Global ID:	T0608153478
Funding:	N - Non-Billable
Lead Agency:	DEH/SAM
Lead Agency Date:	01/30/1987
Census Tract:	200.29
Community:	San Marcos
Jurisdiction:	SAN MARCOS
Watershed Basin Number:	904.52
Water Purveyor:	VALLECITOS WATER DISTRICT
Fire Agency:	SAN MARCOS FIRE PROT DIST
Latitude:	33.1508327
Longitude:	-117.1974652
X MapCoord:	6271680.768
Y MapCoord:	1999825.033

Name:	GLENN YOUNG ARCO #6200
Address:	125 N RANCHO SANTA FE RD
City,State,Zip:	SAN MARCOS, CA 92069
Record ID:	DEH1987-LSAM-H05181-003
Record Status:	Completed
Opened Date:	01/27/1987
Parcel Number:	219-116-13-00
Case Type:	FIT - Failed Integrity Test
Historical Name:	ARCO
SWRCB Global ID:	T0608148767
Funding:	N - Non-Billable
Lead Agency:	DEH/SAM
Lead Agency Date:	01/27/1987
Census Tract:	200.29
Community:	San Marcos
Jurisdiction:	SAN MARCOS
Watershed Basin Number:	904.52
Water Purveyor:	VALLECITOS WATER DISTRICT
Fire Agency:	SAN MARCOS FIRE PROT DIST
Latitude:	33.1508327
Longitude:	-117.1974652
X MapCoord:	6271680.768
Y MapCoord:	1999825.033

Name:	GLENN YOUNG ARCO #6200
Address:	125 N RANCHO SANTA FE RD
City,State,Zip:	SAN MARCOS, CA 92069
Record ID:	DEH1989-LSAM-H05181-002
Record Status:	Completed
Opened Date:	09/13/1989

GLENN YOUNG (Continued) **U001572203**

Parcel Number:	219-116-13-00
Case Type:	LOP - Local Oversight Program
Historical Name:	ARCO PRODUCTS COMPANY
SWRCB Global ID:	T0607300398
Funding:	S - LOP State Fund
Lead Agency:	DEH/SAM
Lead Agency Date:	11/30/1989
Census Tract:	200.29
Community:	San Marcos
Jurisdiction:	SAN MARCOS
Watershed Basin Number:	904.52
Water Purveyor:	VALLECITOS WATER DISTRICT
Fire Agency:	SAN MARCOS FIRE PROT DIST
Latitude:	33.1508327
Longitude:	-117.1974652
X MapCoord:	6271680.768
Y MapCoord:	1999825.033

Name:	GLENN YOUNG ARCO #6200
Address:	125 N RANCHO SANTA FE RD
City,State,Zip:	SAN MARCOS, CA 92069
Record ID:	DEH1993-LSAM-H05181-004
Record Status:	Completed
Opened Date:	06/21/1993
Parcel Number:	219-116-13-00
Case Type:	LOP - Local Oversight Program
Historical Name:	ARCO 6200
SWRCB Global ID:	T0607301273
Funding:	S - LOP State Fund
Lead Agency:	DEH/SAM
Lead Agency Date:	06/21/1993
Census Tract:	200.29
Community:	San Marcos
Jurisdiction:	SAN MARCOS
Watershed Basin Number:	904.52
Water Purveyor:	VALLECITOS WATER DISTRICT
Fire Agency:	SAN MARCOS FIRE PROT DIST
Latitude:	33.1508327
Longitude:	-117.1974652
X MapCoord:	6271680.768
Y MapCoord:	1999825.033

CERS:

Name:	GLENN YOUNG ARCO #6200
Address:	125 N RANCHO SANTA FE RD
City,State,Zip:	SAN MARCOS, CA 920691217
Site ID:	220242
CERS ID:	T0607301273
CERS Description:	Leaking Underground Storage Tank Cleanup Site

Affiliation:

Affiliation Type Desc:	Local Agency Caseworker
Entity Name:	JAMES CLAY - SAN DIEGO COUNTY LOP
Entity Title:	Not reported
Affiliation Address:	P.O. Box 129261
Affiliation City:	San Diego
Affiliation State:	CA

GLENN YOUNG (Continued) **U001572203**

Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: Local Agency Caseworker
Entity Name: NASSER SIONIT - SAN DIEGO COUNTY LOP
Entity Title: Not reported
Affiliation Address: P.O. Box 129261
Affiliation City: San Diego
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Name: GLENN YOUNG ARCO #6200
Address: 125 N RANCHO SANTA FE RD
City,State,Zip: SAN MARCOS, CA 920691217
Site ID: 220242
CERS ID: T0607300398
CERS Description: Leaking Underground Storage Tank Cleanup Site

Affiliation:
Affiliation Type Desc: Local Agency Caseworker
Entity Name: JAMES CLAY - SAN DIEGO COUNTY LOP
Entity Title: Not reported
Affiliation Address: P.O. Box 129261
Affiliation City: San Diego
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: Local Agency Caseworker
Entity Name: NASSER SIONIT - SAN DIEGO COUNTY LOP
Entity Title: Not reported
Affiliation Address: P.O. Box 129261
Affiliation City: San Diego
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Name: GLENN YOUNG ARCO #6200
Address: 125 N RANCHO SANTA FE RD
City,State,Zip: SAN MARCOS, CA 920691217
Site ID: 220242
CERS ID: T0608153478
CERS Description: Cleanup Program Site

Affiliation:
Affiliation Type Desc: Local Agency Caseworker
Entity Name: JAMES CLAY - SAN DIEGO COUNTY LOP
Entity Title: Not reported
Affiliation Address: P.O. Box 129261
Affiliation City: San Diego
Affiliation State: CA

GLENN YOUNG (Continued) **U001572203**

Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: Local Agency Caseworker
Entity Name: NASSER SIONIT - SAN DIEGO COUNTY LOP
Entity Title: Not reported
Affiliation Address: P.O. Box 129261
Affiliation City: San Diego
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Name: GLENN YOUNG ARCO #6200
Address: 125 N RANCHO SANTA FE RD
City,State,Zip: SAN MARCOS, CA 920691217
Site ID: 220242
CERS ID: T0608148767
CERS Description: Cleanup Program Site

Affiliation:
Affiliation Type Desc: Local Agency Caseworker
Entity Name: JAMES CLAY - SAN DIEGO COUNTY LOP
Entity Title: Not reported
Affiliation Address: P.O. Box 129261
Affiliation City: San Diego
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: Local Agency Caseworker
Entity Name: NASSER SIONIT - SAN DIEGO COUNTY LOP
Entity Title: Not reported
Affiliation Address: P.O. Box 129261
Affiliation City: San Diego
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

O73 **SIGNET ARMORLITE, INCORPORATED** **CPS-SLIC** **S106519125**
SE **1001 ARMORLITE DR.** **N/A**
1/4-1/2 **SAN MARCOS, CA 92069**
0.414 mi.
2184 ft. **Site 1 of 2 in cluster O**

Relative:
Lower

Actual:
560 ft.

SLIC REG 9:
Name: SIGNET ARMORLITE, INCORPORATED
Address: 1001 ARMORLITE DR.
City: SAN MARCOS
Region: 9
Facilty Type: Cleanup And Abatement Order
Status: Open
Sort Code: 20-0274.051

SIGNET ARMORLITE, INCORPORATED (Continued) **S106519125**

Waste Discharger Id:	9 000274N97
Local Case Num:	2091500
Responsible Party:	SIGNET ARMORLITE, INCORPORATED
Category:	ENF. REPORT
Class:	SLIC
Order Number:	Not reported
File Number:	9
Date Entered:	09/2003
End Date:	Not reported
Archive Box #:	0
Archive Box Storage:	Not reported
Archive Box Storage Location:	Not reported
Remarks:	Not reported

Name:	SIGNET ARMORLITE, INCORPORATED
Address:	1001 ARMORLITE DR.
City:	SAN MARCOS
Region:	9
Facilty Type:	Cleanup And Abatement Order
Status:	Dead
Sort Code:	20-0274.051
Waste Discharger Id:	9 000274N97
Local Case Num:	2091500
Responsible Party:	SIGNET ARMORLITE, INCORPORATED
Category:	ENF. REPORT
Class:	SLIC
Order Number:	Not reported
File Number:	2
Date Entered:	03/1994
End Date:	04/1996
Archive Box #:	926
Archive Box Storage:	3-1-15F
Archive Box Storage Location:	Not reported
Remarks:	Not reported

Name:	SIGNET ARMORLITE, INCORPORATED
Address:	1001 ARMORLITE DR.
City:	SAN MARCOS
Region:	9
Facilty Type:	Cleanup And Abatement Order
Status:	Dead
Sort Code:	20-0274.05
Waste Discharger Id:	9 000274N97
Local Case Num:	2091500
Responsible Party:	SIGNET ARMORLITE, INCORPORATED
Category:	ENFORCEMENT
Class:	SLIC
Order Number:	Not reported
File Number:	1
Date Entered:	08/1987
End Date:	08/1993
Archive Box #:	926
Archive Box Storage:	3-1-15F
Archive Box Storage Location:	Not reported
Remarks:	Not reported

Name:	SIGNET ARMORLITE, INCORPORATED

SIGNET ARMORLITE, INCORPORATED (Continued) **S106519125**

Address:	1001 ARMORLITE DR.
City:	SAN MARCOS
Region:	9
Facilty Type:	Cleanup And Abatement Order
Status:	Closed
Sort Code:	20-0274.05
Waste Discharger Id:	9 000274N97
Local Case Num:	2091500
Responsible Party:	SIGNET ARMORLITE, INCORPORATED
Category:	ENFORCEMENT
Class:	SLIC
Order Number:	Not reported
File Number:	2
Date Entered:	09/1993
End Date:	06/1998
Archive Box #:	0
Archive Box Storage:	Not reported
Archive Box Storage Location:	Not reported
Remarks:	Not reported

Name:	SIGNET ARMORLITE, INCORPORATED
Address:	1001 ARMORLITE DR.
City:	SAN MARCOS
Region:	9
Facilty Type:	Cleanup And Abatement Order
Status:	Closed
Sort Code:	20-0274.05
Waste Discharger Id:	9 000274N97
Local Case Num:	2091500
Responsible Party:	SIGNET ARMORLITE, INCORPORATED
Category:	ENFORCEMENT
Class:	SLIC
Order Number:	Not reported
File Number:	3
Date Entered:	06/1998
End Date:	08/2000
Archive Box #:	0
Archive Box Storage:	Not reported
Archive Box Storage Location:	Not reported
Remarks:	Not reported

Name:	SIGNET ARMORLITE, INCORPORATED
Address:	1001 ARMORLITE DR.
City:	SAN MARCOS
Region:	9
Facilty Type:	Cleanup And Abatement Order
Status:	Open
Sort Code:	20-0274.05
Waste Discharger Id:	9 000274N97
Local Case Num:	2091500
Responsible Party:	SIGNET ARMORLITE, INCORPORATED
Category:	ENFORCEMENT
Class:	SLIC
Order Number:	Not reported
File Number:	4
Date Entered:	08/2000
End Date:	Not reported

SIGNET ARMORLITE, INCORPORATED (Continued) **S106519125**

Archive Box #: 0
Archive Box Storage: Not reported
Archive Box Storage Location: Not reported
Remarks: Not reported

Name: SIGNET ARMORLITE, INCORPORATED
Address: 1001 ARMORLITE DR.
City: SAN MARCOS
Region: 9
Facilty Type: Cleanup And Abatement Order
Status: Closed
Sort Code: 20-0274.051
Waste Discharger Id: 9 000274N97
Local Case Num: 2091500
Responsible Party: SIGNET ARMORLITE, INCORPORATED
Category: ENF. REPORT
Class: SLIC
Order Number: Not reported
File Number: 1
Date Entered: 01/1993
End Date: 02/1994
Archive Box #: 0
Archive Box Storage: Not reported
Archive Box Storage Location: Not reported
Remarks: Not reported

Name: SIGNET ARMORLITE, INCORPORATED
Address: 1001 ARMORLITE DR.
City: SAN MARCOS
Region: 9
Facilty Type: Cleanup And Abatement Order
Status: Closed
Sort Code: 20-0274.051
Waste Discharger Id: 9 000274N97
Local Case Num: 2091500
Responsible Party: SIGNET ARMORLITE, INCORPORATED
Category: ENF. REPORT
Class: SLIC
Order Number: Not reported
File Number: 2.200
Date Entered: 04/1994
End Date: 04/1996
Archive Box #: 0
Archive Box Storage: Not reported
Archive Box Storage Location: Not reported
Remarks: Not reported

Name: SIGNET ARMORLITE, INCORPORATED
Address: 1001 ARMORLITE DR.
City: SAN MARCOS
Region: 9
Facilty Type: Cleanup And Abatement Order
Status: Closed
Sort Code: 20-0274.051
Waste Discharger Id: 9 000274N97
Local Case Num: 2091500
Responsible Party: SIGNET ARMORLITE, INCORPORATED

SIGNET ARMORLITE, INCORPORATED (Continued) **S106519125**

Category: ENF. REPORT
Class: SLIC
Order Number: Not reported
File Number: 3
Date Entered: 05/1996
End Date: 09/1996
Archive Box #: 0
Archive Box Storage: Not reported
Archive Box Storage Location: Not reported
Remarks: Not reported

Name: SIGNET ARMORLITE, INCORPORATED
Address: 1001 ARMORLITE DR.
City: SAN MARCOS
Region: 9
Facilty Type: Cleanup And Abatement Order
Status: Closed
Sort Code: 20-0274.051
Waste Discharger Id: 9 000274N97
Local Case Num: 2091500
Responsible Party: SIGNET ARMORLITE, INCORPORATED
Category: ENF. REPORT
Class: SLIC
Order Number: Not reported
File Number: 4
Date Entered: 10/1996
End Date: 03/1997
Archive Box #: 0
Archive Box Storage: Not reported
Archive Box Storage Location: Not reported
Remarks: Not reported

Name: SIGNET ARMORLITE, INCORPORATED
Address: 1001 ARMORLITE DR.
City: SAN MARCOS
Region: 9
Facilty Type: Cleanup And Abatement Order
Status: Closed
Sort Code: 20-0274.051
Waste Discharger Id: 9 000274N97
Local Case Num: 2091500
Responsible Party: SIGNET ARMORLITE, INCORPORATED
Category: ENF. REPORT
Class: SLIC
Order Number: Not reported
File Number: 5
Date Entered: 04/1997
End Date: 05/1998
Archive Box #: 0
Archive Box Storage: Not reported
Archive Box Storage Location: Not reported
Remarks: Not reported

Name: SIGNET ARMORLITE, INCORPORATED
Address: 1001 ARMORLITE DR.
City: SAN MARCOS
Region: 9

SIGNET ARMORLITE, INCORPORATED (Continued) **S106519125**

Facilty Type:	Cleanup And Abatement Order
Status:	Closed
Sort Code:	20-0274.051
Waste Discharger Id:	9 000274N97
Local Case Num:	2091500
Responsible Party:	SIGNET ARMORLITE, INCORPORATED
Category:	ENF. REPORT
Class:	SLIC
Order Number:	Not reported
File Number:	6
Date Entered:	06/1998
End Date:	03/2000
Archive Box #:	0
Archive Box Storage:	Not reported
Archive Box Storage Location:	Not reported
Remarks:	Not reported

Name:	SIGNET ARMORLITE, INCORPORATED
Address:	1001 ARMORLITE DR.
City:	SAN MARCOS
Region:	9
Facilty Type:	Cleanup And Abatement Order
Status:	Closed
Sort Code:	20-0274.051
Waste Discharger Id:	9 000274N97
Local Case Num:	2091500
Responsible Party:	SIGNET ARMORLITE, INCORPORATED
Category:	ENF. REPORT
Class:	SLIC
Order Number:	Not reported
File Number:	7
Date Entered:	04/2000
End Date:	08/2001
Archive Box #:	0
Archive Box Storage:	Not reported
Archive Box Storage Location:	Not reported
Remarks:	Not reported

Name:	SIGNET ARMORLITE, INCORPORATED
Address:	1001 ARMORLITE DR.
City:	SAN MARCOS
Region:	9
Facilty Type:	Cleanup And Abatement Order
Status:	Closed
Sort Code:	20-0274.051
Waste Discharger Id:	9 000274N97
Local Case Num:	2091500
Responsible Party:	SIGNET ARMORLITE, INCORPORATED
Category:	ENF. REPORT
Class:	SLIC
Order Number:	Not reported
File Number:	8
Date Entered:	09/2001
End Date:	08/2003
Archive Box #:	0
Archive Box Storage:	Not reported
Archive Box Storage Location:	Not reported

SIGNET ARMORLITE, INCORPORATED (Continued) **S106519125**

Remarks: Not reported

O74
SE
1/4-1/2
0.414 mi.
2184 ft.

Relative: Lower

Actual: 560 ft.

SIGNET ARMORLITE
1001 ARMORLITE DR
SAN MARCOS, CA 92069

Site 2 of 2 in cluster O

SEMS-ARCHIVE **1000314091**
CORRACTS **CAD008362634**
RCRA-TSDF
RCRA-LQG
ENVIROSTOR
LUST
SAN DIEGO CO. SAM
CPS-SLIC
San Diego Co. HMMD
DEED
2020 COR ACTION
ICIS
US AIRS
Cortese
EMI
ENF
HAZNET
HIST CORTESE
HWP
SAN DIEGO CO LOP
CIWQS
CERS
HWTS

SEMS Archive:

Site ID:	0900209
EPA ID:	CAD008362634
Name:	SIGNET ARMORLITE
Address:	130 N BINGHAM DR
Address 2:	Not reported
City,State,Zip:	SAN MARCOS, CA 92069
Cong District:	43
FIPS Code:	06073
FF:	N
NPL:	Not on the NPL
Non NPL Status:	Deferred to RCRA (Subtitle C)

SEMS Archive Detail:

Region:	09
Site ID:	0900209
EPA ID:	CAD008362634
Site Name:	SIGNET ARMORLITE
NPL:	N
FF:	N
OU:	00
Action Code:	VS
Action Name:	ARCH SITE
SEQ:	1
Start Date:	Not reported
Finish Date:	1996-01-23 05:00:00
Qual:	Not reported
Current Action Lead:	EPA Perf In-Hse

Region:	09
Site ID:	0900209
EPA ID:	CAD008362634

SIGNET ARMORLITE (Continued) **1000314091**

Site Name: SIGNET ARMORLITE
NPL: N
FF: N
OU: 00
Action Code: PA
Action Name: PA
SEQ: 1
Start Date: Not reported
Finish Date: 1991-08-26 04:00:00
Qual: D
Current Action Lead: EPA Perf

Region: 09
Site ID: 0900209
EPA ID: CAD008362634
Site Name: SIGNET ARMORLITE
NPL: N
FF: N
OU: 00
Action Code: DS
Action Name: DISCVRY
SEQ: 1
Start Date: 1991-03-01 05:00:00
Finish Date: 1991-03-01 05:00:00
Qual: Not reported
Current Action Lead: EPA Perf

CORRACTS:
Name: SIGNET ARMORLITE, INC.
Address: 1001 ARMORLITE DRIVE
Address 2: Not reported
EPA ID: CAD008362634
Area Name: ENTIRE FACILITY
Corrective Action: STABILIZATION/INTERIM MEASURES DECISION-GROUNDWATER EXTRACTION and TREATMENT
Actual Date: 00:00.0
Air Release Indicator: Not reported
Groundwater Release Indicator: Not reported
Soil Release Indicator: Not reported
Surface Water Release Indicator: Not reported

Name: SIGNET ARMORLITE, INC.
Address: 1001 ARMORLITE DRIVE
Address 2: Not reported
EPA ID: CAD008362634
Area Name: ENTIRE FACILITY
Corrective Action: STABILIZATION/INTERIM MEASURES DECISION-PRIMARY MEAS IS SOURCE REMOVL and/OR TRT
Actual Date: 00:00.0
Air Release Indicator: Not reported
Groundwater Release Indicator: Not reported
Soil Release Indicator: Not reported
Surface Water Release Indicator: Not reported

Name: SIGNET ARMORLITE, INC.
Address: 1001 ARMORLITE DRIVE

SIGNET ARMORLITE (Continued) **1000314091**

Address 2: Not reported
EPA ID: CAD008362634
Area Name: ENTIRE FACILITY
Corrective Action: HUMAN EXPOSURES CONTROLLED DETERMINATION-YES, APPLICABLE AS OF THIS DATE
Actual Date: 00:00.0
Air Release Indicator: Not reported
Groundwater Release Indicator: Not reported
Soil Release Indicator: Not reported
Surface Water Release Indicator: Not reported

Name: SIGNET ARMORLITE, INC.
Address: 1001 ARMORLITE DRIVE
Address 2: Not reported
EPA ID: CAD008362634
Area Name: ENTIRE FACILITY
Corrective Action: RELEASE TO GW CONTROLLED DETERMINATION-FACILITY DOES NOT MEET DEFINITION
Actual Date: 00:00.0
Air Release Indicator: Not reported
Groundwater Release Indicator: Not reported
Soil Release Indicator: Not reported
Surface Water Release Indicator: Not reported

Name: SIGNET ARMORLITE, INC.
Address: 1001 ARMORLITE DRIVE
Address 2: Not reported
EPA ID: CAD008362634
Area Name: ENTIRE FACILITY
Corrective Action: REMEDY CONSTRUCTION-REMEDY CONSTRUCTED
Actual Date: 00:00.0
Air Release Indicator: Not reported
Groundwater Release Indicator: Not reported
Soil Release Indicator: Not reported
Surface Water Release Indicator: Not reported

Name: SIGNET ARMORLITE, INC.
Address: 1001 ARMORLITE DRIVE
Address 2: Not reported
EPA ID: CAD008362634
Area Name: ENTIRE FACILITY
Corrective Action: RELEASE TO GW CONTROLLED DETERMINATION-YES, APPLICABLE AS OF THIS DATE
Actual Date: 00:00.0
Air Release Indicator: Not reported
Groundwater Release Indicator: Not reported
Soil Release Indicator: Not reported
Surface Water Release Indicator: Not reported

RCRA-LQG:
Date Form Received by Agency: 2012-02-29 00:00:00.0
Handler Name: SIGNET ARMORLITE, INC.
Handler Address: 1001 ARMORLITE DRIVE
Handler City,State,Zip: SAN MARCOS, CA 92069
EPA ID: CAD008362634
Contact Name: JOHN T HINGEY
Contact Address: ARMORLITE DRIVE
Contact City,State,Zip: SAN MARCOS, CA 92069

SIGNET ARMORLITE (Continued) **1000314091**

Contact Telephone:	760-744-4000
Contact Fax:	760-471-6255
Contact Email:	JHINGEY@SIGNETARMOLITE.COM
Contact Title:	V.P. OF MANUFACTURING
EPA Region:	09
Land Type:	Private
Federal Waste Generator Description:	Large Quantity Generator
Non-Notifier:	Not reported
Biennial Report Cycle:	2011
Accessibility:	Not reported
Active Site Indicator:	Handler Activities, Corrective Action Activities
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	ARMORLITE DRIVE
Mailing City,State,Zip:	SAN MARCOS, CA 92069
Owner Name:	EDA HOLDINGS CO, INC.
Owner Type:	Private
Operator Name:	EDA HOLDINGS CO, INC.
Operator Type:	Private
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	NN
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Storage, Treatment
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Storage, Treatment
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	Yes
Corrective Action Workload Universe:	Yes
Subject to Corrective Action Universe:	Yes
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	Yes
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No

SIGNET ARMORLITE (Continued) **1000314091**

Human Exposure Controls Indicator:	Yes
Groundwater Controls Indicator:	Yes
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2012-11-06 13:57:46.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	Not reported
Manifest Broker:	Not reported
Sub-Part P Indicator:	No

Biennial: List of Years
Year: 2011

Click Here for Biennial Reporting System Data:
Year: 2009

Click Here for Biennial Reporting System Data:
Year: 2007

Click Here for Biennial Reporting System Data:
Year: 2003

Click Here for Biennial Reporting System Data:
Year: 2001

Click Here for Biennial Reporting System Data:

Hazardous Waste Summary:

Waste Code:	D001
Waste Description:	IGNITABLE WASTE
Waste Code:	D002
Waste Description:	CORROSIVE WASTE
Waste Code:	D003
Waste Description:	REACTIVE WASTE
Waste Code:	D007
Waste Description:	CHROMIUM
Waste Code:	D009
Waste Description:	MERCURY
Waste Code:	D011
Waste Description:	SILVER
Waste Code:	D018
Waste Description:	BENZENE

SIGNET ARMORLITE (Continued) **1000314091**

Waste Code: D035
Waste Description: METHYL ETHYL KETONE

Waste Code: D039
Waste Description: TETRACHLOROETHYLENE

Waste Code: D040
Waste Description: TRICHLORETHYLENE

Waste Code: F001
Waste Description: THE FOLLOWING SPENT HALOGENATED SOLVENTS USED IN DEGREASING: TETRACHLOROETHYLENE, TRICHLORETHYLENE, METHYLENE CHLORIDE, 1,1,1-TRICHLOROETHANE, CARBON TETRACHLORIDE AND CHLORINATED FLUOROCARBONS; ALL SPENT SOLVENT MIXTURES/BLENDS USED IN DEGREASING CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste Code: F002
Waste Description: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste Code: F003
Waste Description: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste Code: P005
Waste Description: 2-PROPEN-1-OL (OR) ALLYL ALCOHOL

Waste Code: U002
Waste Description: 2-PROPANONE (I) (OR) ACETONE (I)

Waste Code: U007
Waste Description: 2-PROPENAMIDE (OR) ACRYLAMIDE

Waste Code: U080
Waste Description: METHANE, DICHLORO- (OR) METHYLENE CHLORIDE

Waste Code: U112
Waste Description: ACETIC ACID, ETHYL ESTER (I) (OR) ETHYL ACETATE (I)

SIGNET ARMORLITE (Continued) **1000314091**

Waste Code: U151
Waste Description: MERCURY

Waste Code: U154
Waste Description: METHANOL (I) (OR) METHYL ALCOHOL (I)

Waste Code: U220
Waste Description: BENZENE, METHYL- (OR) TOLUENE

Waste Code: U236
Waste Description: 2,7-NAPHTHALENEDISULFONIC ACID,3,3'-[(3,3'-DIMETHYL[1,1'-BIPHENYL]-4,4'-DIYL)BIS(AZO)BIS[5-AMINO -4-HYDROXY]-, TETRASODIUM SALT (OR) TRYPAN BLUE

Handler - Owner Operator:
Owner/Operator Indicator: Owner
Owner/Operator Name: EDA HOLDINGS CO, INC.
Legal Status: Private
Date Became Current: 2010-04-01 00:00:00.
Date Ended Current: Not reported
Owner/Operator Address: 135555 N STEMMONS FREEWAY
Owner/Operator City,State,Zip: DALLAS, TX 75234
Owner/Operator Telephone: 760-744-4000
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Operator
Owner/Operator Name: ARMORLITE S.P.A.
Legal Status: Private
Date Became Current: 1997-03-01 00:00:00.
Date Ended Current: Not reported
Owner/Operator Address: 1001 ARMORLITE DRIVE
Owner/Operator City,State,Zip: SAN MARCOS, CA 92069
Owner/Operator Telephone: Not reported
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner
Owner/Operator Name: INDUSTRIE OTTICHE EUROPEE
Legal Status: Private
Date Became Current: 1997-03-01 00:00:00.
Date Ended Current: Not reported
Owner/Operator Address: 1001 ARMORLITE DRIVE
Owner/Operator City,State,Zip: SAN MARCOS, CA 92069
Owner/Operator Telephone: Not reported
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Operator
Owner/Operator Name: INDUSTRIE OTTICHE EUROPEE
Legal Status: Private
Date Became Current: 1997-03-01 00:00:00.
Date Ended Current: Not reported
Owner/Operator Address: Not reported

SIGNET ARMORLITE (Continued) **1000314091**

Owner/Operator City,State,Zip:	Not reported
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Owner
Owner/Operator Name:	INDUSTRIE OTTICHE EUROPEE
Legal Status:	Private
Date Became Current:	1997-03-01 00:00:00.
Date Ended Current:	Not reported
Owner/Operator Address:	1001 ARMORLITE DRIVE
Owner/Operator City,State,Zip:	SAN MARCOS, CA 92069
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Operator
Owner/Operator Name:	INDUSTRIE OTTICHE EUROPEE
Legal Status:	Private
Date Became Current:	1997-03-01 00:00:00.
Date Ended Current:	Not reported
Owner/Operator Address:	Not reported
Owner/Operator City,State,Zip:	Not reported
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Owner
Owner/Operator Name:	INDUSTRIE OTTICHE EUROPEE
Legal Status:	Private
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	VIA XX SETTEMBRE 12
Owner/Operator City,State,Zip:	MILANO ITALY, CA 99999
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Owner
Owner/Operator Name:	ARMORLITE S.P.A
Legal Status:	Private
Date Became Current:	1997-03-01 00:00:00.
Date Ended Current:	Not reported
Owner/Operator Address:	1001 ARMORLITE DRIVE
Owner/Operator City,State,Zip:	SAN MARCOS, CA 92069
Owner/Operator Telephone:	760-744-4000
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Operator
Owner/Operator Name:	INDUSTRIE OTTICHE EUROPEE
Legal Status:	Private

SIGNET ARMORLITE (Continued) **1000314091**

Date Became Current:	1997-03-01 00:00:00.
Date Ended Current:	Not reported
Owner/Operator Address:	Not reported
Owner/Operator City,State,Zip:	Not reported
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Operator
Owner/Operator Name:	EDA HOLDINGS CO, INC.
Legal Status:	Private
Date Became Current:	2010-04-01 00:00:00.
Date Ended Current:	Not reported
Owner/Operator Address:	135555 N STEMMONS FREEWAY
Owner/Operator City,State,Zip:	DALLAS, TX 75234
Owner/Operator Telephone:	760-744-4000
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Owner
Owner/Operator Name:	INDUSTRIE OTTICHE EUROPEE
Legal Status:	Private
Date Became Current:	1997-03-01 00:00:00.
Date Ended Current:	Not reported
Owner/Operator Address:	1001 ARMORLITE DRIVE
Owner/Operator City,State,Zip:	SAN MARCOS, CA 92069
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Operator
Owner/Operator Name:	SIGNET ARMORLITE INC
Legal Status:	Private
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1001 ARMORLITE DR
Owner/Operator City,State,Zip:	SAN MARCOS, CA 92069
Owner/Operator Telephone:	619-744-4000
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	2010-02-01 00:00:00.0
Handler Name: SIGNET ARMORLITE, INC.	
Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported

SIGNET ARMORLITE (Continued) **1000314091**

Electronic Manifest Broker: Not reported

Receive Date: 2012-02-29 00:00:00.0
Handler Name: SIGNET ARMORLITE, INC.
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 1996-09-01 00:00:00.0
Handler Name: SIGNET ARMORLITE INC
Federal Waste Generator Description: Large Quantity Generator
State District Owner: CA
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 2004-03-10 00:00:00.0
Handler Name: SIGNET ARMORLITE, INC.
Federal Waste Generator Description: Small Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 1993-05-13 00:00:00.0
Handler Name: SIGNET ARMORLITE INC
Federal Waste Generator Description: Large Quantity Generator
State District Owner: CA
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 1990-04-13 00:00:00.0
Handler Name: SIGNET ARMORLITE INC
Federal Waste Generator Description: Large Quantity Generator

SIGNET ARMORLITE (Continued) **1000314091**

State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 1992-02-24 00:00:00.0
Handler Name: SIGNET ARMORLITE, INC.
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 1994-03-09 00:00:00.0
Handler Name: SIGNET ARMORLITE INC
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 1996-02-26 00:00:00.0
Handler Name: SIGNET ARMORLITE, INC.
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 1999-03-04 00:00:00.0
Handler Name: SIGNET ARMORLITE, INC.
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No

SIGNET ARMORLITE (Continued) **1000314091**

Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported
Receive Date:	2000-10-12 00:00:00.0
Handler Name: SIGNET ARMORLITE	
Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported
Receive Date:	2002-02-27 00:00:00.0
Handler Name: SIGNET ARMORLITE INC.	
Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported
Receive Date:	2004-03-10 00:00:00.0
Handler Name: SIGNET ARMORLITE, INC.	
Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported
Receive Date:	2008-06-16 00:00:00.0
Handler Name: SIGNET ARMORLITE, INC.	
Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

SIGNET ARMORLITE (Continued) **1000314091**

List of NAICS Codes and Descriptions:
NAICS Code: 326199
NAICS Description: ALL OTHER PLASTICS PRODUCT MANUFACTURING

NAICS Code: 339115
NAICS Description: OPHTHALMIC GOODS MANUFACTURING

Facility Has Received Notices of Violation:

Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	Generators - General
Date Violation was Determined:	1993-07-22 00:00:00.0
Actual Return to Compliance Date:	1998-07-22 00:00:00.0
Return to Compliance Qualifier:	Not Resolved
Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported

Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	LDR - General
Date Violation was Determined:	1988-01-21 00:00:00.0
Actual Return to Compliance Date:	1988-07-25 00:00:00.0
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	001
Date of Enforcement Action:	1988-07-05 00:00:00.0

SIGNET ARMORLITE (Continued) **1000314091**

Enforcement Responsible Agency:	EPA
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	WRITTEN INFORMAL
Enforcement Responsible Person:	R9EPA
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported

Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	Generators - General
Date Violation was Determined:	1991-03-07 00:00:00.0
Actual Return to Compliance Date:	1992-03-13 00:00:00.0
Return to Compliance Qualifier:	Unverifiable
Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported

SIGNET ARMORLITE (Continued) **1000314091**

SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	Generators - General
Date Violation was Determined:	2003-09-08 00:00:00.0
Actual Return to Compliance Date:	2005-10-27 00:00:00.0
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	No
Agency Which Determined Violation:	Not reported
Violation Short Description:	Not reported
Date Violation was Determined:	Not reported
Actual Return to Compliance Date:	Not reported
Return to Compliance Qualifier:	Not reported
Violation Responsible Agency:	Not reported
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported

SIGNET ARMORLITE (Continued) **1000314091**

Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported

Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	TSD - General
Date Violation was Determined:	1992-04-20 00:00:00.0
Actual Return to Compliance Date:	1992-09-10 00:00:00.0
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported

SIGNET ARMORLITE (Continued) **1000314091**

SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: TSD - Financial Requirements
Date Violation was Determined: 1988-01-26 00:00:00.0
Actual Return to Compliance Date: 1989-04-26 00:00:00.0
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 003
Date of Enforcement Action: 1989-02-01 00:00:00.0
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: INITIAL 3008(A) COMPLIANCE
Enforcement Responsible Person: R9STA
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: 30000
Final Monetary Amount: 30000
Paid Amount: Not reported
Final Count: 1
Final Amount: 30000

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: Generators - General
Date Violation was Determined: 1990-01-17 00:00:00.0
Actual Return to Compliance Date: 1991-03-07 00:00:00.0
Return to Compliance Qualifier: Unverifiable
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported

SIGNET ARMORLITE (Continued) **1000314091**

Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported

Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	Generators - General
Date Violation was Determined:	1992-04-20 00:00:00.0
Actual Return to Compliance Date:	1992-09-10 00:00:00.0
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported

SIGNET ARMORLITE (Continued) **1000314091**

SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	No
Agency Which Determined Violation:	Not reported
Violation Short Description:	Not reported
Date Violation was Determined:	Not reported
Actual Return to Compliance Date:	Not reported
Return to Compliance Qualifier:	Not reported
Violation Responsible Agency:	Not reported
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	TSD - Closure/Post-Closure
Date Violation was Determined:	1992-04-20 00:00:00.0
Actual Return to Compliance Date:	1992-09-10 00:00:00.0
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported

SIGNET ARMORLITE (Continued) **1000314091**

Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported

Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	LDR - General
Date Violation was Determined:	1988-01-21 00:00:00.0
Actual Return to Compliance Date:	1988-07-25 00:00:00.0
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	001
Date of Enforcement Action:	1988-07-05 00:00:00.0
Enforcement Responsible Agency:	EPA
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	WRITTEN INFORMAL
Enforcement Responsible Person:	R9EPA
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported

SIGNET ARMORLITE (Continued) **1000314091**

SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: TSD - Financial Requirements
Date Violation was Determined: 1988-01-26 00:00:00.0
Actual Return to Compliance Date: 1989-04-26 00:00:00.0
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 002
Date of Enforcement Action: 1988-02-24 00:00:00.0
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: WRITTEN INFORMAL
Enforcement Responsible Person: R9STA
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: TSD - Closure/Post-Closure
Date Violation was Determined: 1987-10-21 00:00:00.0
Actual Return to Compliance Date: 1992-09-10 00:00:00.0
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: 1988-01-24 00:00:00.0
Enforcement Identifier: 001
Date of Enforcement Action: 1987-12-22 00:00:00.0

SIGNET ARMORLITE (Continued) **1000314091**

Enforcement Responsible Agency:	State
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	WRITTEN INFORMAL
Enforcement Responsible Person:	R9STA
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported

Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	TSD - General
Date Violation was Determined:	1992-04-20 00:00:00.0
Actual Return to Compliance Date:	1992-09-10 00:00:00.0
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported

SIGNET ARMORLITE (Continued) **1000314091**

SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: TSD - General
Date Violation was Determined: 1987-10-21 00:00:00.0
Actual Return to Compliance Date: 1992-03-13 00:00:00.0
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: 1988-01-24 00:00:00.0
Enforcement Identifier: 001
Date of Enforcement Action: 1987-12-22 00:00:00.0
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: WRITTEN INFORMAL
Enforcement Responsible Person: R9STA
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: TSD - General
Date Violation was Determined: 1992-04-20 00:00:00.0
Actual Return to Compliance Date: 1992-09-10 00:00:00.0
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported

SIGNET ARMORLITE (Continued) **1000314091**

Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	No
Agency Which Determined Violation:	Not reported
Violation Short Description:	Not reported
Date Violation was Determined:	Not reported
Actual Return to Compliance Date:	Not reported
Return to Compliance Qualifier:	Not reported
Violation Responsible Agency:	Not reported
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported

SIGNET ARMORLITE (Continued) **1000314091**

SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported

Evaluation Action Summary:

Evaluation Date:	1993-07-22 00:00:00.0
Evaluation Responsible Agency:	State Contractor/Grantee
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1998-07-22 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	1988-01-21 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1988-07-25 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	1991-03-07 00:00:00.0
Evaluation Responsible Agency:	State Contractor/Grantee
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1992-03-13 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	2003-09-08 00:00:00.0
Evaluation Responsible Agency:	State Contractor/Grantee
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	2005-10-27 00:00:00.0
Scheduled Compliance Date:	Not reported

SIGNET ARMORLITE (Continued) **1000314091**

Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	2006-10-27 00:00:00.0
Evaluation Responsible Agency:	Local
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1992-03-13 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1992-09-10 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1988-01-26 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	FINANCIAL RECORD REVIEW
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1989-04-26 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1990-01-17 00:00:00.0
Evaluation Responsible Agency:	State Contractor/Grantee
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1991-03-07 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

SIGNET ARMORLITE (Continued) **1000314091**

Evaluation Date:	1992-03-13 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1992-09-10 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	1992-04-21 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	FINANCIAL RECORD REVIEW
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	1992-03-13 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1992-09-10 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	1988-01-21 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1988-07-25 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	1988-01-26 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	FINANCIAL RECORD REVIEW
Evaluation Responsible Person Identifier:	R9STA

SIGNET ARMORLITE (Continued) **1000314091**

Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1989-04-26 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1987-10-21 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1992-09-10 00:00:00.0
Scheduled Compliance Date:	1988-01-24 00:00:00.0
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1992-03-13 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1992-09-10 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1987-10-21 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1992-03-13 00:00:00.0
Scheduled Compliance Date:	1988-01-24 00:00:00.0
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1992-03-13 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1992-09-10 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported

SIGNET ARMORLITE (Continued) **1000314091**

Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	2005-10-27 00:00:00.0
Evaluation Responsible Agency:	Local
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

SIGNET ARMORLITE (Continued) **1000314091**

RCRA-LQG:

Date Form Received by Agency:		2012-02-29 00:00:00.0
Handler Name:	SIGNET ARMORLITE, INC.	
Handler Address:		1001 ARMORLITE DRIVE
Handler City,State,Zip:		SAN MARCOS, CA 92069
EPA ID:		CAD008362634
Contact Name:		JOHN T HINGEY
Contact Address:		ARMORLITE DRIVE
Contact City,State,Zip:		SAN MARCOS, CA 92069
Contact Telephone:		760-744-4000
Contact Fax:		760-471-6255
Contact Email:		JHINGEY@SIGNETARMOLITE.COM
Contact Title:		V.P. OF MANUFACTURING
EPA Region:		09
Land Type:		Private
Federal Waste Generator Description:		Large Quantity Generator
Non-Notifier:		Not reported
Biennial Report Cycle:		2011
Accessibility:		Not reported
Active Site Indicator:		Handler Activities, Corrective Action Activities
State District Owner:		Not reported
State District:		Not reported
Mailing Address:		ARMORLITE DRIVE
Mailing City,State,Zip:		SAN MARCOS, CA 92069
Owner Name:		EDA HOLDINGS CO, INC.
Owner Type:		Private
Operator Name:		EDA HOLDINGS CO, INC.
Operator Type:		Private
Short-Term Generator Activity:		No
Importer Activity:		No
Mixed Waste Generator:		No
Transporter Activity:		No
Transfer Facility Activity:		No
Recycler Activity with Storage:		No
Small Quantity On-Site Burner Exemption:		No
Smelting Melting and Refining Furnace Exemption:		No
Underground Injection Control:		No
Off-Site Waste Receipt:		No
Universal Waste Indicator:		No
Universal Waste Destination Facility:		No
Federal Universal Waste:		No
Active Site Fed-Reg Treatment Storage and Disposal Facility:		Not reported
Active Site Converter Treatment storage and Disposal Facility:		Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:		Not reported
Active Site State-Reg Handler:		---
Federal Facility Indicator:		Not reported
Hazardous Secondary Material Indicator:		NN
Sub-Part K Indicator:		Not reported
Commercial TSD Indicator:		No
Treatment Storage and Disposal Type:		Storage, Treatment
2018 GPRA Permit Baseline:		Not on the Baseline
2018 GPRA Renewals Baseline:		Not on the Baseline
Permit Renewals Workload Universe:		Not reported
Permit Workload Universe:		Not reported
Permit Progress Universe:		Storage, Treatment
Post-Closure Workload Universe:		Not reported
Closure Workload Universe:		Not reported

SIGNET ARMORLITE (Continued) **1000314091**

202 GPRA Corrective Action Baseline:	Yes
Corrective Action Workload Universe:	Yes
Subject to Corrective Action Universe:	Yes
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	Yes
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	Yes
Groundwater Controls Indicator:	Yes
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2012-11-06 13:57:46.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	Not reported
Manifest Broker:	Not reported
Sub-Part P Indicator:	No

Biennial: List of Years
Year: 2011

Click Here for Biennial Reporting System Data:
Year: 2009

Click Here for Biennial Reporting System Data:
Year: 2007

Click Here for Biennial Reporting System Data:
Year: 2003

Click Here for Biennial Reporting System Data:
Year: 2001

Click Here for Biennial Reporting System Data:

Hazardous Waste Summary:

Waste Code:	D001
Waste Description:	IGNITABLE WASTE
Waste Code:	D002
Waste Description:	CORROSIVE WASTE
Waste Code:	D003
Waste Description:	REACTIVE WASTE
Waste Code:	D007
Waste Description:	CHROMIUM

SIGNET ARMORLITE (Continued) **1000314091**

Waste Code:	D009
Waste Description:	MERCURY
Waste Code:	D011
Waste Description:	SILVER
Waste Code:	D018
Waste Description:	BENZENE
Waste Code:	D035
Waste Description:	METHYL ETHYL KETONE
Waste Code:	D039
Waste Description:	TETRACHLOROETHYLENE
Waste Code:	D040
Waste Description:	TRICHLORETHYLENE
Waste Code:	F001
Waste Description:	THE FOLLOWING SPENT HALOGENATED SOLVENTS USED IN DEGREASING: TETRACHLOROETHYLENE, TRICHLORETHYLENE, METHYLENE CHLORIDE, 1,1,1-TRICHLOROETHANE, CARBON TETRACHLORIDE AND CHLORINATED FLUOROCARBONS; ALL SPENT SOLVENT MIXTURES/BLENDS USED IN DEGREASING CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
Waste Code:	F002
Waste Description:	THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
Waste Code:	F003
Waste Description:	THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
Waste Code:	P005
Waste Description:	2-PROPEN-1-OL (OR) ALLYL ALCOHOL
Waste Code:	U002
Waste Description:	2-PROPANONE (I) (OR) ACETONE (I)

SIGNET ARMORLITE (Continued) **1000314091**

Waste Code: U007
Waste Description: 2-PROPENAMIDE (OR) ACRYLAMIDE

Waste Code: U080
Waste Description: METHANE, DICHLORO- (OR) METHYLENE CHLORIDE

Waste Code: U112
Waste Description: ACETIC ACID, ETHYL ESTER (I) (OR) ETHYL ACETATE (I)

Waste Code: U151
Waste Description: MERCURY

Waste Code: U154
Waste Description: METHANOL (I) (OR) METHYL ALCOHOL (I)

Waste Code: U220
Waste Description: BENZENE, METHYL- (OR) TOLUENE

Waste Code: U236
Waste Description: 2,7-NAPHTHALENEDISULFONIC ACID,3,3'-[(3,3'-DIMETHYL[1,1'-BIPHENYL]-4,4'-DIYL)BIS(AZO)BIS[5-AMINO -4-HYDROXY]-, TETRASODIUM SALT (OR) TRYPAN BLUE

Handler - Owner Operator:
Owner/Operator Indicator: Owner
Owner/Operator Name: EDA HOLDINGS CO, INC.
Legal Status: Private
Date Became Current: 2010-04-01 00:00:00.
Date Ended Current: Not reported
Owner/Operator Address: 135555 N STEMMONS FREEWAY
Owner/Operator City,State,Zip: DALLAS, TX 75234
Owner/Operator Telephone: 760-744-4000
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Operator
Owner/Operator Name: ARMORLITE S.P.A.
Legal Status: Private
Date Became Current: 1997-03-01 00:00:00.
Date Ended Current: Not reported
Owner/Operator Address: 1001 ARMORLITE DRIVE
Owner/Operator City,State,Zip: SAN MARCOS, CA 92069
Owner/Operator Telephone: Not reported
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner
Owner/Operator Name: INDUSTRIE OTTICHE EUROPEE
Legal Status: Private
Date Became Current: 1997-03-01 00:00:00.
Date Ended Current: Not reported
Owner/Operator Address: 1001 ARMORLITE DRIVE
Owner/Operator City,State,Zip: SAN MARCOS, CA 92069
Owner/Operator Telephone: Not reported
Owner/Operator Telephone Ext: Not reported

SIGNET ARMORLITE (Continued) **1000314091**

Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Operator
Owner/Operator Name:	INDUSTRIE OTTICHE EUROPEE
Legal Status:	Private
Date Became Current:	1997-03-01 00:00:00.
Date Ended Current:	Not reported
Owner/Operator Address:	Not reported
Owner/Operator City,State,Zip:	Not reported
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Owner
Owner/Operator Name:	INDUSTRIE OTTICHE EUROPEE
Legal Status:	Private
Date Became Current:	1997-03-01 00:00:00.
Date Ended Current:	Not reported
Owner/Operator Address:	1001 ARMORLITE DRIVE
Owner/Operator City,State,Zip:	SAN MARCOS, CA 92069
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Operator
Owner/Operator Name:	INDUSTRIE OTTICHE EUROPEE
Legal Status:	Private
Date Became Current:	1997-03-01 00:00:00.
Date Ended Current:	Not reported
Owner/Operator Address:	Not reported
Owner/Operator City,State,Zip:	Not reported
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Owner
Owner/Operator Name:	INDUSTRIE OTTICHE EUROPEE
Legal Status:	Private
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	VIA XX SETTEMBRE 12
Owner/Operator City,State,Zip:	MILANO ITALY, CA 99999
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Owner
Owner/Operator Name:	ARMORLITE S.P.A
Legal Status:	Private
Date Became Current:	1997-03-01 00:00:00.
Date Ended Current:	Not reported
Owner/Operator Address:	1001 ARMORLITE DRIVE

SIGNET ARMORLITE (Continued) **1000314091**

Owner/Operator City,State,Zip:	SAN MARCOS, CA 92069
Owner/Operator Telephone:	760-744-4000
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Operator
Owner/Operator Name:	INDUSTRIE OTTICHE EUROPEE
Legal Status:	Private
Date Became Current:	1997-03-01 00:00:00.
Date Ended Current:	Not reported
Owner/Operator Address:	Not reported
Owner/Operator City,State,Zip:	Not reported
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Operator
Owner/Operator Name:	EDA HOLDINGS CO, INC.
Legal Status:	Private
Date Became Current:	2010-04-01 00:00:00.
Date Ended Current:	Not reported
Owner/Operator Address:	135555 N STEMMONS FREEWAY
Owner/Operator City,State,Zip:	DALLAS, TX 75234
Owner/Operator Telephone:	760-744-4000
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Owner
Owner/Operator Name:	INDUSTRIE OTTICHE EUROPEE
Legal Status:	Private
Date Became Current:	1997-03-01 00:00:00.
Date Ended Current:	Not reported
Owner/Operator Address:	1001 ARMORLITE DRIVE
Owner/Operator City,State,Zip:	SAN MARCOS, CA 92069
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Operator
Owner/Operator Name:	SIGNET ARMORLITE INC
Legal Status:	Private
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1001 ARMORLITE DR
Owner/Operator City,State,Zip:	SAN MARCOS, CA 92069
Owner/Operator Telephone:	619-744-4000
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	2010-02-01 00:00:00.0
Handler Name:	SIGNET ARMORLITE, INC.

SIGNET ARMORLITE (Continued) **1000314091**

Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

Receive Date:	2012-02-29 00:00:00.0
Handler Name: SIGNET ARMORLITE, INC.	
Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

Receive Date:	1996-09-01 00:00:00.0
Handler Name: SIGNET ARMORLITE INC	
Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	CA
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

Receive Date:	2004-03-10 00:00:00.0
Handler Name: SIGNET ARMORLITE, INC.	
Federal Waste Generator Description:	Small Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

Receive Date:	1993-05-13 00:00:00.0
Handler Name: SIGNET ARMORLITE INC	
Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	CA
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No

SIGNET ARMORLITE (Continued) **1000314091**

Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

Receive Date:	1990-04-13 00:00:00.0
Handler Name: SIGNET ARMORLITE INC	
Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

Receive Date:	1992-02-24 00:00:00.0
Handler Name: SIGNET ARMORLITE, INC.	
Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

Receive Date:	1994-03-09 00:00:00.0
Handler Name: SIGNET ARMORLITE INC	
Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

Receive Date:	1996-02-26 00:00:00.0
Handler Name: SIGNET ARMORLITE, INC.	
Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

SIGNET ARMORLITE (Continued) **1000314091**

Receive Date:	1999-03-04 00:00:00.0
Handler Name: SIGNET ARMORLITE, INC.	
Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

Receive Date:	2000-10-12 00:00:00.0
Handler Name: SIGNET ARMORLITE	
Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

Receive Date:	2002-02-27 00:00:00.0
Handler Name: SIGNET ARMORLITE INC.	
Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

Receive Date:	2004-03-10 00:00:00.0
Handler Name: SIGNET ARMORLITE, INC.	
Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

Receive Date:	2008-06-16 00:00:00.0
Handler Name: SIGNET ARMORLITE, INC.	
Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No

SIGNET ARMORLITE (Continued) **1000314091**

Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 326199
NAICS Description: ALL OTHER PLASTICS PRODUCT MANUFACTURING

NAICS Code: 339115
NAICS Description: OPHTHALMIC GOODS MANUFACTURING

Facility Has Received Notices of Violation:
Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: Generators - General
Date Violation was Determined: 1993-07-22 00:00:00.0
Actual Return to Compliance Date: 1998-07-22 00:00:00.0
Return to Compliance Qualifier: Not Resolved
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State

SIGNET ARMORLITE (Continued) **1000314091**

Violation Short Description:	LDR - General
Date Violation was Determined:	1988-01-21 00:00:00.0
Actual Return to Compliance Date:	1988-07-25 00:00:00.0
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	001
Date of Enforcement Action:	1988-07-05 00:00:00.0
Enforcement Responsible Agency:	EPA
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	WRITTEN INFORMAL
Enforcement Responsible Person:	R9EPA
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported

Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	Generators - General
Date Violation was Determined:	1991-03-07 00:00:00.0
Actual Return to Compliance Date:	1992-03-13 00:00:00.0
Return to Compliance Qualifier:	Unverifiable
Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported

SIGNET ARMORLITE (Continued) **1000314091**

Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: Generators - General
Date Violation was Determined: 2003-09-08 00:00:00.0
Actual Return to Compliance Date: 2005-10-27 00:00:00.0
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: No
Agency Which Determined Violation: Not reported

SIGNET ARMORLITE (Continued) **1000314091**

Violation Short Description:	Not reported
Date Violation was Determined:	Not reported
Actual Return to Compliance Date:	Not reported
Return to Compliance Qualifier:	Not reported
Violation Responsible Agency:	Not reported
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported

Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	TSD - General
Date Violation was Determined:	1992-04-20 00:00:00.0
Actual Return to Compliance Date:	1992-09-10 00:00:00.0
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported

SIGNET ARMORLITE (Continued) **1000314091**

Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: TSD - Financial Requirements
Date Violation was Determined: 1988-01-26 00:00:00.0
Actual Return to Compliance Date: 1989-04-26 00:00:00.0
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 003
Date of Enforcement Action: 1989-02-01 00:00:00.0
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: INITIAL 3008(A) COMPLIANCE
Enforcement Responsible Person: R9STA
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: 30000
Final Monetary Amount: 30000
Paid Amount: Not reported
Final Count: 1
Final Amount: 30000

Found Violation: Yes
Agency Which Determined Violation: State

SIGNET ARMORLITE (Continued) **1000314091**

Violation Short Description:	Generators - General
Date Violation was Determined:	1990-01-17 00:00:00.0
Actual Return to Compliance Date:	1991-03-07 00:00:00.0
Return to Compliance Qualifier:	Unverifiable
Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported

Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	Generators - General
Date Violation was Determined:	1992-04-20 00:00:00.0
Actual Return to Compliance Date:	1992-09-10 00:00:00.0
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported

SIGNET ARMORLITE (Continued) **1000314091**

Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported

Found Violation:	No
Agency Which Determined Violation:	Not reported
Violation Short Description:	Not reported
Date Violation was Determined:	Not reported
Actual Return to Compliance Date:	Not reported
Return to Compliance Qualifier:	Not reported
Violation Responsible Agency:	Not reported
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported

Found Violation:	Yes
Agency Which Determined Violation:	State

SIGNET ARMORLITE (Continued) **1000314091**

Violation Short Description:	TSD - Closure/Post-Closure
Date Violation was Determined:	1992-04-20 00:00:00.0
Actual Return to Compliance Date:	1992-09-10 00:00:00.0
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported

Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	LDR - General
Date Violation was Determined:	1988-01-21 00:00:00.0
Actual Return to Compliance Date:	1988-07-25 00:00:00.0
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	001
Date of Enforcement Action:	1988-07-05 00:00:00.0
Enforcement Responsible Agency:	EPA
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported

SIGNET ARMORLITE (Continued) **1000314091**

Consent/Final Order Lead Agency: Not reported
Enforcement Type: WRITTEN INFORMAL
Enforcement Responsible Person: R9EPA
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: TSD - Financial Requirements
Date Violation was Determined: 1988-01-26 00:00:00.0
Actual Return to Compliance Date: 1989-04-26 00:00:00.0
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 002
Date of Enforcement Action: 1988-02-24 00:00:00.0
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: WRITTEN INFORMAL
Enforcement Responsible Person: R9STA
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State

SIGNET ARMORLITE (Continued) **1000314091**

Violation Short Description:	TSD - Closure/Post-Closure
Date Violation was Determined:	1987-10-21 00:00:00.0
Actual Return to Compliance Date:	1992-09-10 00:00:00.0
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	1988-01-24 00:00:00.0
Enforcement Identifier:	001
Date of Enforcement Action:	1987-12-22 00:00:00.0
Enforcement Responsible Agency:	State
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	WRITTEN INFORMAL
Enforcement Responsible Person:	R9STA
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported

Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	TSD - General
Date Violation was Determined:	1992-04-20 00:00:00.0
Actual Return to Compliance Date:	1992-09-10 00:00:00.0
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported

SIGNET ARMORLITE (Continued) **1000314091**

Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: TSD - General
Date Violation was Determined: 1987-10-21 00:00:00.0
Actual Return to Compliance Date: 1992-03-13 00:00:00.0
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: 1988-01-24 00:00:00.0
Enforcement Identifier: 001
Date of Enforcement Action: 1987-12-22 00:00:00.0
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: WRITTEN INFORMAL
Enforcement Responsible Person: R9STA
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State

SIGNET ARMORLITE (Continued) **1000314091**

Violation Short Description:	TSD - General
Date Violation was Determined:	1992-04-20 00:00:00.0
Actual Return to Compliance Date:	1992-09-10 00:00:00.0
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	No
Agency Which Determined Violation:	Not reported
Violation Short Description:	Not reported
Date Violation was Determined:	Not reported
Actual Return to Compliance Date:	Not reported
Return to Compliance Qualifier:	Not reported
Violation Responsible Agency:	Not reported
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported

SIGNET ARMORLITE (Continued) **1000314091**

Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported

Evaluation Action Summary:

Evaluation Date:	1993-07-22 00:00:00.0
Evaluation Responsible Agency:	State Contractor/Grantee
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1998-07-22 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	1988-01-21 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1988-07-25 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	1991-03-07 00:00:00.0
Evaluation Responsible Agency:	State Contractor/Grantee
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1992-03-13 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

SIGNET ARMORLITE (Continued) **1000314091**

Evaluation Date:	2003-09-08 00:00:00.0
Evaluation Responsible Agency:	State Contractor/Grantee
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	2005-10-27 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	2006-10-27 00:00:00.0
Evaluation Responsible Agency:	Local
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	1992-03-13 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1992-09-10 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	1988-01-26 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	FINANCIAL RECORD REVIEW
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1989-04-26 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	1990-01-17 00:00:00.0
Evaluation Responsible Agency:	State Contractor/Grantee
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA

SIGNET ARMORLITE (Continued) **1000314091**

Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1991-03-07 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1992-03-13 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1992-09-10 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1992-04-21 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	FINANCIAL RECORD REVIEW
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1992-03-13 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1992-09-10 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1988-01-21 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1988-07-25 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported

SIGNET ARMORLITE (Continued) **1000314091**

Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1988-01-26 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	FINANCIAL RECORD REVIEW
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1989-04-26 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1987-10-21 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1992-09-10 00:00:00.0
Scheduled Compliance Date:	1988-01-24 00:00:00.0
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1992-03-13 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1992-09-10 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1987-10-21 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1992-03-13 00:00:00.0
Scheduled Compliance Date:	1988-01-24 00:00:00.0
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1992-03-13 00:00:00.0
Evaluation Responsible Agency:	State

SIGNET ARMORLITE (Continued) **1000314091**

Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1992-09-10 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	2005-10-27 00:00:00.0
Evaluation Responsible Agency:	Local
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

SIGNET ARMORLITE (Continued) **1000314091**

ENVIROSTOR:

Name:	SIGNET ARMORLITE INC
Address:	1001 ARMORLITE DR
City,State,Zip:	SAN MARCOS, CA 920690000
Facility ID:	80001570
Status:	Refer: RWQCB
Status Date:	08/29/2012
Site Code:	400252
Site Type:	Corrective Action
Site Type Detailed:	Corrective Action
Acres:	0
NPL:	NO
Regulatory Agencies:	RWQCB 9 - San Diego
Lead Agency:	RWQCB 9 - San Diego
Program Manager:	Not reported
Supervisor:	* Unknown
Division Branch:	Cleanup Cypress
Assembly:	75
Senate:	38
Special Program:	Not reported
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	Not reported
Latitude:	33.14554
Longitude:	-117.1853
APN:	NONE SPECIFIED
Past Use:	NONE SPECIFIED
Potential COC:	NONE SPECIFIED
Confirmed COC:	NONE SPECIFIED
Potential Description:	NONE SPECIFIED
Alias Name:	CAD008362634
Alias Type:	EPA Identification Number
Alias Name:	110000478689
Alias Type:	EPA (FRS #)
Alias Name:	400252
Alias Type:	Project Code (Site Code)
Alias Name:	80001570
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	RCRA Facility Assessment Report
Completed Date:	08/08/1991
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Interim Measures Questionnaire
Completed Date:	01/31/1992
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Consent Order
Completed Date:	04/10/1995
Comments:	Not reported

SIGNET ARMORLITE (Continued) **1000314091**

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Groundwater Migration Controlled
Completed Date: 12/15/1997
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Human Exposure Controlled
Completed Date: 12/15/1997
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Interim Measures Workplan
Completed Date: 01/01/1996
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Assessment Report
Completed Date: 08/08/1991
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Interim Measures Workplan
Completed Date: 01/01/1996
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedy Construction Complete
Completed Date: 06/11/2018
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Groundwater Migration Controlled
Completed Date: 06/11/2018
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

LUST:
Name: ARMORLITE INC
Address: 1001 ARMORLITE DR
City,State,Zip: SAN MARCOS, CA 920691431
Lead Agency: SAN DIEGO COUNTY LOP

SIGNET ARMORLITE (Continued) **1000314091**

Case Type:	LUST Cleanup Site
Geo Track:	http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0607302793
Global Id:	T0607302793
Latitude:	33.1444595432761
Longitude:	-117.185845971107
Status:	Completed - Case Closed
Status Date:	09/22/1986
Case Worker:	KH
RB Case Number:	9UT493
Local Agency:	SAN DIEGO COUNTY LOP
File Location:	Local Agency
Local Case Number:	H02662-001
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Diesel
Site History:	Not reported

LUST:

Global Id:	T0607302793
Contact Type:	Local Agency Caseworker
Contact Name:	KEVIN HEATON
Organization Name:	SAN DIEGO COUNTY LOP
Address:	P.O. Box 129261
City:	San Diego
Email:	kevin.heaton@sdcounty.ca.gov
Phone Number:	Not reported

LUST:

Global Id:	T0607302793
Action Type:	Other
Date:	08/26/1986
Action:	Leak Began

Global Id:	T0607302793
Action Type:	Other
Date:	08/26/1986
Action:	Leak Discovery

Global Id:	T0607302793
Action Type:	Other
Date:	08/22/1986
Action:	Leak Reported

LUST:

Global Id:	T0607302793
Status:	Open - Case Begin Date
Status Date:	08/22/1986

Global Id:	T0607302793
Status:	Completed - Case Closed
Status Date:	09/22/1986

LUST REG 9:

Region:	9
Status:	Case Closed
Case Number:	9UT493

SIGNET ARMORLITE (Continued) **1000314091**

Local Case: H02662-001
Substance: Diesel
Qty Leaked: Not reported
Abate Method: Not reported
Local Agency: San Diego
How Found: Tank Closure
How Stopped: Close Tank
Source: Tank
Cause: Corrosion
Lead Agency: Local Agency
Case Type: Aquifer affected
Date Found: 08/22/1986
Date Stopped: / /
Confirm Date: / /
Submit Workplan: Not reported
Prelim Assess: / /
Desc Pollution: Not reported
Remed Plan: / /
Remed Action: Not reported
Began Monitor: Not reported
Release Date: 08/26/1986
Enforce Date: Not reported
Closed Date: 9/22/86
Enforce Type: Not reported
Pilot Program: LOP
Basin Number: 904.52
GW Depth: 6 ft
Beneficial Use: Municipal groundwater use
NPDES Number: Not reported
Priority: Low priority. Priority ranking can change over time.
File Dispn: File discarded, case closed
Interim Remedial Actions: Yes
Cleanup and Abatement order Number: Not reported
Waste Discharge Requirement Number: Not reported

SAN DIEGO CO. SAM:

Name: ARMORLITE INC
Address: 1001 ARMORLITE DR
City,State,Zip: SAN MARCOS, CA 920691431
Case Number: H02662-001
Agency: DEH Site Assessment & Mitigation
Funding: **LOP - Federal Fund**
Facility Type: Soils Only
Facility Status: Closed Case
Date: 9/22/1986
Date Began: 8/26/1986

Name: ARMORLITE INC
Address: 1001 ARMORLITE DR
City,State,Zip: SAN MARCOS, CA 920691431
Case Number: H02662-002
Agency: CA Regional Water Quality Control Board
Funding: **Non Billable**
Facility Type: Drinking Water Aquifer Impacted
Facility Status: Leak Being Confirmed
Date: 9/15/1993
Date Began: 9/15/1993

SIGNET ARMORLITE (Continued) **1000314091**

CPS-SLIC:

Name:	PROPOSED DAVIA VILLAGE
Address:	1001 ARMORLITE DRIVE
City,State,Zip:	SAN MARCOS, CA 92069
Region:	STATE
Facility Status:	**Completed - Case Closed**
Status Date:	05/03/2016
Global Id:	T10000003706
Lead Agency:	SAN DIEGO RWQCB (REGION 9)
Lead Agency Case Number:	Not reported
Latitude:	33.1443427616288
Longitude:	-117.18635559082
Case Type:	Cleanup Program Site
Case Worker:	SAM
Local Agency:	Not reported
RB Case Number:	4090003
File Location:	All Files are on GeoTracker or in the Local Agency Database
Potential Media Affected:	Indoor Air, Other Groundwater (uses other than drinking water), Soil
Potential Contaminants of Concern:	1,1,1-Trichloroethane (TCA), Acetone, Other Chlorinated Hydrocarbons, Tetrachloroethylene (PCE), Trichloroethylene (TCE), Freon, Benzene, Diesel, Gasoline
Site History:	This case is for a planned redevleopment of the former Signet Armorlite Site. For historical information regarding the site please review the Geotracker file for Milano Holdings, Inc. (former Signet Armorlite), Geotracker ID SL209154190.

Click here to access the California GeoTracker records for this facility:

Name:	MILANO HOLDINGS INC. (FORMER SIGNET ARMORLITE, INC.)
Address:	1001 ARMORLITE DRIVE
City,State,Zip:	SAN MARCOS, CA 92069
Region:	STATE
Facility Status:	**Completed - Case Closed**
Status Date:	01/31/2014
Global Id:	SL209154190
Lead Agency:	SAN DIEGO RWQCB (REGION 9)
Lead Agency Case Number:	H02662-001
Latitude:	33.1441271643332
Longitude:	-117.18586742878
Case Type:	Cleanup Program Site
Case Worker:	Not reported
Local Agency:	Not reported
RB Case Number:	2091500
File Location:	Regional Board
Potential Media Affected:	Aquifer used for drinking water supply
Potential Contaminants of Concern:	1,1,1-Trichloroethane (TCA), Acetone, Benzene, Other Chlorinated Hydrocarbons, Tetrachloroethylene (PCE), Trichloroethylene (TCE), Freon, Diesel, Gasoline
Site History:	The Facility is approximately 11.8 acres in size and contains buildings associated with the manufacture, marketing, and distribution of optical lenses. Site assessment activities have been conducted at the Facility since the early 1990s. Investigations revealed the presence of VOCs, including methylene chloride, in soil and groundwater at the Facility. Signet has undertaken four remedial actions at the Facility, as well as subsequent investigation activities to assess the adequacy of the remedial actions. Active remediation has included operation of a multiphase extraction system

SIGNET ARMORLITE (Continued) **1000314091**

(MPE system) from 1995 to 1998 to remove subsurface VOCs from source areas at the Facility. Additionally, three targeted source removal actions have been conducted at the Facility since 1986. Remedial activities have included removal and disposal of contaminated soil and addition of soil amendments to facilitate in-situ degradation. In late 2009, an interim remedial measure to extract VOCs from deep groundwater was evaluated, and the findings of this evaluation are incorporated into the CAP.

Click here to access the California GeoTracker records for this facility:

HMMD SAN DIEGO:

Name:	ARMORLITE INC
Address:	1001 ARMORLITE DR
City,State,Zip:	SAN MARCOS, CA 92069
Permit Number:	102662
Business Type:	6HK67
EPA Id Number:	CAD008362634
APN:	219-163-48-00
Last HMMD Inspection:	11/04/2009
Facility Telephone:	760-744-4000
Permit Status:	CHNG
Permit Expiration:	05/31/2011
Date Last Updated:	11/02/2012
Facility Owner:	ARMORLITE S.P.A.
Facility Mailing Address:	1001 ARMORLITE DR
Facility Mailing City:	SAN MARCOS
Facility Mailing State:	CA
Facility Mailing Zip:	92069-1431
UST Owner:	JEPSON CORP
Handle Regulated Hazmat:	Y
Own Or Operate UST:	Not reported
Subject To APSA:	Not reported
Generate Haz Waste:	Y
Treat Haz Waste:	Y
Generate Medical Waste:	Not reported

UST:

UST Name:	UNDERGROUND TANK 102662 T002
Last Update:	2012-11-02 14:17:38
Permit Number:	102662
Tank Type:	SINGLE WALL
Additional Id:	AT1757- CONCRETE CLARIFIER
Capacity Gallons:	1250
UST Contents:	Not reported
Other Content Info:	Not reported
Reg Status:	REMOVED
Remove Close Date:	1989-09-14 00:00:00
Year Installed:	Not reported
Pipe Type:	Not reported
Delivery System:	Not reported
Monitor Code:	90
UST Monitor Method:	NO MONITORING ALTERNATIVE SELECTED. VERIFY AND ENTER MONITORING ALTERNATIVE DURING INSPECTION
UST Name:	UNDERGROUND TANK 102662 T003
Last Update:	2012-11-02 14:17:38

SIGNET ARMORLITE (Continued) **1000314091**

Permit Number:	102662
Tank Type:	SINGLE WALL
Additional Id:	AT0385
Capacity Gallons:	3000
UST Contents:	DIESEL
Other Content Info:	Not reported
Reg Status:	REMOVED
Remove Close Date:	1986-08-22 00:00:00
Year Installed:	Not reported
Pipe Type:	Not reported
Delivery System:	Not reported
Monitor Code:	90
UST Monitor Method:	NO MONITORING ALTERNATIVE SELECTED. VERIFY AND ENTER MONITORING ALTERNATIVE DURING INSPECTION

UST Name:	UNDERGROUND TANK 102662 T001
Last Update:	2012-11-02 14:17:38
Permit Number:	102662
Tank Type:	SINGLE WALL
Additional Id:	AT5037
Capacity Gallons:	100
UST Contents:	OTHER
Other Content Info:	Not reported
Reg Status:	REMOVED
Remove Close Date:	2004-02-27 00:00:00
Year Installed:	Not reported
Pipe Type:	SINGLE WALL
Delivery System:	Not reported
Monitor Code:	Not reported
UST Monitor Method:	Not reported

Name:	SIGNET ARMORLITE, INC
Address:	1001 ARMORLITE DR
City,State,Zip:	SAN MARCOS, CA 92069
Permit Number:	213233
Business Type:	6HK77
EPA Id Number:	CAD008362634
APN:	219-163-48-00
Last HMMD Inspection:	05/18/2011
Facility Telephone:	760-744-4000
Permit Status:	OPEN
Permit Expiration:	08/31/2013
Date Last Updated:	11/02/2012
Facility Owner:	EOA HOLDING CO, INC
Facility Mailing Address:	1001 ARMORLITE DR
Facility Mailing City:	SAN MARCOS
Facility Mailing State:	CA
Facility Mailing Zip:	92069
UST Owner:	Not reported
Handle Regulated Hazmat:	Y
Own Or Operate UST:	Not reported
Subject To APSA:	Not reported
Generate Haz Waste:	Y
Treat Haz Waste:	N
Generate Medical Waste:	Not reported

SIGNET ARMORLITE (Continued) **1000314091**

Inventory Active Permits (not SQG Medical):

Permit Number:	213233
Update Date:	11/02/2012
Case Number:	67-64-1
Name:	ACETONE
Other Information:	Not reported
Material Waste:	Material
Hazardous Categories 1:	FIRE
Hazardous Categories 2:	ACUTE

Permit Number:	213233
Update Date:	11/02/2012
Case Number:	7440-37-1
Name:	ARGON, HELIUM COMPRESSED GAS :
Other Information:	Not reported
Material Waste:	Material
Hazardous Categories 1:	PRESSURE RELEASE
Hazardous Categories 2:	Not reported

Permit Number:	213233
Update Date:	11/02/2012
Case Number:	Not reported
Name:	CARCINOGENS &/OR REPRODUCTIVE TOXINS
Other Information:	BELOW STATE DISCLOSURE AMTS ARE/MAY BE ON SITE
Material Waste:	Not reported
Hazardous Categories 1:	Not reported
Hazardous Categories 2:	Not reported

Permit Number:	213233
Update Date:	11/02/2012
Case Number:	8006-64-2
Name:	ISOPROPYL ALCOHOL
Other Information:	Not reported
Material Waste:	Material
Hazardous Categories 1:	FIRE
Hazardous Categories 2:	ACUTE

Permit Number:	213233
Update Date:	11/02/2012
Case Number:	67-56-1
Name:	METHYL ALCOHOL
Other Information:	Not reported
Material Waste:	Material
Hazardous Categories 1:	FIRE
Hazardous Categories 2:	ACUTE

Permit Number:	213233
Update Date:	11/02/2012
Case Number:	7727-37-9
Name:	NITROGEN
Other Information:	Not reported
Material Waste:	Material
Hazardous Categories 1:	PRESSURE RELEASE
Hazardous Categories 2:	Not reported

Permit Number:	213233
Update Date:	11/02/2012

SIGNET ARMORLITE (Continued) **1000314091**

Case Number:	64742-54-7
Name:	OIL LUBRICATING PETROLEUM
Other Information:	Not reported
Material Waste:	Material
Hazardous Categories 1:	FIRE
Hazardous Categories 2:	ACUTE
Permit Number:	213233
Update Date:	11/02/2012
Case Number:	7782-44-7
Name:	OXYGEN, COMPRESSED GAS :
Other Information:	Not reported
Material Waste:	Material
Hazardous Categories 1:	REACTIVE
Hazardous Categories 2:	PRESSURE RELEASE
Permit Number:	213233
Update Date:	11/02/2012
Case Number:	1310-58-3
Name:	POTASSIUM HYDROXIDE : STRIPPER 4C, 10%
Other Information:	Not reported
Material Waste:	Material
Hazardous Categories 1:	REACTIVE
Hazardous Categories 2:	ACUTE
Permit Number:	213233
Update Date:	11/02/2012
Case Number:	74-98-6
Name:	PROPANE
Other Information:	Not reported
Material Waste:	Material
Hazardous Categories 1:	FIRE
Hazardous Categories 2:	Not reported
Permit Number:	213233
Update Date:	11/02/2012
Case Number:	Not reported
Name:	VITEC 3000 ANTISCALANT
Other Information:	Not reported
Material Waste:	Material
Hazardous Categories 1:	ACUTE
Hazardous Categories 2:	Not reported
Permit Number:	213233
Update Date:	11/02/2012
Case Number:	1310-58-3
Name:	WASTE 122 ALKALINE SOL'N W/OUT METALS
Other Information:	4-C STRIPPER SOLUTION - POTASSIUM HYDROXIDE SOL. @ 10% KOH
Material Waste:	Waste
Hazardous Categories 1:	Not reported
Hazardous Categories 2:	Not reported
Permit Number:	213233
Update Date:	11/02/2012
Case Number:	Not reported
Name:	WASTE 135 UNSPECIFIED AQUEOUS SOL'N
Other Information:	AQUEOUS COATING

SIGNET ARMORLITE (Continued) **1000314091**

Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Permit Number: 213233
Update Date: 11/02/2012
Case Number: 107-21-1
Name: WASTE 135 UNSPECIFIED AQUEOUS SOL'N
Other Information: DYE
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Permit Number: 213233
Update Date: 11/02/2012
Case Number: 1310-58-3
Name: WASTE 181 INORGANIC SOLID WASTE (OTHER)
Other Information: 4-C STRIPPER DEBRIS - POTASSIUM HYDROXIDE
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Permit Number: 213233
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 212 OXYGENATED SOLVENTS
Other Information: FLAMMABLE PAINT WASTE
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Permit Number: 213233
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 212 OXYGENATED SOLVENTS
Other Information: WASTE ACETONE
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Permit Number: 213233
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 221 WASTE OIL & MIXED OIL
Other Information: WASTE OIL
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Permit Number: 213233
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 272 POLYMERIC RESIN WASTE
Other Information: MONOMER/RAGS/DEBRI
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

SIGNET ARMORLITE (Continued) **1000314091**

Permit Number: 213233
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 352 ORGANIC SOLIDS (OTHER)
Other Information: ACETONE WIPES
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

UST:
UST Name: UNDERGROUND TANK 102662 T002
Last Update: 2012-11-02 14:17:38
Permit Number: 213233
Tank Type: SINGLE WALL
Additional Id: AT1757- CONCRETE CLARIFIER
Capacity Gallons: 1250
UST Contents: Not reported
Other Content Info: Not reported
Reg Status: REMOVED
Remove Close Date: 1989-09-14 00:00:00
Year Installed: Not reported
Pipe Type: Not reported
Delivery System: Not reported
Monitor Code: 90
UST Monitor Method: NO MONITORING ALTERNATIVE SELECTED. VERIFY AND ENTER MONITORING ALTERNATIVE DURING INSPECTION

UST Name: UNDERGROUND TANK 102662 T003
Last Update: 2012-11-02 14:17:38
Permit Number: 213233
Tank Type: SINGLE WALL
Additional Id: AT0385
Capacity Gallons: 3000
UST Contents: DIESEL
Other Content Info: Not reported
Reg Status: REMOVED
Remove Close Date: 1986-08-22 00:00:00
Year Installed: Not reported
Pipe Type: Not reported
Delivery System: Not reported
Monitor Code: 90
UST Monitor Method: NO MONITORING ALTERNATIVE SELECTED. VERIFY AND ENTER MONITORING ALTERNATIVE DURING INSPECTION

UST Name: UNDERGROUND TANK 102662 T001
Last Update: 2012-11-02 14:17:38
Permit Number: 213233
Tank Type: SINGLE WALL
Additional Id: AT5037
Capacity Gallons: 100
UST Contents: OTHER
Other Content Info: Not reported
Reg Status: REMOVED
Remove Close Date: 2004-02-27 00:00:00
Year Installed: Not reported
Pipe Type: SINGLE WALL
Delivery System: Not reported

SIGNET ARMORLITE (Continued) **1000314091**

Monitor Code: Not reported
UST Monitor Method: Not reported

Name: SIGNET ARMORLITE, INC
Address: 1001 ARMORLITE DR
City,State,Zip: SAN MARCOS, CA 92069
Permit Number: 213233
Business Type: 6HK77
EPA Id Number: CAD008362634
APN: 219-163-48-00
Last HMMD Inspection: 05/18/2011
Facility Telephone: 760-744-4000
Permit Status: OPEN
Permit Expiration: 08/31/2013
Date Last Updated: 11/02/2012
Facility Owner: EOA HOLDING CO, INC
Facility Mailing Address: 1001 ARMORLITE DR
Facility Mailing City: SAN MARCOS
Facility Mailing State: CA
Facility Mailing Zip: 92069
UST Owner: Not reported
Handle Regulated Hazmat: Y
Own Or Operate UST: Not reported
Subject To APSA: Not reported
Generate Haz Waste: Y
Treat Haz Waste: Y
Generate Medical Waste: Not reported

Inventory Active Permits (not SQG Medical):
Permit Number: 213233
Update Date: 11/02/2012
Case Number: 67-64-1
Name: ACETONE
Other Information: Not reported
Material Waste: Material
Hazardous Categories 1: FIRE
Hazardous Categories 2: ACUTE

Permit Number: 213233
Update Date: 11/02/2012
Case Number: 7440-37-1
Name: ARGON, HELIUM COMPRESSED GAS :
Other Information: Not reported
Material Waste: Material
Hazardous Categories 1: PRESSURE RELEASE
Hazardous Categories 2: Not reported

Permit Number: 213233
Update Date: 11/02/2012
Case Number: Not reported
Name: CARCINOGENS &/OR REPRODUCTIVE TOXINS
Other Information: BELOW STATE DISCLOSURE AMTS ARE/MAY BE ON SITE
Material Waste: Not reported
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Permit Number: 213233

SIGNET ARMORLITE (Continued) **1000314091**

Update Date:	11/02/2012
Case Number:	8006-64-2
Name:	ISOPROPYL ALCOHOL
Other Information:	Not reported
Material Waste:	Material
Hazardous Categories 1:	FIRE
Hazardous Categories 2:	ACUTE
Permit Number:	213233
Update Date:	11/02/2012
Case Number:	67-56-1
Name:	METHYL ALCOHOL
Other Information:	Not reported
Material Waste:	Material
Hazardous Categories 1:	FIRE
Hazardous Categories 2:	ACUTE
Permit Number:	213233
Update Date:	11/02/2012
Case Number:	7727-37-9
Name:	NITROGEN
Other Information:	Not reported
Material Waste:	Material
Hazardous Categories 1:	PRESSURE RELEASE
Hazardous Categories 2:	Not reported
Permit Number:	213233
Update Date:	11/02/2012
Case Number:	64742-54-7
Name:	OIL LUBRICATING PETROLEUM
Other Information:	Not reported
Material Waste:	Material
Hazardous Categories 1:	FIRE
Hazardous Categories 2:	ACUTE
Permit Number:	213233
Update Date:	11/02/2012
Case Number:	7782-44-7
Name:	OXYGEN, COMPRESSED GAS :
Other Information:	Not reported
Material Waste:	Material
Hazardous Categories 1:	REACTIVE
Hazardous Categories 2:	PRESSURE RELEASE
Permit Number:	213233
Update Date:	11/02/2012
Case Number:	1310-58-3
Name:	POTASSIUM HYDROXIDE : STRIPPER 4C, 10%
Other Information:	Not reported
Material Waste:	Material
Hazardous Categories 1:	REACTIVE
Hazardous Categories 2:	ACUTE
Permit Number:	213233
Update Date:	11/02/2012
Case Number:	74-98-6
Name:	PROPANE

SIGNET ARMORLITE (Continued) **1000314091**

Other Information: Not reported
Material Waste: Material
Hazardous Categories 1: FIRE
Hazardous Categories 2: Not reported

Permit Number: 213233
Update Date: 11/02/2012
Case Number: Not reported
Name: VITEC 3000 ANTISCALANT
Other Information: Not reported
Material Waste: Material
Hazardous Categories 1: ACUTE
Hazardous Categories 2: Not reported

Permit Number: 213233
Update Date: 11/02/2012
Case Number: 1310-58-3
Name: WASTE 122 ALKALINE SOL'N W/OUT METALS
Other Information: 4-C STRIPPER SOLUTION - POTASSIUM HYDROXIDE SOL. @ 10% KOH
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Permit Number: 213233
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 135 UNSPECIFIED AQUEOUS SOL'N
Other Information: AQUEOUS COATING
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Permit Number: 213233
Update Date: 11/02/2012
Case Number: 107-21-1
Name: WASTE 135 UNSPECIFIED AQUEOUS SOL'N
Other Information: DYE
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Permit Number: 213233
Update Date: 11/02/2012
Case Number: 1310-58-3
Name: WASTE 181 INORGANIC SOLID WASTE (OTHER)
Other Information: 4-C STRIPPER DEBRIS - POTASSIUM HYDROXIDE
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Permit Number: 213233
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 212 OXYGENATED SOLVENTS
Other Information: FLAMMABLE PAINT WASTE
Material Waste: Waste
Hazardous Categories 1: Not reported

SIGNET ARMORLITE (Continued) **1000314091**

Hazardous Categories 2: Not reported

Permit Number: 213233
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 212 OXYGENATED SOLVENTS
Other Information: WASTE ACETONE
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Permit Number: 213233
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 221 WASTE OIL & MIXED OIL
Other Information: WASTE OIL
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Permit Number: 213233
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 272 POLYMERIC RESIN WASTE
Other Information: MONOMER/RAGS/DEBRI
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Permit Number: 213233
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 352 ORGANIC SOLIDS (OTHER)
Other Information: ACETONE WIPES
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

UST:
UST Name: UNDERGROUND TANK 102662 T002
Last Update: 2012-11-02 14:17:38
Permit Number: 213233
Tank Type: SINGLE WALL
Additional Id: AT1757- CONCRETE CLARIFIER
Capacity Gallons: 1250
UST Contents: Not reported
Other Content Info: Not reported
Reg Status: REMOVED
Remove Close Date: 1989-09-14 00:00:00
Year Installed: Not reported
Pipe Type: Not reported
Delivery System: Not reported
Monitor Code: 90
UST Monitor Method: NO MONITORING ALTERNATIVE SELECTED. VERIFY AND ENTER MONITORING ALTERNATIVE DURING INSPECTION

UST Name: UNDERGROUND TANK 102662 T003

SIGNET ARMORLITE (Continued) **1000314091**

Last Update:	2012-11-02 14:17:38
Permit Number:	213233
Tank Type:	SINGLE WALL
Additional Id:	AT0385
Capacity Gallons:	3000
UST Contents:	DIESEL
Other Content Info:	Not reported
Reg Status:	REMOVED
Remove Close Date:	1986-08-22 00:00:00
Year Installed:	Not reported
Pipe Type:	Not reported
Delivery System:	Not reported
Monitor Code:	90
UST Monitor Method:	NO MONITORING ALTERNATIVE SELECTED. VERIFY AND ENTER MONITORING ALTERNATIVE DURING INSPECTION

UST Name:	UNDERGROUND TANK 102662 T001
Last Update:	2012-11-02 14:17:38
Permit Number:	213233
Tank Type:	SINGLE WALL
Additional Id:	AT5037
Capacity Gallons:	100
UST Contents:	OTHER
Other Content Info:	Not reported
Reg Status:	REMOVED
Remove Close Date:	2004-02-27 00:00:00
Year Installed:	Not reported
Pipe Type:	SINGLE WALL
Delivery System:	Not reported
Monitor Code:	Not reported
UST Monitor Method:	Not reported

DEED:

Name:	PROPOSED DAVIA VILLAGE
Address:	1001 ARMORLITE DRIVE
City,State,Zip:	SAN MARCOS, CA 92069
Envirostor ID:	T10000003706
Area:	Not reported
Sub Area:	Not reported
Site Type:	SLIC
Status:	COMPLETED - CASE CLOSED
Agency:	SWRCB
Covenant Uploaded:	Y
Deed Date(s):	06/30/2014
File Name:	Geotracker Land Use/Deed Restrictions

Name:	MILANO HOLDINGS INC. (FORMER SIGNET ARMORLITE, INC.)
Address:	1001 ARMORLITE DRIVE
City,State,Zip:	SAN MARCOS, CA 92069
Envirostor ID:	SL209154190
Area:	Not reported
Sub Area:	Not reported
Site Type:	SLIC
Status:	COMPLETED - CASE CLOSED
Agency:	SWRCB
Covenant Uploaded:	Y

SIGNET ARMORLITE (Continued) **1000314091**

Deed Date(s): 06/30/2014
File Name: Geotracker Land Use/Deed Restrictions

2020 COR ACTION:
EPA ID: CAD008362634
Region: 9
Action: Not reported

ICIS:
Enforcement Action ID: CASDSA00000607300058000029
FRS ID: 110000478689
Action Name: SIGNET ARMORLITE 060730005800029
Facility Name: SIGNET ARMORLITE
Facility Address: 1001 ARMORLITE DR
SAN MARCOS, CA 92069
Enforcement Action Type: Administrative Order
Facility County: SAN DIEGO
Program System Acronym: AIR
Enforcement Action Forum Desc: Administrative - Formal
EA Type Code: SCAAAO
Facility SIC Code: 3851
Federal Facility ID: Not reported
Latitude in Decimal Degrees: 33.1448
Longitude in Decimal Degrees: -117.184979
Permit Type Desc: Not reported
Program System Acronym: CASDS0000607300058
Facility NAICS Code: 326199
Tribal Land Code: Not reported

Enforcement Action ID: CASDSA00000607300058000027
FRS ID: 110000478689
Action Name: SIGNET ARMORLITE 060730005800027
Facility Name: SIGNET ARMORLITE
Facility Address: 1001 ARMORLITE DR
SAN MARCOS, CA 92069
Enforcement Action Type: Notice of Violation
Facility County: SAN DIEGO
Program System Acronym: AIR
Enforcement Action Forum Desc: Administrative - Informal
EA Type Code: NOV
Facility SIC Code: 3851
Federal Facility ID: Not reported
Latitude in Decimal Degrees: 33.1448
Longitude in Decimal Degrees: -117.184979
Permit Type Desc: Not reported
Program System Acronym: CASDS0000607300058
Facility NAICS Code: 326199
Tribal Land Code: Not reported

US AIRS MINOR:
Envid: 1000314091
Region Code: 09
Programmatic ID: AIR CASDS0000607300058
Facility Registry ID: 110000478689
D and B Number: Not reported

SIGNET ARMORLITE (Continued) **1000314091**

Primary SIC Code: 3851
NAICS Code: 326199
Default Air Classification Code: MIN
Facility Type of Ownership Code: POF
Air CMS Category Code: Not reported
HPV Status: Not reported

US AIRS MINOR:
Region Code: 09
Programmatic ID: AIR CASDS0000607300058
Facility Registry ID: 110000478689
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: Not reported
Activity Status Date: 1994-06-28 00:00:00
Activity Group: Case File
Activity Type: Case File
Activity Status: Resolved

Region Code: 09
Programmatic ID: AIR CASDS0000607300058
Facility Registry ID: 110000478689
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1976-12-02 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASDS0000607300058
Facility Registry ID: 110000478689
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1978-02-08 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASDS0000607300058
Facility Registry ID: 110000478689
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1979-03-05 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASDS0000607300058

SIGNET ARMORLITE (Continued) **1000314091**

Facility Registry ID: 110000478689
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1980-01-31 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASDS0000607300058
Facility Registry ID: 110000478689
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1981-03-21 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASDS0000607300058
Facility Registry ID: 110000478689
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1982-01-19 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASDS0000607300058
Facility Registry ID: 110000478689
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1982-12-20 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASDS0000607300058
Facility Registry ID: 110000478689
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1983-12-08 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

SIGNET ARMORLITE (Continued) **1000314091**

Region Code: 09
Programmatic ID: AIR CASDS0000607300058
Facility Registry ID: 110000478689
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1984-03-21 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASDS0000607300058
Facility Registry ID: 110000478689
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1985-04-04 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASDS0000607300058
Facility Registry ID: 110000478689
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1986-03-26 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASDS0000607300058
Facility Registry ID: 110000478689
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1986-07-23 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASDS0000607300058
Facility Registry ID: 110000478689
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1987-08-26 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring

SIGNET ARMORLITE (Continued) **1000314091**

Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASDS0000607300058
Facility Registry ID: 110000478689
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1987-12-16 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASDS0000607300058
Facility Registry ID: 110000478689
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1988-08-19 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASDS0000607300058
Facility Registry ID: 110000478689
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1989-02-08 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASDS0000607300058
Facility Registry ID: 110000478689
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1989-09-08 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASDS0000607300058
Facility Registry ID: 110000478689
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

SIGNET ARMORLITE (Continued) **1000314091**

Activity Date: 1991-03-21 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASDS0000607300058
Facility Registry ID: 110000478689
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1992-03-04 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASDS0000607300058
Facility Registry ID: 110000478689
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1993-03-02 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASDS0000607300058
Facility Registry ID: 110000478689
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1994-03-03 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASDS0000607300058
Facility Registry ID: 110000478689
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1995-03-24 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASDS0000607300058
Facility Registry ID: 110000478689

SIGNET ARMORLITE (Continued) **1000314091**

Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1996-03-06 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASDS0000607300058
Facility Registry ID: 110000478689
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1997-02-12 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASDS0000607300058
Facility Registry ID: 110000478689
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1998-01-21 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASDS0000607300058
Facility Registry ID: 110000478689
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1999-01-27 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASDS0000607300058
Facility Registry ID: 110000478689
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2000-03-30 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

SIGNET ARMORLITE (Continued) **1000314091**

Region Code: 09
Programmatic ID: AIR CASDS0000607300058
Facility Registry ID: 110000478689
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2001-08-16 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASDS0000607300058
Facility Registry ID: 110000478689
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2001-12-21 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASDS0000607300058
Facility Registry ID: 110000478689
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2003-01-22 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASDS0000607300058
Facility Registry ID: 110000478689
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2007-06-12 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASDS0000607300058
Facility Registry ID: 110000478689
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2009-02-12 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring

SIGNET ARMORLITE (Continued) **1000314091**

Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASDS0000607300058
Facility Registry ID: 110000478689
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1994-03-28 00:00:00
Activity Status Date: 1994-03-28 00:00:00
Activity Group: Enforcement Action
Activity Type: Administrative - Formal
Activity Status: Final Order Issued

Region Code: 09
Programmatic ID: AIR CASDS0000607300058
Facility Registry ID: 110000478689
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1994-03-21 00:00:00
Activity Status Date: 1994-03-21 00:00:00
Activity Group: Enforcement Action
Activity Type: Administrative - Informal
Activity Status: Achieved

Region Code: 09
Programmatic ID: AIR CASDS0000607300058
Facility Registry ID: 110000478689
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: Title V Permits
Activity Date: 1997-02-12 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASDS0000607300058
Facility Registry ID: 110000478689
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: Title V Permits
Activity Date: 1998-01-21 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASDS0000607300058
Facility Registry ID: 110000478689
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: Title V Permits

SIGNET ARMORLITE (Continued) **1000314091**

Activity Date: 1999-01-27 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASDS0000607300058
Facility Registry ID: 110000478689
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: Title V Permits
Activity Date: 2000-03-30 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASDS0000607300058
Facility Registry ID: 110000478689
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: Title V Permits
Activity Date: 2001-03-01 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASDS0000607300058
Facility Registry ID: 110000478689
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: Title V Permits
Activity Date: 2001-12-21 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASDS0000607300058
Facility Registry ID: 110000478689
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: Title V Permits
Activity Date: 2003-01-22 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASDS0000607300058
Facility Registry ID: 110000478689

SIGNET ARMORLITE (Continued) **1000314091**

Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: Title V Permits
Activity Date: 2003-04-21 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASDS0000607300058
Facility Registry ID: 110000478689
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: Title V Permits
Activity Date: 2003-09-22 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASDS0000607300058
Facility Registry ID: 110000478689
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: Title V Permits
Activity Date: 2004-01-20 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASDS0000607300058
Facility Registry ID: 110000478689
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: Title V Permits
Activity Date: 2005-03-01 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASDS0000607300058
Facility Registry ID: 110000478689
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: Title V Permits
Activity Date: 2005-03-08 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

SIGNET ARMORLITE (Continued) **1000314091**

Region Code: 09
Programmatic ID: AIR CASDS0000607300058
Facility Registry ID: 110000478689
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: Title V Permits
Activity Date: 2005-03-09 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASDS0000607300058
Facility Registry ID: 110000478689
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: Title V Permits
Activity Date: 2005-07-08 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASDS0000607300058
Facility Registry ID: 110000478689
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: Title V Permits
Activity Date: 2006-01-26 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASDS0000607300058
Facility Registry ID: 110000478689
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: Title V Permits
Activity Date: 2007-06-12 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

CORTESE:
Name: ARMORLITE INC
Address: 1001 ARMORLITE DR
City,State,Zip: SAN MARCOS, CA 920691431
Region: CORTESE
Envirostor Id: Not reported
Global ID: T0607302793
Site/Facility Type: LUST CLEANUP SITE

SIGNET ARMORLITE (Continued) **1000314091**

Cleanup Status:	COMPLETED - CASE CLOSED
Status Date:	Not reported
Site Code:	Not reported
Latitude:	Not reported
Longitude:	Not reported
Owner:	Not reported
Enf Type:	Not reported
Swat R:	Not reported
Flag:	active
Order No:	Not reported
Waste Discharge System No:	Not reported
Effective Date:	Not reported
Region 2:	Not reported
WID Id:	Not reported
Solid Waste Id No:	Not reported
Waste Management Uit Name:	Not reported
File Name:	Active Open

EMI:

Name:	SIGNET ARMORLITE
Address:	1001 ARMORLITE DR
City,State,Zip:	SAN MARCOS, CA 92069
Year:	1997
County Code:	37
Air Basin:	SD
Facility ID:	172
Air District Name:	SD
SIC Code:	3851
Air District Name:	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	42
Reactive Organic Gases Tons/Yr:	2
Carbon Monoxide Emissions Tons/Yr:	1
NOX - Oxides of Nitrogen Tons/Yr:	1
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Name:	SIGNET ARMORLITE
Address:	1001 ARMORLITE DR
City,State,Zip:	SAN MARCOS, CA 92069
Year:	1998
County Code:	37
Air Basin:	SD
Facility ID:	172
Air District Name:	SD
SIC Code:	3851
Air District Name:	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	42
Reactive Organic Gases Tons/Yr:	2
Carbon Monoxide Emissions Tons/Yr:	1
NOX - Oxides of Nitrogen Tons/Yr:	1
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0

SIGNET ARMORLITE (Continued) **1000314091**

Part. Matter 10 Micrometers and Smllr Tons/Yr:0

Name:	SIGNET ARMORLITE
Address:	1001 ARMORLITE DR
City,State,Zip:	SAN MARCOS, CA 92069
Year:	1999
County Code:	37
Air Basin:	SD
Facility ID:	172
Air District Name:	SD
SIC Code:	3851
Air District Name:	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	42
Reactive Organic Gases Tons/Yr:	2
Carbon Monoxide Emissions Tons/Yr:	1
NOX - Oxides of Nitrogen Tons/Yr:	1
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Name:	SIGNET ARMORLITE
Address:	1001 ARMORLITE DR
City,State,Zip:	SAN MARCOS, CA 92069
Year:	2000
County Code:	37
Air Basin:	SD
Facility ID:	172
Air District Name:	SD
SIC Code:	3851
Air District Name:	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	42
Reactive Organic Gases Tons/Yr:	2
Carbon Monoxide Emissions Tons/Yr:	1
NOX - Oxides of Nitrogen Tons/Yr:	1
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Name:	SIGNET ARMORLITE
Address:	1001 ARMORLITE DR
City,State,Zip:	SAN MARCOS, CA 92069
Year:	2001
County Code:	37
Air Basin:	SD
Facility ID:	172
Air District Name:	SD
SIC Code:	3851
Air District Name:	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System:	Y
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	20
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0

SIGNET ARMORLITE (Continued) **1000314091**

NOX - Oxides of Nitrogen Tons/Yr: 0
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 0
Part. Matter 10 Micrometers and Smllr Tons/Yr: 0

Name: SIGNET ARMORLITE
Address: 1001 ARMORLITE DR
City,State,Zip: SAN MARCOS, CA 92069
Year: 2002
County Code: 37
Air Basin: SD
Facility ID: 172
Air District Name: SD
SIC Code: 3851
Air District Name: SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 20
Reactive Organic Gases Tons/Yr: 0
Carbon Monoxide Emissions Tons/Yr: 0
NOX - Oxides of Nitrogen Tons/Yr: 0
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 0
Part. Matter 10 Micrometers and Smllr Tons/Yr: 0

Name: SIGNET ARMORLITE
Address: 1001 ARMORLITE DR
City,State,Zip: SAN MARCOS, CA 92069
Year: 2003
County Code: 37
Air Basin: SD
Facility ID: 172
Air District Name: SD
SIC Code: 3851
Air District Name: SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 20
Reactive Organic Gases Tons/Yr: 0
Carbon Monoxide Emissions Tons/Yr: 0
NOX - Oxides of Nitrogen Tons/Yr: 0
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 0
Part. Matter 10 Micrometers and Smllr Tons/Yr: 0

Name: SIGNET ARMORLITE
Address: 1001 ARMORLITE DR
City,State,Zip: SAN MARCOS, CA 92069
Year: 2004
County Code: 37
Air Basin: SD
Facility ID: 172
Air District Name: SD
SIC Code: 3851
Air District Name: SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System: Y
Consolidated Emission Reporting Rule: Not reported

SIGNET ARMORLITE (Continued) **1000314091**

Total Organic Hydrocarbon Gases Tons/Yr:	20.256239
Reactive Organic Gases Tons/Yr:	0.405522
Carbon Monoxide Emissions Tons/Yr:	0.008736
NOX - Oxides of Nitrogen Tons/Yr:	0.0104
SOX - Oxides of Sulphur Tons/Yr:	0.0000624
Particulate Matter Tons/Yr:	0.0007904
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0.0007904

Name:	SIGNET ARMORLITE INC
Address:	1001 ARMORLITE DR
City,State,Zip:	SAN MARCOS, CA 92069
Year:	2005
County Code:	37
Air Basin:	SD
Facility ID:	172
Air District Name:	SD
SIC Code:	3851
Air District Name:	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	20.19114
Reactive Organic Gases Tons/Yr:	17.165132
Carbon Monoxide Emissions Tons/Yr:	.00874
NOX - Oxides of Nitrogen Tons/Yr:	.01
SOX - Oxides of Sulphur Tons/Yr:	.0000624
Particulate Matter Tons/Yr:	.00079
Part. Matter 10 Micrometers and Smllr Tons/Yr:	.00079

Name:	SIGNET ARMORLITE INC
Address:	1001 ARMORLITE DR
City,State,Zip:	SAN MARCOS, CA 92069
Year:	2006
County Code:	37
Air Basin:	SD
Facility ID:	172
Air District Name:	SD
SIC Code:	3851
Air District Name:	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	12.98068055
Reactive Organic Gases Tons/Yr:	11.064925775
Carbon Monoxide Emissions Tons/Yr:	.00628998
NOX - Oxides of Nitrogen Tons/Yr:	.0116351
SOX - Oxides of Sulphur Tons/Yr:	.00004161
Particulate Matter Tons/Yr:	.00058958
Part. Matter 10 Micrometers and Smllr Tons/Yr:	.00058958

Name:	SIGNET ARMORLITE INC
Address:	1001 ARMORLITE DR
City,State,Zip:	SAN MARCOS, CA 92069
Year:	2007
County Code:	37
Air Basin:	SD
Facility ID:	172
Air District Name:	SD
SIC Code:	3851

SIGNET ARMORLITE (Continued) **1000314091**

Air District Name:	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	12.980686
Reactive Organic Gases Tons/Yr:	11.064931
Carbon Monoxide Emissions Tons/Yr:	.006291
NOX - Oxides of Nitrogen Tons/Yr:	.01164
SOX - Oxides of Sulphur Tons/Yr:	.0000416
Particulate Matter Tons/Yr:	.0005899
Part. Matter 10 Micrometers and Smllr Tons/Yr:	.0005899

Name:	SIGNET ARMORLITE INC
Address:	1001 ARMORLITE DR
City,State,Zip:	SAN MARCOS, CA 92069
Year:	2008
County Code:	37
Air Basin:	SD
Facility ID:	172
Air District Name:	SD
SIC Code:	3851
Air District Name:	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	9.110686
Reactive Organic Gases Tons/Yr:	7.786267
Carbon Monoxide Emissions Tons/Yr:	.006291
NOX - Oxides of Nitrogen Tons/Yr:	.01164
SOX - Oxides of Sulphur Tons/Yr:	.0000416
Particulate Matter Tons/Yr:	.0005899
Part. Matter 10 Micrometers and Smllr Tons/Yr:	.0005899

ENF:

Name:	SIGNET ARMORLITE
Address:	1001 ARMORLITE DR
City,State,Zip:	SAN MARCOS, CA 92069
Region:	9
Facility Id:	257031
Agency Name:	Signet Armorlite
Place Type:	Facility
Place Subtype:	Not reported
Facility Type:	All other facilities
Agency Type:	Privately-Owned Business
# Of Agencies:	1
Place Latitude:	33.146831
Place Longitude:	-117.189715
SIC Code 1:	Not reported
SIC Desc 1:	Not reported
SIC Code 2:	Not reported
SIC Desc 2:	Not reported
SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	Not reported
NAICS Desc 1:	Not reported
NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported

SIGNET ARMORLITE (Continued) **1000314091**

# Of Places:	1
Source Of Facility:	Reg Meas
Design Flow:	Not reported
Threat To Water Quality:	Not reported
Complexity:	Not reported
Pretreatment:	Not reported
Facility Waste Type:	Not reported
Facility Waste Type 2:	Not reported
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	SLIC
Program Category1:	TANKS
Program Category2:	TANKS
# Of Programs:	1
WDID:	9 000274N97
Reg Measure Id:	161243
Reg Measure Type:	Unregulated
Region:	9
Order #:	Not reported
Npdes# CA#:	Not reported
Major-Minor:	Not reported
Npdes Type:	Not reported
Reclamation:	Not reported
Dredge Fill Fee:	Not reported
301H:	Not reported
Application Fee Amt Received:	Not reported
Status:	Never Active
Status Date:	02/20/2013
Effective Date:	Not reported
Expiration/Review Date:	Not reported
Termination Date:	Not reported
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	N
Individual/General:	I
Fee Code:	Not reported
Direction/Voice:	Passive
Enforcement Id(EID):	233861
Region:	9
Order / Resolution Number:	UNKNOWN
Enforcement Action Type:	13267 Letter
Effective Date:	01/27/2000
Adoption/Issuance Date:	Not reported
Achieve Date:	Not reported
Termination Date:	Not reported
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Historical
Title:	Enforcement - 9 000274N97
Description:	Provide a time schedule for field activities for full delineation, vertical and horizontal, on-site and off-site, of ground water contamination from the Signet Armorlite facility.

SIGNET ARMORLITE (Continued) **1000314091**

Program:	SLIC
Latest Milestone Completion Date:	11/22/2000
# Of Programs1:	1
Total Assessment Amount:	0
Initial Assessed Amount:	0
Liability $ Amount:	0
Project $ Amount:	0
Liability $ Paid:	0
Project $ Completed:	0
Total $ Paid/Completed Amount:	0

Name:	SIGNET ARMORLITE
Address:	1001 ARMORLITE DR
City,State,Zip:	SAN MARCOS, CA 92069
Region:	9
Facility Id:	257031
Agency Name:	Signet Armorlite
Place Type:	Facility
Place Subtype:	Not reported
Facility Type:	All other facilities
Agency Type:	Privately-Owned Business
# Of Agencies:	1
Place Latitude:	33.146831
Place Longitude:	-117.189715
SIC Code 1:	Not reported
SIC Desc 1:	Not reported
SIC Code 2:	Not reported
SIC Desc 2:	Not reported
SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	Not reported
NAICS Desc 1:	Not reported
NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Reg Meas
Design Flow:	Not reported
Threat To Water Quality:	Not reported
Complexity:	Not reported
Pretreatment:	Not reported
Facility Waste Type:	Not reported
Facility Waste Type 2:	Not reported
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	SLIC
Program Category1:	TANKS
Program Category2:	TANKS
# Of Programs:	1
WDID:	9 000274N97
Reg Measure Id:	161243
Reg Measure Type:	Unregulated
Region:	9
Order #:	Not reported
Npdes# CA#:	Not reported
Major-Minor:	Not reported

SIGNET ARMORLITE (Continued) **1000314091**

Npdes Type:	Not reported
Reclamation:	Not reported
Dredge Fill Fee:	Not reported
301H:	Not reported
Application Fee Amt Received:	Not reported
Status:	Never Active
Status Date:	02/20/2013
Effective Date:	Not reported
Expiration/Review Date:	Not reported
Termination Date:	Not reported
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	N
Individual/General:	I
Fee Code:	Not reported
Direction/Voice:	Passive
Enforcement Id(EID):	233171
Region:	9
Order / Resolution Number:	UNKNOWN
Enforcement Action Type:	13267 Letter
Effective Date:	05/19/1999
Adoption/Issuance Date:	Not reported
Achieve Date:	7/22/1999
Termination Date:	Not reported
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Historical
Title:	Enforcement - 9 000274N97
Description:	Submit a workplan for full delineation, vertical and horizontal, on-site and off-site, of ground water contamination from the Signet Armorlite facility.
Program:	SLIC
Latest Milestone Completion Date:	7/22/1999
# Of Programs1:	1
Total Assessment Amount:	0
Initial Assessed Amount:	0
Liability $ Amount:	0
Project $ Amount:	0
Liability $ Paid:	0
Project $ Completed:	0
Total $ Paid/Completed Amount:	0

HAZNET:

Name:	MILANO HOLDING INC.
Address:	1001 ARMORLITE DR
Address 2:	Not reported
City,State,Zip:	SAN MARCOS, CA 920691431
Contact:	ADAM STANFORD
Telephone:	2149301718
Mailing Name:	Not reported
Mailing Address:	130 BIRMINGHAM DRIVE
Year:	2013

SIGNET ARMORLITE (Continued) **1000314091**

Gepaid: CAC002717415
TSD EPA ID: AZC950823111
CA Waste Code: 151 - Asbestos containing waste
Disposal Method: H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Tons: 0.4

Additional Info:
Year: 2013
Gen EPA ID: CAC002717415

Shipment Date: 20130118
Creation Date: 6/7/2013 22:15:09
Receipt Date: 20130124
Manifest ID: 009506282JJK
Trans EPA ID: CAL000160111
Trans Name: ALLIANCE ENVIRONMENTAL GROUP
Trans 2 EPA ID: CAR000049064
Trans 2 Name: ECTI
TSDF EPA ID: AZC950823111
Trans Name: LA PAZ RECIAMATION SITE
TSDF Alt EPA ID: Not reported
TSDF Alt Name: Not reported
Waste Code Description: 151 - Asbestos-containing waste
RCRA Code: Not reported
Meth Code: H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Quantity Tons: 0.4
Waste Quantity: 1
Quantity Unit: Y
Additional Code 1: Not reported
Additional Code 2: Not reported
Additional Code 3: Not reported
Additional Code 4: Not reported
Additional Code 5: Not reported

HIST CORTESE:
edr_fname: SIGNET ARMORLITE
edr_fadd1: 1001 ARMORLITE
City,State,Zip: SAN MARCOS, CA 92069
Region: CORTESE
Facility County Code: 37
Reg By: LTNKA
Reg Id: 9UT493

HWP:
EPA ID: CAD008362634
Name: SIGNET ARMORLITE INC
Address: 1001 ARMORLITE DR
Cleanup Status: CLOSED
Latitude: 33.14554
Longitude: -117.1853
Facility Type: Historical - Non-Operating
Facility Size: Not reported
Supervisor: Not reported

SIGNET ARMORLITE (Continued) **1000314091**

Site Code:	400252
Senate District:	38
Assembly District:	75
Public Information Officer:	Not reported
Commercial Offsite Facility Types:	Not reported
Quarterly Update:	WB Lead Agency for corrective action: Signet Armorlite Inc. (SAI) is located at 1001 Armorlite Drive, San Marcos, in northern San Diego County. Land use in the immediate vicinity is industrial. An Interim Status Document was issued to the facility by the U.S. EPA on January 4, 1982, for storage and treatment of these RCRA units: (1) hazardous waste storage unit, (1) elementary neutralization unit, (1) methylene chloride still, and (1) methylene chloride evaporation unit. SAI was classified as a treatment, storage, and disposal facility (TSDF). On November 2, 1984, the Department of Health Services denied SAIs request for hazardous waste reclassification from a TSDF to generator status, due to storage of hazardous waste on-site for longer than 90 days. The primary operations generated waste streams from the manufacturing plastic eyeglass lenses, and included the storage of nonchlorinated waste solvents, sodium hydroxide and water, and chlorinated waste solvents. As a treatment facility, SAI utilized two recovery units: one carbon adsorption unit and one distillation unit. The units were used to recover methylene chloride. The facility was formally clean closed by the U.S. EPA in a letter dated June 30, 1992. Our records indicate that in December 1997, the facility was referred to the Regional Water Quality Control Board (RWQCB) San Diego Region, as the lead agency for corrective action at the facility. In a letter dated October 28, 2005, the DTSC formally acknowledged that the RWQCB is the lead agency for corrective action at the facility.
Project Manager Lead:	Not reported
Project Manager:	Not reported
Permit Type:	RCRA
Permit Effective Date:	Not reported
Permit Expiration Date:	Not reported
Calenviroscreen Score:	56-60%
Total Planned Hours:	Not reported
Total Planned Amount:	Not reported
Total Actual Hours:	Not reported

Activities:

EPA ID:	CAD008362634
Facility Type:	Historical - Non-Operating
Facility Name:	SIGNET ARMORLITE INC
Project Manager:	Not reported
Project Manager Lead:	Not reported
Supervisor:	Not reported
Facility Status:	CLOSED
Activity Type:	New Operating Permit
Permit Being Renewed:	Not reported
Permit Being Modified:	Not reported
Final Date:	1991-06-20 00:00:00
Type:	RCRA
Title Description:	Imported 12/2011:PERMIT1
Due Date:	Not reported
Comments:	Not reported
Unit Names:	Not reported
Event Description:	New Operating Permit - APPLICATION PART A RECEIVED
Actual Date:	11/29/1989

SIGNET ARMORLITE (Continued) **1000314091**

EPA ID: CAD008362634
Facility Type: Historical - Non-Operating
Facility Name: SIGNET ARMORLITE INC
Project Manager: Not reported
Project Manager Lead: Not reported
Supervisor: Not reported
Facility Status: CLOSED
Activity Type: New Operating Permit
Permit Being Renewed: Not reported
Permit Being Modified: Not reported
Final Date: 1991-06-20 00:00:00
Type: RCRA
Title Description: Imported 12/2011:PERMIT1
Due Date: Not reported
Comments: INTENDS/CLOSED ALL WASTE HANDLING FACILITY, INTENDS/CLOSED ALL WASTE HANDLING FACILITY, Approved Request
Unit Names: Not reported
Event Description: New Operating Permit - FINAL PERMIT - WITHDRAWAL REQUEST ACKNOWLEDGED
Actual Date: 06/20/1991

EPA ID: CAD008362634
Facility Type: Historical - Non-Operating
Facility Name: SIGNET ARMORLITE INC
Project Manager: Not reported
Project Manager Lead: Not reported
Supervisor: Not reported
Facility Status: CLOSED
Activity Type: New Operating Permit
Permit Being Renewed: Not reported
Permit Being Modified: Not reported
Final Date: 1991-06-20 00:00:00
Type: RCRA
Title Description: Imported 12/2011:PERMIT1
Due Date: Not reported
Comments: INTENDS/CLOSED ALL WASTE HANDLING FACILITY, INTENDS/CLOSED ALL WASTE HANDLING FACILITY, Approved Request
Unit Names: Not reported
Event Description: New Operating Permit - FINAL PERMIT - WITHDRAWAL REQUEST RECEIVED
Actual Date: 12/07/1989

Closure:
EPA ID: CAD008362634
Facility Type: Historical - Non-Operating
Facility Name: SIGNET ARMORLITE INC
Project Manager: Not reported
Project Manager Lead: Not reported
Supervisor: Not reported
Facility Size: Not reported
Facility Status: CLOSED
Activity Type: Closure Final
Final Date: Not reported
Type: RCRA
Title Description: Closure
Due Date: Not reported
Comments: Not reported
Unit Names: CONTAIN1, OTHRTRT1
Event Description: Closure Final - RECEIVE CLOSURE CERTIFICATION

SIGNET ARMORLITE (Continued) **1000314091**

Actual Date: 06/18/1992

EPA ID: CAD008362634
Facility Type: Historical - Non-Operating
Facility Name: SIGNET ARMORLITE INC
Project Manager: Not reported
Project Manager Lead: Not reported
Supervisor: Not reported
Facility Size: Not reported
Facility Status: CLOSED
Activity Type: Closure Final
Final Date: Not reported
Type: RCRA
Title Description: Closure
Due Date: Not reported
Comments: Not reported
Unit Names: CONTAIN1, OTHRTRT1
Event Description: Closure Final - ISSUE CLOSURE VERIFICATION
Actual Date: 06/30/1992

Alias:
EPA ID: CAD008362634
Facility Type: Historical - Non-Operating
Facility Name: SIGNET ARMORLITE INC
Facility Status: CLOSED
Project Manager: Not reported
Project Manager Lead: Not reported
Supervisor: Not reported
Alias Type: FRS
Alias: 110000478689

EPA ID: CAD008362634
Facility Type: Historical - Non-Operating
Facility Name: SIGNET ARMORLITE INC
Facility Status: CLOSED
Project Manager: Not reported
Project Manager Lead: Not reported
Supervisor: Not reported
Alias Type: Project Code (Site Code)
Alias: 400252

SAN DIEGO CO LOP:
Name: ARMORLITE INC
Address: 1001 ARMORLITE DR
City,State,Zip: SAN MARCOS, CA 92069
Record ID: DEH1993-LSAM-H02662-002
Record Status: Completed
Opened Date: 09/15/1993
Parcel Number: 219-163-48-00
Case Type: Not reported
Historical Name: SIGNET ARMORLITE
SWRCB Global ID: SL209154190
Funding: N - Non-Billable
Lead Agency: RWQCB
Lead Agency Date: 09/15/1993

SIGNET ARMORLITE (Continued) **1000314091**

Census Tract:	200.29
Community:	San Marcos
Jurisdiction:	SAN MARCOS
Watershed Basin Number:	904.52
Water Purveyor:	VALLECITOS WATER DISTRICT
Fire Agency:	SAN MARCOS FIRE PROT DIST
Latitude:	33.1446094
Longitude:	-117.1860845
X MapCoord:	6275167.036
Y MapCoord:	1997583.948

Name:	ARMORLITE INC
Address:	1001 ARMORLITE DR
City,State,Zip:	SAN MARCOS, CA 92069
Record ID:	DEH1986-LSAM-H02662-001
Record Status:	Completed
Opened Date:	08/22/1986
Parcel Number:	219-163-48-00
Case Type:	LOP - Local Oversight Program
Historical Name:	ARMORLITE INC
SWRCB Global ID:	T0607302793
Funding:	N - Non-Billable
Lead Agency:	RWQCB
Lead Agency Date:	04/10/1995
Census Tract:	200.29
Community:	San Marcos
Jurisdiction:	SAN MARCOS
Watershed Basin Number:	904.52
Water Purveyor:	VALLECITOS WATER IMP DIST NO 6 - SEWER SERVICE
Fire Agency:	SAN MARCOS FIRE PROTECTION DISTRICT
Latitude:	33.1446094
Longitude:	-117.1860845
X MapCoord:	6274903.34397328
Y MapCoord:	1997023.20319503

CIWQS:

Name:	SIGNET ARMORLITE INC
Address:	1001 ARMORLITE DR
City,State,Zip:	SAN MARCOS, CA 92069
Agency:	Signet Armorlite Essilor Labs of America
Agency Address:	PO Box 961389, El Paso, TX 79996
Place/Project Type:	Industrial - Ophthalmic Goods
SIC/NAICS:	3851
Region:	9
Program:	INDSTW
Regulatory Measure Status:	Terminated
Regulatory Measure Type:	Storm water industrial
Order Number:	2014-0057-DWQ
WDID:	9 37I001658
NPDES Number:	CAS000001
Adoption Date:	01/01/1900
Effective Date:	03/27/1992
Termination Date:	03/31/2013
Expiration/Review Date:	01/01/1900
Design Flow:	Not reported
Major/Minor:	Not reported
Complexity:	Not reported

SIGNET ARMORLITE (Continued) **1000314091**

TTWQ: Not reported
Enforcement Actions within 5 years: 0
Violations within 5 years: 0
Latitude: 33.1469
Longitude: -117.18977

CERS:
Name: SIGNET ARMORLITE INC
Address: 1001 ARMORLITE DR
City,State,Zip: SAN MARCOS, CA 920690000
Site ID: 203292
CERS ID: CAD008362634
CERS Description: Hazardous Waste

Affiliation:
Affiliation Type Desc: Facility Contact
Entity Name: PRASHANT SANTAN
Entity Title: Not reported
Affiliation Address: 130 BINGHAM DR
Affiliation City: SAN MARCOS
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 920691402
Affiliation Phone: 7607444000

Affiliation Type Desc: Facility Owner
Entity Name: EOA HOLDING CO INC
Entity Title: Not reported
Affiliation Address: 13555 N STEMMONS FWY
Affiliation City: DALLAS
Affiliation State: TX
Affiliation Country: Not reported
Affiliation Zip: 752340000
Affiliation Phone: 7607444000

Affiliation Type Desc: Supervisor
Entity Name: * Unknown
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Name: MILANO HOLDINGS INC. (FORMER SIGNET ARMORLITE, INC.)
Address: 1001 ARMORLITE DRIVE
City,State,Zip: SAN MARCOS, CA 92069
Site ID: 209533
CERS ID: SL209154190
CERS Description: Cleanup Program Site

Name: SIGNET ARMORLITE INC
Address: 1001 ARMORLITE DR
City,State,Zip: SAN MARCOS, CA 920690000
Site ID: 203292

SIGNET ARMORLITE (Continued) **1000314091**

CERS ID: 80001570
CERS Description: Corrective Action

Affiliation:
Affiliation Type Desc: Facility Contact
Entity Name: PRASHANT SANTAN
Entity Title: Not reported
Affiliation Address: 130 BINGHAM DR
Affiliation City: SAN MARCOS
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 920691402
Affiliation Phone: 7607444000

Affiliation Type Desc: Facility Owner
Entity Name: EOA HOLDING CO INC
Entity Title: Not reported
Affiliation Address: 13555 N STEMMONS FWY
Affiliation City: DALLAS
Affiliation State: TX
Affiliation Country: Not reported
Affiliation Zip: 752340000
Affiliation Phone: 7607444000

Affiliation Type Desc: Supervisor
Entity Name: * Unknown
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Name: ARMORLITE INC
Address: 1001 ARMORLITE DR
City,State,Zip: SAN MARCOS, CA 920691431
Site ID: 207455
CERS ID: T0607302793
CERS Description: Leaking Underground Storage Tank Cleanup Site

Affiliation:
Affiliation Type Desc: Local Agency Caseworker
Entity Name: KEVIN HEATON - SAN DIEGO COUNTY LOP
Entity Title: Not reported
Affiliation Address: P.O. Box 129261
Affiliation City: San Diego
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Name: PROPOSED DAVIA VILLAGE
Address: 1001 ARMORLITE DRIVE
City,State,Zip: SAN MARCOS, CA 92069
Site ID: 212080

SIGNET ARMORLITE (Continued) **1000314091**

CERS ID: T10000003706
CERS Description: Cleanup Program Site

Affiliation:
Affiliation Type Desc: Regional Board Caseworker
Entity Name: SARAH A. MEARON - SAN DIEGO RWQCB (REGION 9)
Entity Title: Not reported
Affiliation Address: 2375 NORTHSIDE DRIVE, SUITE 100
Affiliation City: SAN DIEGO
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: 6195213363

Name: SIGNET ARMORLITE
Address: 1001 ARMORLITE DR.
City,State,Zip: SAN MARCOS, CA 920691431
Site ID: 494325
CERS ID: 110000478689
CERS Description: US EPA Air Emission Inventory System (EIS)

Affiliation:
Affiliation Type Desc: Environmental Contact
Entity Name: JOHN T HINGEY
Entity Title: V.P. OF MANUFACTURING
Affiliation Address: 1001 ARMORLITE DRIVE
Affiliation City: SANMARCOS
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

HWTS:
Name: MILANO HOLDING INC.
Address: 1001 ARMORLITE DR
Address 2: Not reported
City,State,Zip: SAN MARCOS, CA 920691431
EPA ID: CAC002717415
Inactive Date: 04/18/2013
Create Date: 01/17/2013
Last Act Date: 04/19/2013
Mailing Name: Not reported
Mailing Address: 130 BIRMINGHAM DRIVE
Mailing Address 2: Not reported
Mailing City,State,Zip: SAN MARCOS, CA 92069
Owner Name: MILANO HOLDING INC.
Owner Address: 130 BIRMINGHAM DRIVE
Owner Address 2: Not reported
Owner City,State,Zip: SAN MARCOS, CA 92069
Contact Name: ADAM STANFORD
Contact Address: 130 BIRMINGHAM DRIVE
Contact Address 2: Not reported
City,State,Zip: SAN MARCOS, CA 92069

N75 **C.D.R. - SHELL** **LUST** **U001572208**
West **112 N RANCHO SANTA FE RD** **San Diego Co. HMMD** **N/A**
1/4-1/2 **SAN MARCOS, CA 92069** **SWEEPS UST**
0.423 mi. **HIST UST**
2233 ft. **Site 3 of 4 in cluster N** **Cortese**
SAN DIEGO CO LOP
Relative: **CERS**
Higher

Actual: **622 ft.**

LUST:

Name:	RANCHO SANTA FE EXXON
Address:	112 N.RANCHO SANTA FE RD
City,State,Zip:	SAN MARCOS, CA 92069-121
Lead Agency:	SAN DIEGO RWQCB (REGION 9)
Case Type:	LUST Cleanup Site
Geo Track:	http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0619784179
Global Id:	T0619784179
Latitude:	33.1496120103319
Longitude:	-117.198827396503
Status:	Open - Remediation
Status Date:	07/10/2017
Case Worker:	LT
RB Case Number:	Not reported
Local Agency:	Not reported
File Location:	Regional Board
Local Case Number:	Not reported
Potential Media Affect:	Aquifer used for drinking water supply
Potential Contaminants of Concern:	Diesel
Site History:	An older single walled underground storage tank was thought to have been ruptured during fuel delivery and approximately 6,000 gallons of diesel fuel were released to the subsurface on March 20, 2007. See Environmental Data Tab for additional information. This case is under consideration for either to combine it with case # T0607302478 (H03229-001) or handle it seperately.

LUST:

Global Id:	T0619784179
Contact Type:	Regional Board Caseworker
Contact Name:	LALITHA THOTAKURA
Organization Name:	SAN DIEGO RWQCB (REGION 9)
Address:	2375 NORTHSIDE DRIVE, SUITE 100
City:	SAN DIEGO
Email:	lalitha.thotakura@waterboards.ca.gov
Phone Number:	6195213002

LUST:

Global Id:	T0619784179
Action Type:	RESPONSE
Date:	04/30/2011
Action:	Monitoring Report - Semi-Annually
Global Id:	T0619784179
Action Type:	RESPONSE
Date:	07/30/2011
Action:	Monitoring Report - Quarterly
Global Id:	T0619784179
Action Type:	RESPONSE
Date:	08/04/2015
Action:	Monitoring Report - Quarterly

C.D.R. - SHELL (Continued) **U001572208**

Global Id: T0619784179
Action Type: ENFORCEMENT
Date: 12/08/2009
Action: Staff Letter

Global Id: T0619784179
Action Type: RESPONSE
Date: 11/18/2015
Action: Monitoring Report - Quarterly

Global Id: T0619784179
Action Type: RESPONSE
Date: 10/31/2018
Action: Monitoring Report - Quarterly

Global Id: T0619784179
Action Type: ENFORCEMENT
Date: 05/20/2010
Action: Technical Correspondence / Assistance / Other

Global Id: T0619784179
Action Type: ENFORCEMENT
Date: 05/13/2014
Action: Notice of Responsibility

Global Id: T0619784179
Action Type: ENFORCEMENT
Date: 06/30/2015
Action: Referral to Regional Board

Global Id: T0619784179
Action Type: RESPONSE
Date: 08/18/2016
Action: Monitoring Report - Quarterly

Global Id: T0619784179
Action Type: ENFORCEMENT
Date: 07/02/2014
Action: Technical Correspondence / Assistance / Other

Global Id: T0619784179
Action Type: RESPONSE
Date: 01/28/2013
Action: Correspondence

Global Id: T0619784179
Action Type: RESPONSE
Date: 04/30/2011
Action: Other Workplan - Regulator Responded

Global Id: T0619784179
Action Type: RESPONSE
Date: 11/18/2011
Action: Other Report / Document - Regulator Responded

Global Id: T0619784179
Action Type: RESPONSE

C.D.R. - SHELL (Continued) **U001572208**

Date: 02/28/2012
Action: Pilot Study/ Treatability Report - Regulator Responded

Global Id: T0619784179
Action Type: ENFORCEMENT
Date: 05/05/2011
Action: Technical Correspondence / Assistance / Other

Global Id: T0619784179
Action Type: ENFORCEMENT
Date: 01/27/2011
Action: Technical Correspondence / Assistance / Other

Global Id: T0619784179
Action Type: RESPONSE
Date: 11/29/2012
Action: Interim Remedial Action Plan - Regulator Responded

Global Id: T0619784179
Action Type: ENFORCEMENT
Date: 10/06/2010
Action: Technical Correspondence / Assistance / Other

Global Id: T0619784179
Action Type: ENFORCEMENT
Date: 12/21/2011
Action: Technical Correspondence / Assistance / Other

Global Id: T0619784179
Action Type: ENFORCEMENT
Date: 07/01/2015
Action: Referral to Regional Board

Global Id: T0619784179
Action Type: ENFORCEMENT
Date: 09/15/2020
Action: Email Correspondence

Global Id: T0619784179
Action Type: ENFORCEMENT
Date: 12/02/2019
Action: Staff Letter

Global Id: T0619784179
Action Type: ENFORCEMENT
Date: 08/18/2017
Action: Clean Up Fund - Case Closure Review Summary Report (RSR)

Global Id: T0619784179
Action Type: RESPONSE
Date: 01/31/2015
Action: Remedial Progress Report - Regulator Responded

Global Id: T0619784179
Action Type: RESPONSE
Date: 10/04/2019
Action: Request for Closure - Regulator Responded

C.D.R. - SHELL (Continued) **U001572208**

Global Id: T0619784179
Action Type: ENFORCEMENT
Date: 03/28/2007
Action: Notice of Responsibility

Global Id: T0619784179
Action Type: ENFORCEMENT
Date: 03/27/2012
Action: Technical Correspondence / Assistance / Other

Global Id: T0619784179
Action Type: Other
Date: 03/20/2007
Action: Leak Began

Global Id: T0619784179
Action Type: Other
Date: 03/20/2007
Action: Leak Discovery

Global Id: T0619784179
Action Type: Other
Date: 03/20/2007
Action: Leak Stopped

Global Id: T0619784179
Action Type: RESPONSE
Date: 04/30/2010
Action: Interim Remedial Action Report

Global Id: T0619784179
Action Type: RESPONSE
Date: 06/30/2015
Action: Monitoring Report - Quarterly

Global Id: T0619784179
Action Type: RESPONSE
Date: 10/04/2018
Action: Monitoring Report - Quarterly

Global Id: T0619784179
Action Type: RESPONSE
Date: 08/28/2018
Action: Monitoring Report - Quarterly

Global Id: T0619784179
Action Type: RESPONSE
Date: 07/20/2020
Action: Other Workplan - Regulator Responded

Global Id: T0619784179
Action Type: ENFORCEMENT
Date: 02/07/2013
Action: Technical Correspondence / Assistance / Other

Global Id: T0619784179
Action Type: Other

C.D.R. - SHELL (Continued) **U001572208**

Date: 03/20/2007
Action: Leak Reported

Global Id: T0619784179
Action Type: RESPONSE
Date: 07/07/2009
Action: Other Report / Document

Global Id: T0619784179
Action Type: RESPONSE
Date: 01/31/2015
Action: Remedial Progress Report

Global Id: T0619784179
Action Type: RESPONSE
Date: 03/31/2015
Action: Remedial Progress Report

Global Id: T0619784179
Action Type: RESPONSE
Date: 04/10/2019
Action: Monitoring Report - Quarterly

Global Id: T0619784179
Action Type: RESPONSE
Date: 01/19/2018
Action: Monitoring Report - Quarterly

Global Id: T0619784179
Action Type: RESPONSE
Date: 07/30/2010
Action: Remedial Progress Report

Global Id: T0619784179
Action Type: RESPONSE
Date: 05/26/2017
Action: Monitoring Report - Quarterly

Global Id: T0619784179
Action Type: RESPONSE
Date: 06/13/2018
Action: Monitoring Report - Quarterly

Global Id: T0619784179
Action Type: RESPONSE
Date: 02/06/2017
Action: Monitoring Report - Quarterly

Global Id: T0619784179
Action Type: ENFORCEMENT
Date: 12/23/2008
Action: Letter - Notice

Global Id: T0619784179
Action Type: ENFORCEMENT
Date: 01/03/2013
Action: Technical Correspondence / Assistance / Other

C.D.R. - SHELL (Continued) **U001572208**

Global Id: T0619784179
Action Type: RESPONSE
Date: 03/19/2019
Action: Other Report / Document

Global Id: T0619784179
Action Type: RESPONSE
Date: 10/30/2010
Action: Monitoring Report - Quarterly

Global Id: T0619784179
Action Type: RESPONSE
Date: 01/31/2011
Action: Monitoring Report - Quarterly

Global Id: T0619784179
Action Type: RESPONSE
Date: 05/10/2016
Action: Monitoring Report - Quarterly

Global Id: T0619784179
Action Type: ENFORCEMENT
Date: 05/26/2009
Action: Letter - Notice

Global Id: T0619784179
Action Type: ENFORCEMENT
Date: 07/08/2009
Action: Letter - Notice

Global Id: T0619784179
Action Type: ENFORCEMENT
Date: 01/23/2014
Action: Notice of Responsibility

LUST:
Global Id: T0619784179
Status: Open - Case Begin Date
Status Date: 03/20/2007

Global Id: T0619784179
Status: Open - Site Assessment
Status Date: 03/20/2007

Global Id: T0619784179
Status: Open - Remediation
Status Date: 07/10/2017

Name: RANCHO SANTA FE EXXON
Address: 112 N RANCHO SANTA FE RD
City,State,Zip: SAN MARCOS, CA 920691218
Lead Agency: SAN DIEGO RWQCB (REGION 9)
Case Type: LUST Cleanup Site
Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0607302478
Global Id: T0607302478
Latitude: 33.149555608

C.D.R. - SHELL (Continued) **U001572208**

Longitude:	-117.199069505
Status:	Open - Remediation
Status Date:	11/17/2000
Case Worker:	LT
RB Case Number:	9UT3709
Local Agency:	SAN DIEGO COUNTY LOP
File Location:	Regional Board
Local Case Number:	Not reported
Potential Media Affect:	Aquifer used for drinking water supply
Potential Contaminants of Concern:	Gasoline
Site History:	Gasoline contaminated soil was discovered during a Phase II Environmental Assessment conducted in 1998. Thirteen soil borings were drilled and soil samples were collected as part of the Phase II investigation. Total petroleum hydrocarbons as gasoline (TPHg)were detected at 1,000 mg/kg and BTEX and MTBE were also detected in soil samples. Groundwater monitoring wells were installed in 2000. TPHg, BTex and MTBE at 1,000 ug/l were detected in groundwater samples. See Environmental Data Tab for additional information.

LUST:

Global Id:	T0607302478
Contact Type:	Local Agency Caseworker
Contact Name:	CAROL FENNER
Organization Name:	SAN DIEGO COUNTY LOP
Address:	P.O. Box 129261
City:	San Diego
Email:	carol.fenner@sdcounty.ca.gov
Phone Number:	Not reported

Global Id:	T0607302478
Contact Type:	Regional Board Caseworker
Contact Name:	LALITHA THOTAKURA
Organization Name:	SAN DIEGO RWQCB (REGION 9)
Address:	2375 NORTHSIDE DRIVE, SUITE 100
City:	SAN DIEGO
Email:	lalitha.thotakura@waterboards.ca.gov
Phone Number:	6195213002

LUST:

Global Id:	T0607302478
Action Type:	RESPONSE
Date:	07/30/2011
Action:	Monitoring Report - Semi-Annually

Global Id:	T0607302478
Action Type:	RESPONSE
Date:	01/22/2016
Action:	Monitoring Report - Semi-Annually

Global Id:	T0607302478
Action Type:	ENFORCEMENT
Date:	07/31/2015
Action:	Email Correspondence

Global Id:	T0607302478
Action Type:	ENFORCEMENT
Date:	05/15/2014

C.D.R. - SHELL (Continued) **U001572208**

Action: Technical Correspondence / Assistance / Other

Global Id: T0607302478
Action Type: RESPONSE
Date: 01/30/2012
Action: Monitoring Report - Semi-Annually

Global Id: T0607302478
Action Type: RESPONSE
Date: 12/21/2011
Action: Sensitive Receptor Survey Report

Global Id: T0607302478
Action Type: RESPONSE
Date: 10/11/2017
Action: Correspondence

Global Id: T0607302478
Action Type: RESPONSE
Date: 08/05/2010
Action: Monitoring Report - Quarterly

Global Id: T0607302478
Action Type: RESPONSE
Date: 06/30/2015
Action: Other Report / Document

Global Id: T0607302478
Action Type: RESPONSE
Date: 01/04/2021
Action: Soil Vapor Intrusion Investigation Report

Global Id: T0607302478
Action Type: ENFORCEMENT
Date: 03/09/2010
Action: Technical Correspondence / Assistance / Other

Global Id: T0607302478
Action Type: RESPONSE
Date: 07/30/2012
Action: Monitoring Report - Semi-Annually

Global Id: T0607302478
Action Type: RESPONSE
Date: 07/26/2017
Action: Monitoring Report - Semi-Annually

Global Id: T0607302478
Action Type: RESPONSE
Date: 11/18/2011
Action: Other Report / Document

Global Id: T0607302478
Action Type: RESPONSE
Date: 02/28/2013
Action: Other Report / Document

C.D.R. - SHELL (Continued) **U001572208**

Global Id: T0607302478
Action Type: RESPONSE
Date: 02/01/2013
Action: CAP/RAP - Other Report

Global Id: T0607302478
Action Type: RESPONSE
Date: 01/24/2018
Action: Monitoring Report - Semi-Annually

Global Id: T0607302478
Action Type: RESPONSE
Date: 07/25/2016
Action: Monitoring Report - Semi-Annually

Global Id: T0607302478
Action Type: RESPONSE
Date: 06/24/2015
Action: Correspondence

Global Id: T0607302478
Action Type: RESPONSE
Date: 03/27/2007
Action: Preliminary Site Assessment Report

Global Id: T0607302478
Action Type: RESPONSE
Date: 07/16/2019
Action: Other Report / Document

Global Id: T0607302478
Action Type: RESPONSE
Date: 12/06/2011
Action: Sensitive Receptor Survey Report - Regulator Responded

Global Id: T0607302478
Action Type: RESPONSE
Date: 07/30/2013
Action: Monitoring Report - Semi-Annually

Global Id: T0607302478
Action Type: RESPONSE
Date: 05/30/2013
Action: Correspondence

Global Id: T0607302478
Action Type: RESPONSE
Date: 11/08/2010
Action: Monitoring Report - Quarterly

Global Id: T0607302478
Action Type: RESPONSE
Date: 05/08/2010
Action: Monitoring Report - Quarterly

Global Id: T0607302478
Action Type: RESPONSE

C.D.R. - SHELL (Continued) **U001572208**

Date: 01/30/2013
Action: Monitoring Report - Semi-Annually - Regulator Responded

Global Id: T0607302478
Action Type: RESPONSE
Date: 11/06/2013
Action: Conceptual Site Model - Regulator Responded

Global Id: T0607302478
Action Type: RESPONSE
Date: 03/10/2014
Action: Conceptual Site Model - Regulator Responded

Global Id: T0607302478
Action Type: ENFORCEMENT
Date: 10/31/2011
Action: Technical Correspondence / Assistance / Other

Global Id: T0607302478
Action Type: ENFORCEMENT
Date: 11/02/2016
Action: Letter - Notice

Global Id: T0607302478
Action Type: ENFORCEMENT
Date: 01/18/2019
Action: Staff Letter

Global Id: T0607302478
Action Type: ENFORCEMENT
Date: 11/05/2018
Action: Notification - Public Notice of Case Closure

Global Id: T0607302478
Action Type: ENFORCEMENT
Date: 01/24/2020
Action: Email Correspondence

Global Id: T0607302478
Action Type: ENFORCEMENT
Date: 09/29/2020
Action: Technical Correspondence / Assistance / Other

Global Id: T0607302478
Action Type: ENFORCEMENT
Date: 08/02/2019
Action: Complaint

Global Id: T0607302478
Action Type: ENFORCEMENT
Date: 01/24/2019
Action: Email Correspondence

Global Id: T0607302478
Action Type: RESPONSE
Date: 01/31/2014
Action: Monitoring Report - Semi-Annually

C.D.R. - SHELL (Continued) **U001572208**

Global Id: T0607302478
Action Type: RESPONSE
Date: 01/31/2015
Action: Monitoring Report - Semi-Annually

Global Id: T0607302478
Action Type: RESPONSE
Date: 07/31/2014
Action: Monitoring Report - Semi-Annually - Regulator Responded

Global Id: T0607302478
Action Type: RESPONSE
Date: 12/07/2012
Action: Corrective Action Plan / Remedial Action Plan - Regulator Responded

Global Id: T0607302478
Action Type: RESPONSE
Date: 08/26/2020
Action: Soil Vapor Intrusion Investigation Report - Regulator Responded

Global Id: T0607302478
Action Type: RESPONSE
Date: 10/28/2019
Action: Site Investigation Workplan - Regulator Responded

Global Id: T0607302478
Action Type: ENFORCEMENT
Date: 08/27/1998
Action: Notice of Responsibility

Global Id: T0607302478
Action Type: ENFORCEMENT
Date: 12/12/2011
Action: Technical Correspondence / Assistance / Other

Global Id: T0607302478
Action Type: ENFORCEMENT
Date: 02/07/2013
Action: Technical Correspondence / Assistance / Other

Global Id: T0607302478
Action Type: ENFORCEMENT
Date: 08/18/2017
Action: Clean Up Fund - Case Closure Review Summary Report (RSR)

Global Id: T0607302478
Action Type: ENFORCEMENT
Date: 03/25/2020
Action: Email Correspondence

Global Id: T0607302478
Action Type: ENFORCEMENT
Date: 04/04/2019
Action: Email Correspondence

Global Id: T0607302478
Action Type: ENFORCEMENT

C.D.R. - SHELL (Continued) **U001572208**

Date: 10/19/2020
Action: Other Report

Global Id: T0607302478
Action Type: ENFORCEMENT
Date: 10/06/2020
Action: Technical Correspondence / Assistance / Other

Global Id: T0607302478
Action Type: ENFORCEMENT
Date: 12/21/2020
Action: Other Report

Global Id: T0607302478
Action Type: ENFORCEMENT
Date: 02/24/2021
Action: Clean Up Fund - Case Closure Review Summary Report (RSR)

Global Id: T0607302478
Action Type: ENFORCEMENT
Date: 10/19/2020
Action: Other Report

Global Id: T0607302478
Action Type: Other
Date: 08/20/1998
Action: Leak Began

Global Id: T0607302478
Action Type: Other
Date: 08/20/1998
Action: Leak Discovery

Global Id: T0607302478
Action Type: Other
Date: 08/20/1998
Action: Leak Stopped

Global Id: T0607302478
Action Type: Other
Date: 08/20/1998
Action: Leak Reported

Global Id: T0607302478
Action Type: RESPONSE
Date: 02/17/2010
Action: Pilot Study / Treatability Workplan

Global Id: T0607302478
Action Type: RESPONSE
Date: 02/04/2011
Action: Other Report / Document

Global Id: T0607302478
Action Type: RESPONSE
Date: 04/22/2011
Action: Other Workplan

C.D.R. - SHELL (Continued) **U001572208**

Global Id: T0607302478
Action Type: RESPONSE
Date: 04/28/2011
Action: Monitoring Report - Quarterly

Global Id: T0607302478
Action Type: RESPONSE
Date: 07/06/2015
Action: Monitoring Report - Semi-Annually

Global Id: T0607302478
Action Type: RESPONSE
Date: 04/03/2017
Action: Other Report / Document

Global Id: T0607302478
Action Type: RESPONSE
Date: 07/30/2018
Action: Monitoring Report - Semi-Annually

Global Id: T0607302478
Action Type: RESPONSE
Date: 01/15/2020
Action: Site Investigation Workplan - Regulator Responded

Global Id: T0607302478
Action Type: RESPONSE
Date: 07/30/2009
Action: Monitoring Report - Quarterly

Global Id: T0607302478
Action Type: RESPONSE
Date: 04/30/2009
Action: Monitoring Report - Quarterly

Global Id: T0607302478
Action Type: RESPONSE
Date: 01/30/2010
Action: Monitoring Report - Semi-Annually

Global Id: T0607302478
Action Type: RESPONSE
Date: 07/30/2010
Action: Monitoring Report - Semi-Annually

Global Id: T0607302478
Action Type: RESPONSE
Date: 07/27/2011
Action: Other Report / Document

Global Id: T0607302478
Action Type: RESPONSE
Date: 05/27/2014
Action: Correspondence

Global Id: T0607302478
Action Type: ENFORCEMENT

C.D.R. - SHELL (Continued) **U001572208**

Date: 07/07/2008
Action: Technical Correspondence / Assistance / Other

Global Id: T0607302478
Action Type: RESPONSE
Date: 06/26/2009
Action: Monitoring Report - Quarterly

Global Id: T0607302478
Action Type: RESPONSE
Date: 03/05/2009
Action: Well Installation Report

Global Id: T0607302478
Action Type: RESPONSE
Date: 01/26/2017
Action: Monitoring Report - Semi-Annually

Global Id: T0607302478
Action Type: ENFORCEMENT
Date: 01/16/2009
Action: Technical Correspondence / Assistance / Other

Global Id: T0607302478
Action Type: ENFORCEMENT
Date: 02/03/2009
Action: Technical Correspondence / Assistance / Other

Global Id: T0607302478
Action Type: RESPONSE
Date: 01/30/2011
Action: Monitoring Report - Semi-Annually

Global Id: T0607302478
Action Type: RESPONSE
Date: 06/28/2019
Action: Well Destruction Report

Global Id: T0607302478
Action Type: ENFORCEMENT
Date: 07/08/2009
Action: Letter - Notice

Global Id: T0607302478
Action Type: ENFORCEMENT
Date: 06/30/2015
Action: Referral to Regional Board

LUST:
Global Id: T0607302478
Status: Open - Case Begin Date
Status Date: 08/20/1998

Global Id: T0607302478
Status: Open - Remediation
Status Date: 11/17/2000

C.D.R. - SHELL (Continued) **U001572208**

HMMD SAN DIEGO:

Name:	G&M OIL #171
Address:	112 N RANCHO SANTA FE RD
City,State,Zip:	SAN MARCOS, CA 92069
Permit Number:	210458
Business Type:	6HK28
EPA Id Number:	CAL000338216
APN:	219-117-28-00
Last HMMD Inspection:	03/14/2012
Facility Telephone:	760-597-1640
Permit Status:	EXPR
Permit Expiration:	10/31/2012
Date Last Updated:	11/02/2012
Facility Owner:	G&M OIL CO
Facility Mailing Address:	16868 A ST
Facility Mailing City:	HUNTINGTON BEACH
Facility Mailing State:	CA
Facility Mailing Zip:	92647
UST Owner:	G&M OIL CO
Handle Regulated Hazmat:	Y
Own Or Operate UST:	Y
Subject To APSA:	Not reported
Generate Haz Waste:	Y
Treat Haz Waste:	Not reported
Generate Medical Waste:	Not reported

Inventory Active Permits (not SQG Medical):

Permit Number:	210458
Update Date:	11/02/2012
Case Number:	25155-30-0
Name:	ALKYL SODIUM SULFONATE 30% : ZEP SOAP
Other Information:	Not reported
Material Waste:	Material
Hazardous Categories 1:	CHRONIC
Hazardous Categories 2:	Not reported

Permit Number:	210458
Update Date:	11/02/2012
Case Number:	68476-34-6
Name:	DIESEL
Other Information:	UNDERGROUND TANK 103229 T001
Material Waste:	Material
Hazardous Categories 1:	FIRE
Hazardous Categories 2:	ACUTE

Permit Number:	210458
Update Date:	11/02/2012
Case Number:	86290-81-5
Name:	PREMIUM UNLEADED
Other Information:	UNDERGROUND TANK 103229 T003
Material Waste:	Material
Hazardous Categories 1:	FIRE
Hazardous Categories 2:	ACUTE

Permit Number:	210458
Update Date:	11/02/2012
Case Number:	8006-61-9

C.D.R. - SHELL (Continued) **U001572208**

Name: REGULAR UNLEADED
Other Information: UNDERGROUND TANK 103229 T002
Material Waste: Material
Hazardous Categories 1: FIRE
Hazardous Categories 2: ACUTE

Permit Number: 210458
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 134 AQUEOUS SOL'N W/LESS 10% ORG
Other Information: FUEL & WATER
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Permit Number: 210458
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 352 ORGANIC SOLIDS (OTHER)
Other Information: USED FUEL FILTERS & CONTAMINATED ABSORBENT
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

UST:
UST Name: UNDERGROUND TANK 103229 T001
Last Update: 2012-11-02 14:17:38
Permit Number: 210458
Tank Type: SINGLE WALL
Additional Id: RT0783, RT2567/RT3879; RT5076
Capacity Gallons: 10000
UST Contents: DIESEL
Other Content Info: DIESEL
Reg Status: ACTIVE
Remove Close Date: Not reported
Year Installed: 1982-01-01 00:00:00
Pipe Type: DOUBLE WALL
Delivery System: PRESSURE
Monitor Code: 15
UST Monitor Method: SW TANK DW PRESSURE PIPE W/ SHUTOFF AND ALARM ON LLD AND CERTIFIED ATG: IN-TANK TEST MONTHLY

UST Name: UNDERGROUND TANK 103229 T002
Last Update: 2012-11-02 14:17:38
Permit Number: 210458
Tank Type: SINGLE WALL
Additional Id: RT0783, RT2567; RT5076
Capacity Gallons: 10000
UST Contents: REGULAR UNLEADED
Other Content Info: REGULAR UNLEADED
Reg Status: ACTIVE
Remove Close Date: Not reported
Year Installed: 1982-01-01 00:00:00
Pipe Type: DOUBLE WALL
Delivery System: PRESSURE
Monitor Code: 15
UST Monitor Method: SW TANK DW PRESSURE PIPE W/ SHUTOFF AND ALARM ON LLD AND CERTIFIED

C.D.R. - SHELL (Continued) **U001572208**

ATG: IN-TANK TEST MONTHLY

UST Name:	UNDERGROUND TANK 103229 T003
Last Update:	2012-11-02 14:17:38
Permit Number:	210458
Tank Type:	SINGLE WALL
Additional Id:	RT0783, RT2567; RT5076
Capacity Gallons:	10000
UST Contents:	PREMIUM UNLEADED
Other Content Info:	PREMIUM UNLEADED
Reg Status:	ACTIVE
Remove Close Date:	Not reported
Year Installed:	1982-01-01 00:00:00
Pipe Type:	DOUBLE WALL
Delivery System:	PRESSURE
Monitor Code:	15
UST Monitor Method:	SW TANK DW PRESSURE PIPE W/ SHUTOFF AND ALARM ON LLD AND CERTIFIED ATG: IN-TANK TEST MONTHLY

Name:	G&M OIL #171
Address:	112 N RANCHO SANTA FE RD
City,State,Zip:	SAN MARCOS, CA 92069
Permit Number:	210458
Business Type:	6HK28
EPA Id Number:	CAL000338216
APN:	219-117-28-00
Last HMMD Inspection:	03/14/2012
Facility Telephone:	760-597-1640
Permit Status:	EXPR
Permit Expiration:	10/31/2012
Date Last Updated:	11/02/2012
Facility Owner:	G&M OIL CO
Facility Mailing Address:	16868 A ST
Facility Mailing City:	HUNTINGTON BEACH
Facility Mailing State:	CA
Facility Mailing Zip:	92647
UST Owner:	G&M OIL CO
Handle Regulated Hazmat:	Y
Own Or Operate UST:	Y
Subject To APSA:	Not reported
Generate Haz Waste:	Y
Treat Haz Waste:	Not reported
Generate Medical Waste:	Not reported

Inventory Active Permits (not SQG Medical):

Permit Number:	210458
Update Date:	11/02/2012
Case Number:	25155-30-0
Name:	ALKYL SODIUM SULFONATE 30% : ZEP SOAP
Other Information:	Not reported
Material Waste:	Material
Hazardous Categories 1:	CHRONIC
Hazardous Categories 2:	Not reported

Permit Number:	210458
Update Date:	11/02/2012
Case Number:	68476-34-6

C.D.R. - SHELL (Continued) **U001572208**

Name: DIESEL
Other Information: UNDERGROUND TANK 103229 T001
Material Waste: Material
Hazardous Categories 1: FIRE
Hazardous Categories 2: ACUTE

Permit Number: 210458
Update Date: 11/02/2012
Case Number: 86290-81-5
Name: PREMIUM UNLEADED
Other Information: UNDERGROUND TANK 103229 T003
Material Waste: Material
Hazardous Categories 1: FIRE
Hazardous Categories 2: ACUTE

Permit Number: 210458
Update Date: 11/02/2012
Case Number: 8006-61-9
Name: REGULAR UNLEADED
Other Information: UNDERGROUND TANK 103229 T002
Material Waste: Material
Hazardous Categories 1: FIRE
Hazardous Categories 2: ACUTE

Permit Number: 210458
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 134 AQUEOUS SOL'N W/LESS 10% ORG
Other Information: FUEL & WATER
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Permit Number: 210458
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 352 ORGANIC SOLIDS (OTHER)
Other Information: USED FUEL FILTERS & CONTAMINATED ABSORBENT
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

UST:
UST Name: UNDERGROUND TANK 103229 T001
Last Update: 2012-11-02 14:17:38
Permit Number: 210458
Tank Type: SINGLE WALL
Additional Id: RT0783, RT2567/RT3879; RT5076
Capacity Gallons: 10000
UST Contents: DIESEL
Other Content Info: DIESEL
Reg Status: ACTIVE
Remove Close Date: Not reported
Year Installed: 1982-01-01 00:00:00
Pipe Type: DOUBLE WALL
Delivery System: PRESSURE
Monitor Code: 15

C.D.R. - SHELL (Continued) **U001572208**

UST Monitor Method: SW TANK DW PRESSURE PIPE W/ SHUTOFF AND ALARM ON LLD AND CERTIFIED ATG: IN-TANK TEST MONTHLY

UST Name: UNDERGROUND TANK 103229 T002
Last Update: 2012-11-02 14:17:38
Permit Number: 210458
Tank Type: SINGLE WALL
Additional Id: RT0783, RT2567; RT5076
Capacity Gallons: 10000
UST Contents: REGULAR UNLEADED
Other Content Info: REGULAR UNLEADED
Reg Status: ACTIVE
Remove Close Date: Not reported
Year Installed: 1982-01-01 00:00:00
Pipe Type: DOUBLE WALL
Delivery System: PRESSURE
Monitor Code: 15
UST Monitor Method: SW TANK DW PRESSURE PIPE W/ SHUTOFF AND ALARM ON LLD AND CERTIFIED ATG: IN-TANK TEST MONTHLY

UST Name: UNDERGROUND TANK 103229 T003
Last Update: 2012-11-02 14:17:38
Permit Number: 210458
Tank Type: SINGLE WALL
Additional Id: RT0783, RT2567; RT5076
Capacity Gallons: 10000
UST Contents: PREMIUM UNLEADED
Other Content Info: PREMIUM UNLEADED
Reg Status: ACTIVE
Remove Close Date: Not reported
Year Installed: 1982-01-01 00:00:00
Pipe Type: DOUBLE WALL
Delivery System: PRESSURE
Monitor Code: 15
UST Monitor Method: SW TANK DW PRESSURE PIPE W/ SHUTOFF AND ALARM ON LLD AND CERTIFIED ATG: IN-TANK TEST MONTHLY

Name: G&M OIL #171
Address: 112 N RANCHO SANTA FE RD
City,State,Zip: SAN MARCOS, CA 92069
Permit Number: 210458
Business Type: 6HK28
EPA Id Number: CAL000338216
APN: 219-117-28-00
Last HMMD Inspection: 03/14/2012
Facility Telephone: 760-597-1640
Permit Status: EXPR
Permit Expiration: 10/31/2012
Date Last Updated: 11/02/2012
Facility Owner: G&M OIL CO
Facility Mailing Address: 16868 A ST
Facility Mailing City: HUNTINGTON BEACH
Facility Mailing State: CA
Facility Mailing Zip: 92647
UST Owner: G&M OIL CO
Handle Regulated Hazmat: Y

C.D.R. - SHELL (Continued) **U001572208**

Own Or Operate UST: Y
Subject To APSA: Not reported
Generate Haz Waste: Y
Treat Haz Waste: Not reported
Generate Medical Waste: Not reported

Inventory Active Permits (not SQG Medical):
Permit Number: 210458
Update Date: 11/02/2012
Case Number: 25155-30-0
Name: ALKYL SODIUM SULFONATE 30% : ZEP SOAP
Other Information: Not reported
Material Waste: Material
Hazardous Categories 1: CHRONIC
Hazardous Categories 2: Not reported

Permit Number: 210458
Update Date: 11/02/2012
Case Number: 68476-34-6
Name: DIESEL
Other Information: UNDERGROUND TANK 103229 T001
Material Waste: Material
Hazardous Categories 1: FIRE
Hazardous Categories 2: ACUTE

Permit Number: 210458
Update Date: 11/02/2012
Case Number: 86290-81-5
Name: PREMIUM UNLEADED
Other Information: UNDERGROUND TANK 103229 T003
Material Waste: Material
Hazardous Categories 1: FIRE
Hazardous Categories 2: ACUTE

Permit Number: 210458
Update Date: 11/02/2012
Case Number: 8006-61-9
Name: REGULAR UNLEADED
Other Information: UNDERGROUND TANK 103229 T002
Material Waste: Material
Hazardous Categories 1: FIRE
Hazardous Categories 2: ACUTE

Permit Number: 210458
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 134 AQUEOUS SOL'N W/LESS 10% ORG
Other Information: FUEL & WATER
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Permit Number: 210458
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 352 ORGANIC SOLIDS (OTHER)
Other Information: USED FUEL FILTERS & CONTAMINATED ABSORBENT
Material Waste: Waste

C.D.R. - SHELL (Continued) **U001572208**

Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

UST:
UST Name: UNDERGROUND TANK 103229 T001
Last Update: 2012-11-02 14:17:38
Permit Number: 210458
Tank Type: SINGLE WALL
Additional Id: RT0783, RT2567/RT3879; RT5076
Capacity Gallons: 10000
UST Contents: DIESEL
Other Content Info: DIESEL
Reg Status: ACTIVE
Remove Close Date: Not reported
Year Installed: 1982-01-01 00:00:00
Pipe Type: DOUBLE WALL
Delivery System: PRESSURE
Monitor Code: 15
UST Monitor Method: SW TANK DW PRESSURE PIPE W/ SHUTOFF AND ALARM ON LLD AND CERTIFIED ATG: IN-TANK TEST MONTHLY

UST Name: UNDERGROUND TANK 103229 T002
Last Update: 2012-11-02 14:17:38
Permit Number: 210458
Tank Type: SINGLE WALL
Additional Id: RT0783, RT2567; RT5076
Capacity Gallons: 10000
UST Contents: REGULAR UNLEADED
Other Content Info: REGULAR UNLEADED
Reg Status: ACTIVE
Remove Close Date: Not reported
Year Installed: 1982-01-01 00:00:00
Pipe Type: DOUBLE WALL
Delivery System: PRESSURE
Monitor Code: 15
UST Monitor Method: SW TANK DW PRESSURE PIPE W/ SHUTOFF AND ALARM ON LLD AND CERTIFIED ATG: IN-TANK TEST MONTHLY

UST Name: UNDERGROUND TANK 103229 T003
Last Update: 2012-11-02 14:17:38
Permit Number: 210458
Tank Type: SINGLE WALL
Additional Id: RT0783, RT2567; RT5076
Capacity Gallons: 10000
UST Contents: PREMIUM UNLEADED
Other Content Info: PREMIUM UNLEADED
Reg Status: ACTIVE
Remove Close Date: Not reported
Year Installed: 1982-01-01 00:00:00
Pipe Type: DOUBLE WALL
Delivery System: PRESSURE
Monitor Code: 15
UST Monitor Method: SW TANK DW PRESSURE PIPE W/ SHUTOFF AND ALARM ON LLD AND CERTIFIED ATG: IN-TANK TEST MONTHLY

Name: G&M OIL #171

C.D.R. - SHELL (Continued) **U001572208**

Address:	112 N RANCHO SANTA FE RD
City,State,Zip:	SAN MARCOS, CA 92069
Permit Number:	210458
Business Type:	6HK28
EPA Id Number:	CAL000338216
APN:	219-117-28-00
Last HMMD Inspection:	03/14/2012
Facility Telephone:	760-597-1640
Permit Status:	EXPR
Permit Expiration:	10/31/2012
Date Last Updated:	11/02/2012
Facility Owner:	G&M OIL CO
Facility Mailing Address:	16868 A ST
Facility Mailing City:	HUNTINGTON BEACH
Facility Mailing State:	CA
Facility Mailing Zip:	92647
UST Owner:	G&M OIL CO
Handle Regulated Hazmat:	Y
Own Or Operate UST:	Y
Subject To APSA:	Not reported
Generate Haz Waste:	Y
Treat Haz Waste:	Not reported
Generate Medical Waste:	Not reported

Inventory Active Permits (not SQG Medical):

Permit Number:	210458
Update Date:	11/02/2012
Case Number:	25155-30-0
Name:	ALKYL SODIUM SULFONATE 30% : ZEP SOAP
Other Information:	Not reported
Material Waste:	Material
Hazardous Categories 1:	CHRONIC
Hazardous Categories 2:	Not reported

Permit Number:	210458
Update Date:	11/02/2012
Case Number:	68476-34-6
Name:	DIESEL
Other Information:	UNDERGROUND TANK 103229 T001
Material Waste:	Material
Hazardous Categories 1:	FIRE
Hazardous Categories 2:	ACUTE

Permit Number:	210458
Update Date:	11/02/2012
Case Number:	86290-81-5
Name:	PREMIUM UNLEADED
Other Information:	UNDERGROUND TANK 103229 T003
Material Waste:	Material
Hazardous Categories 1:	FIRE
Hazardous Categories 2:	ACUTE

Permit Number:	210458
Update Date:	11/02/2012
Case Number:	8006-61-9
Name:	REGULAR UNLEADED
Other Information:	UNDERGROUND TANK 103229 T002
Material Waste:	Material

C.D.R. - SHELL (Continued) **U001572208**

Hazardous Categories 1: FIRE
Hazardous Categories 2: ACUTE

Permit Number: 210458
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 134 AQUEOUS SOL'N W/LESS 10% ORG
Other Information: FUEL & WATER
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Permit Number: 210458
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 352 ORGANIC SOLIDS (OTHER)
Other Information: USED FUEL FILTERS & CONTAMINATED ABSORBENT
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

UST:
UST Name: UNDERGROUND TANK 103229 T001
Last Update: 2012-11-02 14:17:38
Permit Number: 210458
Tank Type: SINGLE WALL
Additional Id: RT0783, RT2567/RT3879; RT5076
Capacity Gallons: 10000
UST Contents: DIESEL
Other Content Info: DIESEL
Reg Status: ACTIVE
Remove Close Date: Not reported
Year Installed: 1982-01-01 00:00:00
Pipe Type: DOUBLE WALL
Delivery System: PRESSURE
Monitor Code: 15
UST Monitor Method: SW TANK DW PRESSURE PIPE W/ SHUTOFF AND ALARM ON LLD AND CERTIFIED ATG: IN-TANK TEST MONTHLY

UST Name: UNDERGROUND TANK 103229 T002
Last Update: 2012-11-02 14:17:38
Permit Number: 210458
Tank Type: SINGLE WALL
Additional Id: RT0783, RT2567; RT5076
Capacity Gallons: 10000
UST Contents: REGULAR UNLEADED
Other Content Info: REGULAR UNLEADED
Reg Status: ACTIVE
Remove Close Date: Not reported
Year Installed: 1982-01-01 00:00:00
Pipe Type: DOUBLE WALL
Delivery System: PRESSURE
Monitor Code: 15
UST Monitor Method: SW TANK DW PRESSURE PIPE W/ SHUTOFF AND ALARM ON LLD AND CERTIFIED ATG: IN-TANK TEST MONTHLY

UST Name: UNDERGROUND TANK 103229 T003

C.D.R. - SHELL (Continued) **U001572208**

Last Update:	2012-11-02 14:17:38
Permit Number:	210458
Tank Type:	SINGLE WALL
Additional Id:	RT0783, RT2567; RT5076
Capacity Gallons:	10000
UST Contents:	PREMIUM UNLEADED
Other Content Info:	PREMIUM UNLEADED
Reg Status:	ACTIVE
Remove Close Date:	Not reported
Year Installed:	1982-01-01 00:00:00
Pipe Type:	DOUBLE WALL
Delivery System:	PRESSURE
Monitor Code:	15
UST Monitor Method:	SW TANK DW PRESSURE PIPE W/ SHUTOFF AND ALARM ON LLD AND CERTIFIED ATG: IN-TANK TEST MONTHLY

Name:	G&M OIL #171
Address:	112 N RANCHO SANTA FE RD
City,State,Zip:	SAN MARCOS, CA 92069
Permit Number:	210458
Business Type:	6HK28
EPA Id Number:	CAL000338216
APN:	219-117-28-00
Last HMMD Inspection:	03/14/2012
Facility Telephone:	760-597-1640
Permit Status:	EXPR
Permit Expiration:	10/31/2012
Date Last Updated:	11/02/2012
Facility Owner:	G&M OIL CO
Facility Mailing Address:	16868 A ST
Facility Mailing City:	HUNTINGTON BEACH
Facility Mailing State:	CA
Facility Mailing Zip:	92647
UST Owner:	G&M OIL CO
Handle Regulated Hazmat:	Y
Own Or Operate UST:	Y
Subject To APSA:	Not reported
Generate Haz Waste:	Y
Treat Haz Waste:	Not reported
Generate Medical Waste:	Not reported

Inventory Active Permits (not SQG Medical):

Permit Number:	210458
Update Date:	11/02/2012
Case Number:	25155-30-0
Name:	ALKYL SODIUM SULFONATE 30% : ZEP SOAP
Other Information:	Not reported
Material Waste:	Material
Hazardous Categories 1:	CHRONIC
Hazardous Categories 2:	Not reported

Permit Number:	210458
Update Date:	11/02/2012
Case Number:	68476-34-6
Name:	DIESEL
Other Information:	UNDERGROUND TANK 103229 T001
Material Waste:	Material

C.D.R. - SHELL (Continued) **U001572208**

Hazardous Categories 1: FIRE
Hazardous Categories 2: ACUTE

Permit Number: 210458
Update Date: 11/02/2012
Case Number: 86290-81-5
Name: PREMIUM UNLEADED
Other Information: UNDERGROUND TANK 103229 T003
Material Waste: Material
Hazardous Categories 1: FIRE
Hazardous Categories 2: ACUTE

Permit Number: 210458
Update Date: 11/02/2012
Case Number: 8006-61-9
Name: REGULAR UNLEADED
Other Information: UNDERGROUND TANK 103229 T002
Material Waste: Material
Hazardous Categories 1: FIRE
Hazardous Categories 2: ACUTE

Permit Number: 210458
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 134 AQUEOUS SOL'N W/LESS 10% ORG
Other Information: FUEL & WATER
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Permit Number: 210458
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 352 ORGANIC SOLIDS (OTHER)
Other Information: USED FUEL FILTERS & CONTAMINATED ABSORBENT
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

UST:
UST Name: UNDERGROUND TANK 103229 T001
Last Update: 2012-11-02 14:17:38
Permit Number: 210458
Tank Type: SINGLE WALL
Additional Id: RT0783, RT2567/RT3879; RT5076
Capacity Gallons: 10000
UST Contents: DIESEL
Other Content Info: DIESEL
Reg Status: ACTIVE
Remove Close Date: Not reported
Year Installed: 1982-01-01 00:00:00
Pipe Type: DOUBLE WALL
Delivery System: PRESSURE
Monitor Code: 15
UST Monitor Method: SW TANK DW PRESSURE PIPE W/ SHUTOFF AND ALARM ON LLD AND CERTIFIED ATG: IN-TANK TEST MONTHLY

C.D.R. - SHELL (Continued) **U001572208**

UST Name:	UNDERGROUND TANK 103229 T002
Last Update:	2012-11-02 14:17:38
Permit Number:	210458
Tank Type:	SINGLE WALL
Additional Id:	RT0783, RT2567; RT5076
Capacity Gallons:	10000
UST Contents:	REGULAR UNLEADED
Other Content Info:	REGULAR UNLEADED
Reg Status:	ACTIVE
Remove Close Date:	Not reported
Year Installed:	1982-01-01 00:00:00
Pipe Type:	DOUBLE WALL
Delivery System:	PRESSURE
Monitor Code:	15
UST Monitor Method:	SW TANK DW PRESSURE PIPE W/ SHUTOFF AND ALARM ON LLD AND CERTIFIED ATG: IN-TANK TEST MONTHLY

UST Name:	UNDERGROUND TANK 103229 T003
Last Update:	2012-11-02 14:17:38
Permit Number:	210458
Tank Type:	SINGLE WALL
Additional Id:	RT0783, RT2567; RT5076
Capacity Gallons:	10000
UST Contents:	PREMIUM UNLEADED
Other Content Info:	PREMIUM UNLEADED
Reg Status:	ACTIVE
Remove Close Date:	Not reported
Year Installed:	1982-01-01 00:00:00
Pipe Type:	DOUBLE WALL
Delivery System:	PRESSURE
Monitor Code:	15
UST Monitor Method:	SW TANK DW PRESSURE PIPE W/ SHUTOFF AND ALARM ON LLD AND CERTIFIED ATG: IN-TANK TEST MONTHLY

SWEEPS UST:

Name:	C.D.R. - SHELL
Address:	112 N RANCHO SANTA FE RD
City:	SAN MARCOS
Status:	Active
Comp Number:	3229
Number:	9
Board Of Equalization:	44-000074
Referral Date:	Not reported
Action Date:	06-26-92
Created Date:	02-29-88
Owner Tank Id:	Not reported
SWRCB Tank Id:	37-000-003229-000001
Tank Status:	A
Capacity:	10000
Active Date:	Not reported
Tank Use:	M.V. FUEL
STG:	P
Content:	REG UNLEADED
Number Of Tanks:	3

Name: C.D.R. - SHELL

C.D.R. - SHELL (Continued) **U001572208**

Address: 112 N RANCHO SANTA FE RD
City: SAN MARCOS
Status: Active
Comp Number: 3229
Number: 9
Board Of Equalization: 44-000074
Referral Date: Not reported
Action Date: 06-26-92
Created Date: 02-29-88
Owner Tank Id: Not reported
SWRCB Tank Id: 37-000-003229-000002
Tank Status: A
Capacity: 10000
Active Date: Not reported
Tank Use: M.V. FUEL
STG: P
Content: LEADED
Number Of Tanks: Not reported

Name: C.D.R. - SHELL
Address: 112 N RANCHO SANTA FE RD
City: SAN MARCOS
Status: Active
Comp Number: 3229
Number: 9
Board Of Equalization: 44-000074
Referral Date: Not reported
Action Date: 06-26-92
Created Date: 02-29-88
Owner Tank Id: Not reported
SWRCB Tank Id: 37-000-003229-000003
Tank Status: A
Capacity: 10000
Active Date: Not reported
Tank Use: M.V. FUEL
STG: P
Content: LEADED
Number Of Tanks: Not reported

HIST UST:
Name: JERRY BUTLER
Address: 112 N RANCHO SANTA FE RD
City,State,Zip: SAN MARCOS, CA 92069
File Number: 0002F304
URL: http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0002F304.pdf
Region: STATE
Facility ID: 00000014906
Facility Type: Gas Station
Other Type: Not reported
Contact Name: SAME
Telephone: 6197276521
Owner Name: SHELL OIL COMPANY
Owner Address: P.O. BOX 4848
Owner City,St,Zip: ANAHEIM, CA 92803
Total Tanks: 0003

Tank Num: 001

C.D.R. - SHELL (Continued) **U001572208**

Container Num:	1
Year Installed:	1982
Tank Capacity:	00010000
Tank Used for:	PRODUCT
Type of Fuel:	UNLEADED
Container Construction Thickness:	1/4
Leak Detection:	Stock Inventor, Groundwater Monitoring Well, 10
Tank Num:	002
Container Num:	2
Year Installed:	1982
Tank Capacity:	00010000
Tank Used for:	PRODUCT
Type of Fuel:	REGULAR
Container Construction Thickness:	1/4
Leak Detection:	Stock Inventor, Groundwater Monitoring Well, 10
Tank Num:	003
Container Num:	3
Year Installed:	1982
Tank Capacity:	00010000
Tank Used for:	PRODUCT
Type of Fuel:	PREMIUM
Container Construction Thickness:	1/4
Leak Detection:	Stock Inventor, Groundwater Monitoring Well, 10

Click here for Geo Tracker PDF:

CORTESE:

Name:	RANCHO SANTA FE EXXON
Address:	112 N RANCHO SANTA FE RD
City,State,Zip:	SAN MARCOS, CA 920691218
Region:	CORTESE
Envirostor Id:	Not reported
Global ID:	T0607302478
Site/Facility Type:	LUST CLEANUP SITE
Cleanup Status:	OPEN - REMEDIATION
Status Date:	Not reported
Site Code:	Not reported
Latitude:	Not reported
Longitude:	Not reported
Owner:	Not reported
Enf Type:	Not reported
Swat R:	Not reported
Flag:	active
Order No:	Not reported
Waste Discharge System No:	Not reported
Effective Date:	Not reported
Region 2:	Not reported
WID Id:	Not reported
Solid Waste Id No:	Not reported
Waste Management Uit Name:	Not reported
File Name:	Active Open

SAN DIEGO CO LOP:

Name:	RANCHO SANTA FE EXXON

C.D.R. - SHELL (Continued) **U001572208**

Address:	112 N RANCHO SANTA FE RD
City,State,Zip:	SAN MARCOS, CA 92069
Record ID:	DEH1998-LSAM-H03229-001
Record Status:	Completed
Opened Date:	08/20/1998
Parcel Number:	219-117-28-00
Case Type:	LOP - Local Oversight Program
Historical Name:	SHELL SERVICE STATION
SWRCB Global ID:	T0607302478
Funding:	S - LOP State Fund
Lead Agency:	RWQCB
Lead Agency Date:	07/01/2015
Census Tract:	200.18
Community:	San Marcos
Jurisdiction:	SAN MARCOS
Watershed Basin Number:	904.32
Water Purveyor:	VALLECITOS WATER DISTRICT
Fire Agency:	SAN MARCOS FIRE PROT DIST
Latitude:	33.1495334
Longitude:	-117.1990377
X MapCoord:	6271217.099
Y MapCoord:	1999396.095

Name:	RANCHO SANTA FE EXXON
Address:	112 N RANCHO SANTA FE RD
City,State,Zip:	SAN MARCOS, CA 92069
Record ID:	DEH2007-LSAM-H03229-002
Record Status:	Completed
Opened Date:	03/20/2007
Parcel Number:	219-117-28-00
Case Type:	LOP - Local Oversight Program
Historical Name:	RANCHO SANATA FE EXXON
SWRCB Global ID:	T0619784179
Funding:	S - LOP State Fund
Lead Agency:	RWQCB
Lead Agency Date:	07/01/2015
Census Tract:	200.18
Community:	San Marcos
Jurisdiction:	SAN MARCOS
Watershed Basin Number:	904.32
Water Purveyor:	VALLECITOS WATER DISTRICT
Fire Agency:	SAN MARCOS FIRE PROT DIST
Latitude:	33.1495334
Longitude:	-117.1990377
X MapCoord:	6271217.099
Y MapCoord:	1999396.095

CERS:

Name:	RANCHO SANTA FE EXXON
Address:	112 N RANCHO SANTA FE RD
City,State,Zip:	SAN MARCOS, CA 920691218
Site ID:	218725
CERS ID:	T0607302478
CERS Description:	Leaking Underground Storage Tank Cleanup Site

Affiliation:

Affiliation Type Desc:	Local Agency Caseworker

C.D.R. - SHELL (Continued) **U001572208**

Entity Name:	CAROL FENNER - SAN DIEGO COUNTY LOP
Entity Title:	Not reported
Affiliation Address:	P.O. Box 129261
Affiliation City:	San Diego
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported
Affiliation Type Desc:	Regional Board Caseworker
Entity Name:	LALITHA THOTAKURA - SAN DIEGO RWQCB (REGION 9)
Entity Title:	Not reported
Affiliation Address:	2375 NORTHSIDE DRIVE, SUITE 100
Affiliation City:	SAN DIEGO
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	6195213002

N76 **RANCHO SANTA FE EXXON** **SAN DIEGO CO. SAM** **U003789106**
West **112 N RANCHO SANTA FE RD** **UST** **N/A**
1/4-1/2 **SAN MARCOS, CA 92069** **San Diego Co. HMMD**
0.423 mi. **Cortese**
2233 ft. **Site 4 of 4 in cluster N** **CERS**

Relative:
Higher

Actual:
622 ft.

SAN DIEGO CO. SAM:

Name:	RANCHO SANTA FE EXXON
Address:	112 N.RANCHO SANTA FE RD
City,State,Zip:	SAN MARCOS, CA 92069-1218
Case Number:	H03229-002
Agency:	DEH Site Assessment & Mitigation
Funding:	**LOP - State Fund**
Facility Type:	Drinking Water Aquifer Impacted
Facility Status:	Preliminary Assessment
Date:	3/20/2007
Date Began:	3/20/2007
Name:	RANCHO SANTA FE EXXON
Address:	112 N RANCHO SANTA FE RD
City,State,Zip:	SAN MARCOS, CA 920691218
Case Number:	H03229-001
Agency:	DEH Site Assessment & Mitigation
Funding:	**LOP - State Fund**
Facility Type:	Drinking Water Aquifer Impacted
Facility Status:	Remedial Investigation
Date:	11/17/2000
Date Began:	8/20/1998

UST:

Name:	RANCHO SANTA FE EXXON
Address:	112 N RANCHO SANTA FE RD
City,State,Zip:	SAN MARCOS, CA 92069
Facility ID:	H03229
Permitting Agency:	SAN DIEGO COUNTY
Latitude:	33.15094
Longitude:	-117.19797

RANCHO SANTA FE EXXON (Continued) **U003789106**

HMMD SAN DIEGO:

Name:	RANCHO SANTA FE EXXON
Address:	112 N RANCHO SANTA FE RD
City,State,Zip:	SAN MARCOS, CA 92069
Permit Number:	103229
Business Type:	6HK28
EPA Id Number:	CAL000189853
APN:	219-117-28-00
Last HMMD Inspection:	03/03/2008
Facility Telephone:	760-597-1640
Permit Status:	CHNG
Permit Expiration:	06/30/2009
Date Last Updated:	11/02/2012
Facility Owner:	NEW WEST PETROLEUM SD 2, INC.
Facility Mailing Address:	1831 SIXTEENTH ST
Facility Mailing City:	SACRAMENTO
Facility Mailing State:	CA
Facility Mailing Zip:	95814-
UST Owner:	NEW WEST PETROLEUM LLC
Handle Regulated Hazmat:	Y
Own Or Operate UST:	Y
Subject To APSA:	Not reported
Generate Haz Waste:	Y
Treat Haz Waste:	Not reported
Generate Medical Waste:	Not reported

UST:

UST Name:	UNDERGROUND TANK 103229 T001
Last Update:	2012-11-02 14:17:38
Permit Number:	103229
Tank Type:	SINGLE WALL
Additional Id:	RT0783, RT2567/RT3879
Capacity Gallons:	10000
UST Contents:	DIESEL
Other Content Info:	DIESEL
Reg Status:	ACTIVE
Remove Close Date:	Not reported
Year Installed:	1982-01-01 00:00:00
Pipe Type:	DOUBLE WALL
Delivery System:	PRESSURE
Monitor Code:	15
UST Monitor Method:	SW TANK DW PRESSURE PIPE W/ SHUTOFF AND ALARM ON LLD AND CERTIFIED ATG: IN-TANK TEST MONTHLY

UST Name:	UNDERGROUND TANK 103229 T002
Last Update:	2012-11-02 14:17:38
Permit Number:	103229
Tank Type:	SINGLE WALL
Additional Id:	RT0783, RT2567
Capacity Gallons:	10000
UST Contents:	REGULAR UNLEADED
Other Content Info:	REGULAR UNLEADED
Reg Status:	ACTIVE
Remove Close Date:	Not reported
Year Installed:	1982-01-01 00:00:00
Pipe Type:	DOUBLE WALL
Delivery System:	PRESSURE

RANCHO SANTA FE EXXON (Continued) **U003789106**

Monitor Code: 15
UST Monitor Method: SW TANK DW PRESSURE PIPE W/ SHUTOFF AND ALARM ON LLD AND CERTIFIED ATG: IN-TANK TEST MONTHLY

UST Name: UNDERGROUND TANK 103229 T003
Last Update: 2012-11-02 14:17:38
Permit Number: 103229
Tank Type: SINGLE WALL
Additional Id: RT0783, RT2567
Capacity Gallons: 10000
UST Contents: PREMIUM UNLEADED
Other Content Info: PREMIUM UNLEADED
Reg Status: ACTIVE
Remove Close Date: Not reported
Year Installed: 1982-01-01 00:00:00
Pipe Type: DOUBLE WALL
Delivery System: PRESSURE
Monitor Code: 15
UST Monitor Method: SW TANK DW PRESSURE PIPE W/ SHUTOFF AND ALARM ON LLD AND CERTIFIED ATG: IN-TANK TEST MONTHLY

Name: RANCHO SANTA FE EXXON
Address: 112 N RANCHO SANTA FE RD
City,State,Zip: SAN MARCOS, CA 92069
Permit Number: 103229
Business Type: 6HK28
EPA Id Number: CAL000189853
APN: 219-117-28-00
Last HMMD Inspection: 03/03/2008
Facility Telephone: 760-597-1640
Permit Status: CHNG
Permit Expiration: 06/30/2009
Date Last Updated: 11/02/2012
Facility Owner: NEW WEST PETROLEUM SD 2, INC.
Facility Mailing Address: 1831 SIXTEENTH ST
Facility Mailing City: SACRAMENTO
Facility Mailing State: CA
Facility Mailing Zip: 95814-
UST Owner: NEW WEST PETROLEUM LLC
Handle Regulated Hazmat: Y
Own Or Operate UST: Y
Subject To APSA: Not reported
Generate Haz Waste: Y
Treat Haz Waste: Not reported
Generate Medical Waste: Not reported

UST:
UST Name: UNDERGROUND TANK 103229 T001
Last Update: 2012-11-02 14:17:38
Permit Number: 103229
Tank Type: SINGLE WALL
Additional Id: RT0783, RT2567/RT3879
Capacity Gallons: 10000
UST Contents: DIESEL
Other Content Info: DIESEL
Reg Status: ACTIVE
Remove Close Date: Not reported

RANCHO SANTA FE EXXON (Continued) **U003789106**

Year Installed:	1982-01-01 00:00:00
Pipe Type:	DOUBLE WALL
Delivery System:	PRESSURE
Monitor Code:	15
UST Monitor Method:	SW TANK DW PRESSURE PIPE W/ SHUTOFF AND ALARM ON LLD AND CERTIFIED ATG: IN-TANK TEST MONTHLY
UST Name:	UNDERGROUND TANK 103229 T002
Last Update:	2012-11-02 14:17:38
Permit Number:	103229
Tank Type:	SINGLE WALL
Additional Id:	RT0783, RT2567
Capacity Gallons:	10000
UST Contents:	REGULAR UNLEADED
Other Content Info:	REGULAR UNLEADED
Reg Status:	ACTIVE
Remove Close Date:	Not reported
Year Installed:	1982-01-01 00:00:00
Pipe Type:	DOUBLE WALL
Delivery System:	PRESSURE
Monitor Code:	15
UST Monitor Method:	SW TANK DW PRESSURE PIPE W/ SHUTOFF AND ALARM ON LLD AND CERTIFIED ATG: IN-TANK TEST MONTHLY
UST Name:	UNDERGROUND TANK 103229 T003
Last Update:	2012-11-02 14:17:38
Permit Number:	103229
Tank Type:	SINGLE WALL
Additional Id:	RT0783, RT2567
Capacity Gallons:	10000
UST Contents:	PREMIUM UNLEADED
Other Content Info:	PREMIUM UNLEADED
Reg Status:	ACTIVE
Remove Close Date:	Not reported
Year Installed:	1982-01-01 00:00:00
Pipe Type:	DOUBLE WALL
Delivery System:	PRESSURE
Monitor Code:	15
UST Monitor Method:	SW TANK DW PRESSURE PIPE W/ SHUTOFF AND ALARM ON LLD AND CERTIFIED ATG: IN-TANK TEST MONTHLY
Name:	RANCHO SANTA FE EXXON
Address:	112 N RANCHO SANTA FE RD
City,State,Zip:	SAN MARCOS, CA 92069
Permit Number:	103229
Business Type:	6HK28
EPA Id Number:	CAL000189853
APN:	219-117-28-00
Last HMMD Inspection:	03/03/2008
Facility Telephone:	760-597-1640
Permit Status:	CHNG
Permit Expiration:	06/30/2009
Date Last Updated:	11/02/2012
Facility Owner:	NEW WEST PETROLEUM SD 2, INC.
Facility Mailing Address:	1831 SIXTEENTH ST
Facility Mailing City:	SACRAMENTO

RANCHO SANTA FE EXXON (Continued) **U003789106**

Facility Mailing State: CA
Facility Mailing Zip: 95814-
UST Owner: NEW WEST PETROLEUM LLC
Handle Regulated Hazmat: Y
Own Or Operate UST: Y
Subject To APSA: Not reported
Generate Haz Waste: Y
Treat Haz Waste: Not reported
Generate Medical Waste: Not reported

UST:
UST Name: UNDERGROUND TANK 103229 T001
Last Update: 2012-11-02 14:17:38
Permit Number: 103229
Tank Type: SINGLE WALL
Additional Id: RT0783, RT2567/RT3879
Capacity Gallons: 10000
UST Contents: DIESEL
Other Content Info: DIESEL
Reg Status: ACTIVE
Remove Close Date: Not reported
Year Installed: 1982-01-01 00:00:00
Pipe Type: DOUBLE WALL
Delivery System: PRESSURE
Monitor Code: 15
UST Monitor Method: SW TANK DW PRESSURE PIPE W/ SHUTOFF AND ALARM ON LLD AND CERTIFIED ATG: IN-TANK TEST MONTHLY

UST Name: UNDERGROUND TANK 103229 T002
Last Update: 2012-11-02 14:17:38
Permit Number: 103229
Tank Type: SINGLE WALL
Additional Id: RT0783, RT2567
Capacity Gallons: 10000
UST Contents: REGULAR UNLEADED
Other Content Info: REGULAR UNLEADED
Reg Status: ACTIVE
Remove Close Date: Not reported
Year Installed: 1982-01-01 00:00:00
Pipe Type: DOUBLE WALL
Delivery System: PRESSURE
Monitor Code: 15
UST Monitor Method: SW TANK DW PRESSURE PIPE W/ SHUTOFF AND ALARM ON LLD AND CERTIFIED ATG: IN-TANK TEST MONTHLY

UST Name: UNDERGROUND TANK 103229 T003
Last Update: 2012-11-02 14:17:38
Permit Number: 103229
Tank Type: SINGLE WALL
Additional Id: RT0783, RT2567
Capacity Gallons: 10000
UST Contents: PREMIUM UNLEADED
Other Content Info: PREMIUM UNLEADED
Reg Status: ACTIVE
Remove Close Date: Not reported
Year Installed: 1982-01-01 00:00:00
Pipe Type: DOUBLE WALL
Delivery System: PRESSURE

RANCHO SANTA FE EXXON (Continued) **U003789106**

Monitor Code: 15
UST Monitor Method: SW TANK DW PRESSURE PIPE W/ SHUTOFF AND ALARM ON LLD AND CERTIFIED ATG: IN-TANK TEST MONTHLY

Name: RANCHO SANTA FE EXXON
Address: 112 N RANCHO SANTA FE RD
City,State,Zip: SAN MARCOS, CA 92069
Permit Number: 103229
Business Type: 6HK28
EPA Id Number: CAL000189853
APN: 219-117-28-00
Last HMMD Inspection: 03/03/2008
Facility Telephone: 760-597-1640
Permit Status: CHNG
Permit Expiration: 06/30/2009
Date Last Updated: 11/02/2012
Facility Owner: NEW WEST PETROLEUM SD 2, INC.
Facility Mailing Address: 1831 SIXTEENTH ST
Facility Mailing City: SACRAMENTO
Facility Mailing State: CA
Facility Mailing Zip: 95814-
UST Owner: NEW WEST PETROLEUM LLC
Handle Regulated Hazmat: Y
Own Or Operate UST: Y
Subject To APSA: Not reported
Generate Haz Waste: Y
Treat Haz Waste: Not reported
Generate Medical Waste: Not reported

UST:
UST Name: UNDERGROUND TANK 103229 T001
Last Update: 2012-11-02 14:17:38
Permit Number: 103229
Tank Type: SINGLE WALL
Additional Id: RT0783, RT2567/RT3879
Capacity Gallons: 10000
UST Contents: DIESEL
Other Content Info: DIESEL
Reg Status: ACTIVE
Remove Close Date: Not reported
Year Installed: 1982-01-01 00:00:00
Pipe Type: DOUBLE WALL
Delivery System: PRESSURE
Monitor Code: 15
UST Monitor Method: SW TANK DW PRESSURE PIPE W/ SHUTOFF AND ALARM ON LLD AND CERTIFIED ATG: IN-TANK TEST MONTHLY

UST Name: UNDERGROUND TANK 103229 T002
Last Update: 2012-11-02 14:17:38
Permit Number: 103229
Tank Type: SINGLE WALL
Additional Id: RT0783, RT2567
Capacity Gallons: 10000
UST Contents: REGULAR UNLEADED
Other Content Info: REGULAR UNLEADED
Reg Status: ACTIVE
Remove Close Date: Not reported

RANCHO SANTA FE EXXON (Continued) **U003789106**

Year Installed:	1982-01-01 00:00:00
Pipe Type:	DOUBLE WALL
Delivery System:	PRESSURE
Monitor Code:	15
UST Monitor Method:	SW TANK DW PRESSURE PIPE W/ SHUTOFF AND ALARM ON LLD AND CERTIFIED ATG: IN-TANK TEST MONTHLY
UST Name:	UNDERGROUND TANK 103229 T003
Last Update:	2012-11-02 14:17:38
Permit Number:	103229
Tank Type:	SINGLE WALL
Additional Id:	RT0783, RT2567
Capacity Gallons:	10000
UST Contents:	PREMIUM UNLEADED
Other Content Info:	PREMIUM UNLEADED
Reg Status:	ACTIVE
Remove Close Date:	Not reported
Year Installed:	1982-01-01 00:00:00
Pipe Type:	DOUBLE WALL
Delivery System:	PRESSURE
Monitor Code:	15
UST Monitor Method:	SW TANK DW PRESSURE PIPE W/ SHUTOFF AND ALARM ON LLD AND CERTIFIED ATG: IN-TANK TEST MONTHLY

CORTESE:

Name:	RANCHO SANTA FE EXXON
Address:	112 N.RANCHO SANTA FE RD
City,State,Zip:	SAN MARCOS, CA
Region:	CORTESE
Envirostor Id:	Not reported
Global ID:	T0619784179
Site/Facility Type:	LUST CLEANUP SITE
Cleanup Status:	OPEN - REMEDIATION
Status Date:	Not reported
Site Code:	Not reported
Latitude:	Not reported
Longitude:	Not reported
Owner:	Not reported
Enf Type:	Not reported
Swat R:	Not reported
Flag:	active
Order No:	Not reported
Waste Discharge System No:	Not reported
Effective Date:	Not reported
Region 2:	Not reported
WID Id:	Not reported
Solid Waste Id No:	Not reported
Waste Management Uit Name:	Not reported
File Name:	Active Open

CERS:

Name:	RANCHO SANTA FE EXXON
Address:	112 N.RANCHO SANTA FE RD
City,State,Zip:	SAN MARCOS, CA 92069-121
Site ID:	214650

RANCHO SANTA FE EXXON (Continued) **U003789106**

CERS ID: T0619784179
CERS Description: Leaking Underground Storage Tank Cleanup Site

Affiliation:
Affiliation Type Desc: Regional Board Caseworker
Entity Name: LALITHA THOTAKURA - SAN DIEGO RWQCB (REGION 9)
Entity Title: Not reported
Affiliation Address: 2375 NORTHSIDE DRIVE, SUITE 100
Affiliation City: SAN DIEGO
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: 6195213002

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77 **CNTY OF SD SAN MARCOS RD STATION** **LUST** **S104746029**
WSW **1579 OSAGE ST** **SAN DIEGO CO. SAM** **N/A**
1/4-1/2 **SAN MARCOS, CA 92078** **AST**
0.423 mi. **San Diego Co. HMMD**
2236 ft. **CERS HAZ WASTE**
CERS TANKS
Relative: **Cortese**
Higher **SAN DIEGO CO LOP**
CERS
Actual:
575 ft.

LUST:
Name: SAN MARCOS HDQTRS/DIVISION II
Address: 1579 OSAGE ST
City,State,Zip: SAN MARCOS, CA 920692504
Lead Agency: SAN DIEGO COUNTY LOP
Case Type: LUST Cleanup Site
Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0607302697
Global Id: T0607302697
Latitude: 33.147520455
Longitude: -117.19666087
Status: Completed - Case Closed
Status Date: 07/06/2011
Case Worker: JC
RB Case Number: 9UT3937
Local Agency: SAN DIEGO COUNTY LOP
File Location: Local Agency
Local Case Number: H04814-002
Potential Media Affect: Aquifer used for drinking water supply
Potential Contaminants of Concern: Gasoline
Site History: The Site is a maintenance/operations facility owned and operated by the County of San Diego. In May 1999, two USTs were removed and soil samples were collected and analyzed under the direction of DEH. Based on laboratory results, case H04814-002 was opened on July 8, 1999. A total of seven groundwater monitoring wells have been installed to investigate the petroleum release at this Site. The wells were monitored and sampled at various times between 2000 and 2009. The sampling events demonstrated that the benzene and MTBE dissolved plumes have not migrated offsite and are localized in the area of the former underground storage tank and dispensers. The consultant, by trend analysis, estimates that benzene in groundwater will reach MCLs by 2015. The consultant estimates that MTBE in groundwater will reach MCLs by 2022. TBA concentrations in some wells have increased due to the breakdown of MTBE; however the plume appears stable and the

CNTY OF SD SAN MARCOS RD STATION (Continued) **S104746029**

residual TBA will not adversely impact human health or the environment. DEH estimates that TBA will attenuate to action levels 10 years beyond the degradation of MTBE or by approximately 2032. The consultant estimates that the volume of petroleum hydrocarbon-impacted soil with Total Petroleum Hydrocarbon concentrations as gasoline above 100 mg/kg is approximately 35 cubic yards. A Corrective Action Plan was prepared and completed its public review period on June 4, 2010. The remedial action chosen was natural attenuation. Additionally, public notification was completed to adjacent property owners. No groundwater production wells are located on, adjacent to or within \\% mile of the Site. The closest surface water body to the Site is approximately 1.14 miles. The residual petroleum hydrocarbons in soil and groundwater do not present a significant risk to human health or the environment. DEH concurs with the recommendation of No Further Action.

LUST:
Global Id: T0607302697
Contact Type: Local Agency Caseworker
Contact Name: JAMES CLAY
Organization Name: SAN DIEGO COUNTY LOP
Address: P.O. Box 129261
City: San Diego
Email: james.clay@sdcounty.ca.gov
Phone Number: Not reported

LUST:
Global Id: T0607302697
Action Type: ENFORCEMENT
Date: 07/14/2009
Action: Letter - Notice

Global Id: T0607302697
Action Type: ENFORCEMENT
Date: 04/08/2010
Action: Technical Correspondence / Assistance / Other

Global Id: T0607302697
Action Type: ENFORCEMENT
Date: 04/15/2010
Action: Notification - Public Notice of ROD/RAP/CAP

Global Id: T0607302697
Action Type: ENFORCEMENT
Date: 04/20/2010
Action: Technical Correspondence / Assistance / Other

Global Id: T0607302697
Action Type: ENFORCEMENT
Date: 04/20/2010
Action: Technical Correspondence / Assistance / Other

Global Id: T0607302697
Action Type: ENFORCEMENT
Date: 07/06/2011
Action: Closure/No Further Action Letter

CNTY OF SD SAN MARCOS RD STATION (Continued) **S104746029**

Global Id: T0607302697
Action Type: ENFORCEMENT
Date: 02/15/2011
Action: Technical Correspondence / Assistance / Other

Global Id: T0607302697
Action Type: ENFORCEMENT
Date: 02/15/2011
Action: Technical Correspondence / Assistance / Other

Global Id: T0607302697
Action Type: ENFORCEMENT
Date: 12/21/2010
Action: Technical Correspondence / Assistance / Other

Global Id: T0607302697
Action Type: Other
Date: 05/14/1999
Action: Leak Began

Global Id: T0607302697
Action Type: Other
Date: 05/14/1999
Action: Leak Discovery

Global Id: T0607302697
Action Type: Other
Date: 05/14/1999
Action: Leak Stopped

Global Id: T0607302697
Action Type: Other
Date: 06/02/1999
Action: Leak Reported

Global Id: T0607302697
Action Type: RESPONSE
Date: 03/16/2009
Action: Corrective Action Plan / Remedial Action Plan - Addendum

Global Id: T0607302697
Action Type: ENFORCEMENT
Date: 07/08/1999
Action: Notice of Responsibility

Global Id: T0607302697
Action Type: ENFORCEMENT
Date: 12/23/2008
Action: Notification - Public Notice of ROD/RAP/CAP

LUST:
Global Id: T0607302697
Status: Open - Case Begin Date
Status Date: 05/14/1999

Global Id: T0607302697
Status: Open - Remediation

CNTY OF SD SAN MARCOS RD STATION (Continued) **S104746029**

Status Date: 10/23/2000

Global Id: T0607302697
Status: Completed - Case Closed
Status Date: 07/07/2009

Global Id: T0607302697
Status: Open - Site Assessment
Status Date: 07/07/2009

Global Id: T0607302697
Status: Completed - Case Closed
Status Date: 07/06/2011

Name: SAN MARCOS HDQTRS/DIVISION II
Address: 1579 OSAGE ST
City,State,Zip: SAN MARCOS, CA 920692504
Lead Agency: SAN DIEGO COUNTY LOP
Case Type: LUST Cleanup Site
Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0607302282
Global Id: T0607302282
Latitude: 33.1483978
Longitude: -117.1976509
Status: Completed - Case Closed
Status Date: 11/23/2004
Case Worker: JC
RB Case Number: 9UT3514
Local Agency: SAN DIEGO COUNTY LOP
File Location: Local Agency
Local Case Number: H04814-001
Potential Media Affect: Aquifer used for drinking water supply
Potential Contaminants of Concern: Diesel
Site History: Not reported

LUST:
Global Id: T0607302282
Contact Type: Local Agency Caseworker
Contact Name: JAMES CLAY
Organization Name: SAN DIEGO COUNTY LOP
Address: P.O. Box 129261
City: San Diego
Email: james.clay@sdcounty.ca.gov
Phone Number: Not reported

LUST:
Global Id: T0607302282
Action Type: ENFORCEMENT
Date: 11/23/2004
Action: Closure/No Further Action Letter

Global Id: T0607302282
Action Type: ENFORCEMENT
Date: 08/01/1997
Action: Notice of Responsibility

Global Id: T0607302282

CNTY OF SD SAN MARCOS RD STATION (Continued) **S104746029**

Action Type: Other
Date: 07/09/1997
Action: Leak Began

Global Id: T0607302282
Action Type: Other
Date: 07/09/1997
Action: Leak Discovery

Global Id: T0607302282
Action Type: Other
Date: 07/09/1997
Action: Leak Stopped

Global Id: T0607302282
Action Type: Other
Date: 07/09/1997
Action: Leak Reported

LUST:
Global Id: T0607302282
Status: Open - Case Begin Date
Status Date: 07/09/1997

Global Id: T0607302282
Status: Completed - Case Closed
Status Date: 11/23/2004

SAN DIEGO CO. SAM:
Name: SAN MARCOS HDQTRS/DIVISION II
Address: 1579 OSAGE ST
City,State,Zip: SAN MARCOS, CA 920692504
Case Number: H04814-002
Agency: DEH Site Assessment & Mitigation
Funding: **LOP - State Fund**
Facility Type: Drinking Water Aquifer Impacted
Facility Status: Remedial Investigation
Date: 5/11/2005
Date Began: 5/14/1999

Name: SAN MARCOS HDQTRS/DIVISION II
Address: 1579 OSAGE ST
City,State,Zip: SAN MARCOS, CA 920692504
Case Number: H04814-001
Agency: DEH Site Assessment & Mitigation
Funding: **LOP - Federal Fund**
Facility Type: Drinking Water Aquifer Impacted
Facility Status: Closed Case
Date: 11/23/2004
Date Began: 7/9/1997

AST:
Name: SD CNTY FLEET OPERATIONS SAN MARCOS
Address: 1579 OSAGE ST
City/Zip: SAN MARCOS,92078

CNTY OF SD SAN MARCOS RD STATION (Continued) **S104746029**

Certified Unified Program Agencies:	Not reported
Owner:	COUNTY OF SAN DIEGO
Total Gallons:	Not reported
CERSID:	10375723
Facility ID:	37-000-104814
Business Name:	DGS FLEET
Phone:	760-510-2457
Fax:	760-510-2390
Mailing Address:	5560 Overland Ave, 4th Floor, Suite 410
Mailing Address City:	SAN DIEGO
Mailing Address State:	CA
Mailing Address Zip Code:	92121
Operator Name:	COUNTY OF SAN DIEGO
Operator Phone:	760-510-2457
Owner Phone:	858-694-2151
Owner Mail Address:	5560 Overland Ave, 4th Floor, Suite 410
Owner State:	CA
Owner Zip Code:	92078
Owner Country:	United States
Property Owner Name:	COUNTY OF SAN DIEGO
Property Owner Phone:	Not reported
Property Owner Mailing Address:	5560 Overland Ave, 4th Floor, Suite 410
Property Owner City:	SAN DIEGO
Property Owner Stat :	CA
Property Owner Zip Code:	92123
Property Owner Country:	United States
EPAID:	CAL000271233

HMMD SAN DIEGO:

Name:	CNTY OF SD SAN MARCOS RD STATION
Address:	1579 OSAGE ST
City,State,Zip:	SAN MARCOS, CA 92078
Permit Number:	Not reported
Business Type:	Not reported
EPA Id Number:	CAL000314402
APN:	Not reported
Last HMMD Inspection:	Not reported
Facility Telephone:	760-510-2440
Permit Status:	Permit Renewed
Permit Expiration:	Not reported
Date Last Updated:	10/27/2020
Facility Owner:	Not reported
Facility Mailing Address:	5510 OVERLAND AVE, 4TH FLOOR, SAN DIEGO, CA 92123
Facility Mailing City:	Not reported
Facility Mailing State:	Not reported
Facility Mailing Zip:	Not reported
UST Owner:	N
Handle Regulated Hazmat:	Not reported
Own Or Operate UST:	Not reported
Subject To APSA:	Not reported
Generate Haz Waste:	Y
Treat Haz Waste:	N
Generate Medical Waste:	Not reported

Waste and Materials:

Record ID:	DEH2002-HUPFP-200955
Permit Status:	Permit Renewed

CNTY OF SD SAN MARCOS RD STATION (Continued) **S104746029**

Active Permit: Y
Child Record Id: DEH2020-HCHEM-0253591
Trade Secret: N
Hazardous Material Type: Mixture
Last Updated: 2020-10-27T00:33:13.000
Chemical Name: BIODIESEL B99
Common Name: BIODIESEL B99
Case Number: Not reported

Record ID: DEH2002-HUPFP-200955
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2016-HCHEM-0100832
Trade Secret: N
Hazardous Material Type: Mixture
Last Updated: 2016-05-28T02:32:26.000
Chemical Name: ASPHALT PRODUCTS
Common Name: ASPHALT PRODUCTS
Case Number: 8052-42-4

Record ID: DEH2002-HUPFP-200955
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2016-HCHEM-0100833
Trade Secret: N
Hazardous Material Type: Pure
Last Updated: 2016-05-28T02:32:26.000
Chemical Name: ASPHALT RELEASE - SUPERCO
Common Name: ASPHALT RELEASE - SUPERCO
Case Number: Not reported

Record ID: DEH2002-HUPFP-200955
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2016-HWAST-0082918
Trade Secret: N
Hazardous Material Type: Not reported
Last Updated: 2016-05-28T02:32:26.000
Chemical Name: SS1H/WATER WASTE
Common Name: SS1H/WATER WASTE
Case Number: Not reported

Record ID: DEH2002-HUPFP-200955
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2017-HCHEM-0142264
Trade Secret: N
Hazardous Material Type: Mixture
Last Updated: 2018-03-06T00:47:31.000
Chemical Name: ASPHALT PRODUCTS
Common Name: ASPHALT PRODUCTS
Case Number: 8052-42-4

Record ID: DEH2002-HUPFP-200955
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2017-HCHEM-0142265

CNTY OF SD SAN MARCOS RD STATION (Continued) **S104746029**

Trade Secret: N
Hazardous Material Type: Pure
Last Updated: 2018-03-06T00:47:31.000
Chemical Name: ASPHALT RELEASE - SUPERCO
Common Name: ASPHALT RELEASE - SUPERCO
Case Number: Not reported

Record ID: DEH2002-HUPFP-200955
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2017-HCHEM-0142266
Trade Secret: N
Hazardous Material Type: Mixture
Last Updated: 2018-03-06T00:47:31.000
Chemical Name: BIODIESEL B99
Common Name: BIODIESEL B99
Case Number: Not reported

Record ID: DEH2002-HUPFP-200955
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2017-HWAST-0121029
Trade Secret: N
Hazardous Material Type: Not reported
Last Updated: 2018-03-06T00:47:31.000
Chemical Name: SS1H/WATER WASTE
Common Name: SS1H/WATER WASTE
Case Number: Not reported

Record ID: DEH2002-HUPFP-200955
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2020-HCHEM-0253590
Trade Secret: N
Hazardous Material Type: Mixture
Last Updated: 2020-10-27T00:33:13.000
Chemical Name: ASPHALT PRODUCTS
Common Name: ASPHALT PRODUCTS
Case Number: 8052-42-4

Record ID: DEH2002-HUPFP-200955
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2018-HCHEM-0182716
Trade Secret: N
Hazardous Material Type: Mixture
Last Updated: 2019-12-13T05:34:55.000
Chemical Name: ASPHALT PRODUCTS
Common Name: ASPHALT PRODUCTS
Case Number: 8052-42-4

Record ID: DEH2002-HUPFP-200955
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2018-HCHEM-0182717
Trade Secret: N
Hazardous Material Type: Mixture

CNTY OF SD SAN MARCOS RD STATION (Continued) **S104746029**

Last Updated:	2019-12-13T05:34:55.000
Chemical Name:	BIODIESEL B99
Common Name:	BIODIESEL B99
Case Number:	Not reported
Record ID:	DEH2002-HUPFP-200955
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2018-HWAST-0156841
Trade Secret:	N
Hazardous Material Type:	Not reported
Last Updated:	2019-12-13T05:34:55.000
Chemical Name:	SS1H/WATER WASTE
Common Name:	SS1H/WATER WASTE
Case Number:	Not reported
Name:	CNTY OF SD SAN MARCOS RD STATION
Address:	1579 OSAGE ST
City,State,Zip:	SAN MARCOS, CA 92078
Permit Number:	200955
Business Type:	6HK70
EPA Id Number:	CAL000314402
APN:	219-093-19-00
Last HMMD Inspection:	05/04/2011
Facility Telephone:	760-510-2440
Permit Status:	OPEN
Permit Expiration:	06/30/2013
Date Last Updated:	11/02/2012
Facility Owner:	COUNTY OF SAN DIEGO - DPW
Facility Mailing Address:	5469 KEARNY VILLA RD #201
Facility Mailing City:	SAN DIEGO
Facility Mailing State:	CA
Facility Mailing Zip:	92123
UST Owner:	Not reported
Handle Regulated Hazmat:	Y
Own Or Operate UST:	Not reported
Subject To APSA:	Not reported
Generate Haz Waste:	Y
Treat Haz Waste:	Not reported
Generate Medical Waste:	Not reported

Inventory Active Permits (not SQG Medical):

Permit Number:	200955
Update Date:	11/02/2012
Case Number:	Not reported
Name:	ASPHALT RELEASE
Other Information:	SUPERCO
Material Waste:	Material
Hazardous Categories 1:	ACUTE
Hazardous Categories 2:	Not reported
Permit Number:	200955
Update Date:	11/02/2012
Case Number:	68955-27-1
Name:	SC CUTBACK ASPHALT
Other Information:	SC800
Material Waste:	Material

CNTY OF SD SAN MARCOS RD STATION (Continued) **S104746029**

Hazardous Categories 1: ACUTE
Hazardous Categories 2: Not reported

Permit Number: 200955
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 343 UNSPEC ORGANIC LIQUID MIXTURE
Other Information: DIESEL/BITUMAL/ASPHALT
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Permit Number: 200955
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 352 ORGANIC SOLIDS (OTHER)
Other Information: FUEL/OIL CONTAMINATED SOLIDS
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Permit Number: 200955
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 612 HOUSEHOLD WASTES
Other Information: ORPHANED WASTE OILS/PAINTS/SOLVENTS
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Violations Active Permits:

Permit Number: 200955
Update Date: 11/02/2012
Inspection Date: 12/21/2006
Violation Code: 6HV0135
Violation: MANIFESTS/RECEIPTS FOR 3 YEARS NOT ONSIT
Violation Citation: Hazardous waste manifests/receipts for 3 years are not maintained onsite to document proper disposal of hazardous waste. CCR 66262.40(a) & 25160.2(b)(3)
Activity: ACTIVE

Permit Number: 200955
Update Date: 11/02/2012
Inspection Date: 08/21/2008
Violation Code: 6HV1014
Violation: HMBP INCOMPLETE/NOT AMENDED
Violation Citation: HMBP is incomplete/inadequate/not amended to reflect changes. 25504, 25505(a)(2) &/or 25509(a); 25505(b); 19 CCR 2729
Activity: ACTIVE

Name: CNTY OF SD SAN MARCOS RD STATION
Address: 1579 OSAGE ST
City,State,Zip: SAN MARCOS, CA 92078
Permit Number: 200955
Business Type: 6HK70
EPA Id Number: CAL000314402

CNTY OF SD SAN MARCOS RD STATION (Continued) **S104746029**

APN:	219-093-19-00
Last HMMD Inspection:	05/04/2011
Facility Telephone:	760-510-2440
Permit Status:	OPEN
Permit Expiration:	06/30/2013
Date Last Updated:	11/02/2012
Facility Owner:	COUNTY OF SAN DIEGO - DPW
Facility Mailing Address:	5469 KEARNY VILLA RD #201
Facility Mailing City:	SAN DIEGO
Facility Mailing State:	CA
Facility Mailing Zip:	92123
UST Owner:	Not reported
Handle Regulated Hazmat:	Not reported
Own Or Operate UST:	Not reported
Subject To APSA:	Not reported
Generate Haz Waste:	Not reported
Treat Haz Waste:	Not reported
Generate Medical Waste:	Not reported

Inventory Active Permits (not SQG Medical):

Permit Number:	200955
Update Date:	11/02/2012
Case Number:	Not reported
Name:	ASPHALT RELEASE
Other Information:	SUPERCO
Material Waste:	Material
Hazardous Categories 1:	ACUTE
Hazardous Categories 2:	Not reported

Permit Number:	200955
Update Date:	11/02/2012
Case Number:	68955-27-1
Name:	SC CUTBACK ASPHALT
Other Information:	SC800
Material Waste:	Material
Hazardous Categories 1:	ACUTE
Hazardous Categories 2:	Not reported

Permit Number:	200955
Update Date:	11/02/2012
Case Number:	Not reported
Name:	WASTE 343 UNSPEC ORGANIC LIQUID MIXTURE
Other Information:	DIESEL/BITUMAL/ASPHALT
Material Waste:	Waste
Hazardous Categories 1:	Not reported
Hazardous Categories 2:	Not reported

Permit Number:	200955
Update Date:	11/02/2012
Case Number:	Not reported
Name:	WASTE 352 ORGANIC SOLIDS (OTHER)
Other Information:	FUEL/OIL CONTAMINATED SOLIDS
Material Waste:	Waste
Hazardous Categories 1:	Not reported
Hazardous Categories 2:	Not reported

Permit Number:	200955
Update Date:	11/02/2012

CNTY OF SD SAN MARCOS RD STATION (Continued) **S104746029**

Case Number:	Not reported
Name:	WASTE 612 HOUSEHOLD WASTES
Other Information:	ORPHANED WASTE OILS/PAINTS/SOLVENTS
Material Waste:	Waste
Hazardous Categories 1:	Not reported
Hazardous Categories 2:	Not reported

Violations Active Permits:

Permit Number:	200955
Update Date:	11/02/2012
Inspection Date:	12/21/2006
Violation Code:	6HV0135
Violation:	MANIFESTS/RECEIPTS FOR 3 YEARS NOT ONSIT
Violation Citation:	Hazardous waste manifests/receipts for 3 years are not maintained onsite to document proper disposal of hazardous waste. CCR 66262.40(a) & 25160.2(b)(3)
Activity:	ACTIVE

Permit Number:	200955
Update Date:	11/02/2012
Inspection Date:	08/21/2008
Violation Code:	6HV1014
Violation:	HMBP INCOMPLETE/NOT AMENDED
Violation Citation:	HMBP is incomplete/inadequate/not amended to reflect changes. 25504, 25505(a)(2) &/or 25509(a); 25505(b); 19 CCR 2729
Activity:	ACTIVE

Name:	CNTY OF SD SAN MARCOS RD STATION
Address:	1579 OSAGE ST
City,State,Zip:	SAN MARCOS, CA 92078
Permit Number:	200955
Business Type:	6HK70
EPA Id Number:	CAL000314402
APN:	219-093-19-00
Last HMMD Inspection:	05/04/2011
Facility Telephone:	760-510-2440
Permit Status:	OPEN
Permit Expiration:	06/30/2013
Date Last Updated:	11/02/2012
Facility Owner:	COUNTY OF SAN DIEGO - DPW
Facility Mailing Address:	5469 KEARNY VILLA RD #201
Facility Mailing City:	SAN DIEGO
Facility Mailing State:	CA
Facility Mailing Zip:	92123
UST Owner:	Not reported
Handle Regulated Hazmat:	Not reported
Own Or Operate UST:	Not reported
Subject To APSA:	Not reported
Generate Haz Waste:	Not reported
Treat Haz Waste:	Not reported
Generate Medical Waste:	Not reported

Inventory Active Permits (not SQG Medical):

Permit Number:	200955
Update Date:	11/02/2012
Case Number:	Not reported

CNTY OF SD SAN MARCOS RD STATION (Continued) **S104746029**

Name: ASPHALT RELEASE
Other Information: SUPERCO
Material Waste: Material
Hazardous Categories 1: ACUTE
Hazardous Categories 2: Not reported

Permit Number: 200955
Update Date: 11/02/2012
Case Number: 68955-27-1
Name: SC CUTBACK ASPHALT
Other Information: SC800
Material Waste: Material
Hazardous Categories 1: ACUTE
Hazardous Categories 2: Not reported

Permit Number: 200955
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 343 UNSPEC ORGANIC LIQUID MIXTURE
Other Information: DIESEL/BITUMAL/ASPHALT
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Permit Number: 200955
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 352 ORGANIC SOLIDS (OTHER)
Other Information: FUEL/OIL CONTAMINATED SOLIDS
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Permit Number: 200955
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 612 HOUSEHOLD WASTES
Other Information: ORPHANED WASTE OILS/PAINTS/SOLVENTS
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Violations Active Permits:
Permit Number: 200955
Update Date: 11/02/2012
Inspection Date: 12/21/2006
Violation Code: 6HV0135
Violation: MANIFESTS/RECEIPTS FOR 3 YEARS NOT ONSIT
Violation Citation: Hazardous waste manifests/receipts for 3 years are not maintained onsite to document proper disposal of hazardous waste. CCR 66262.40(a) & 25160.2(b)(3)
Activity: ACTIVE

Permit Number: 200955
Update Date: 11/02/2012
Inspection Date: 08/21/2008
Violation Code: 6HV1014

CNTY OF SD SAN MARCOS RD STATION (Continued) **S104746029**

Violation:	HMBP INCOMPLETE/NOT AMENDED
Violation Citation:	HMBP is incomplete/inadequate/not amended to reflect changes. 25504, 25505(a)(2) &/or 25509(a); 25505(b); 19 CCR 2729
Activity:	ACTIVE

Name:	SD CNTY FLEET OPERATIONS SAN MARCOS
Address:	1579 OSAGE ST
City,State,Zip:	SAN MARCOS, CA 92078
Permit Number:	104814
Business Type:	6HK24
EPA Id Number:	CAL000271233
APN:	219-093-19-00
Last HMMD Inspection:	12/27/2011
Facility Telephone:	760-510-2457
Permit Status:	OPEN
Permit Expiration:	06/30/2013
Date Last Updated:	11/02/2012
Facility Owner:	COUNTY OF SAN DIEGO - DPW
Facility Mailing Address:	5560 OVERLAND AVE, 4TH FL, STE #410
Facility Mailing City:	SAN DIEGO
Facility Mailing State:	CA
Facility Mailing Zip:	92121
UST Owner:	COUNTY OF SAN DIEGO/PUBLIC WKS
Handle Regulated Hazmat:	Y
Own Or Operate UST:	Y
Subject To APSA:	Not reported
Generate Haz Waste:	Y
Treat Haz Waste:	Not reported
Generate Medical Waste:	Not reported

Inventory Active Permits (not SQG Medical):

Permit Number:	104814
Update Date:	11/02/2012
Case Number:	74-86-2
Name:	ACETYLENE GAS
Other Information:	Not reported
Material Waste:	Material
Hazardous Categories 1:	FIRE
Hazardous Categories 2:	Not reported

Permit Number:	104814
Update Date:	11/02/2012
Case Number:	Not reported
Name:	ANTIFREEZE
Other Information:	Not reported
Material Waste:	Material
Hazardous Categories 1:	Not reported
Hazardous Categories 2:	Not reported

Permit Number:	104814
Update Date:	11/02/2012
Case Number:	7440-37-1
Name:	ARGON GAS
Other Information:	Not reported
Material Waste:	Material
Hazardous Categories 1:	PRESSURE RELEASE
Hazardous Categories 2:	Not reported

CNTY OF SD SAN MARCOS RD STATION (Continued) **S104746029**

Permit Number:	104814
Update Date:	11/02/2012
Case Number:	Not reported
Name:	ARGON/CO2
Other Information:	Not reported
Material Waste:	Material
Hazardous Categories 1:	Not reported
Hazardous Categories 2:	Not reported

Permit Number:	104814
Update Date:	11/02/2012
Case Number:	Not reported
Name:	DIESEL
Other Information:	UNDERGROUND TANK 104814 T007
Material Waste:	Material
Hazardous Categories 1:	FIRE
Hazardous Categories 2:	Not reported

Permit Number:	104814
Update Date:	11/02/2012
Case Number:	8002-05-9
Name:	OILS, LUBRICATING
Other Information:	Not reported
Material Waste:	Not reported
Hazardous Categories 1:	FIRE
Hazardous Categories 2:	CHRONIC

Permit Number:	104814
Update Date:	11/02/2012
Case Number:	7782-44-7
Name:	OXYGEN GAS
Other Information:	Not reported
Material Waste:	Material
Hazardous Categories 1:	PRESSURE RELEASE
Hazardous Categories 2:	Not reported

Permit Number:	104814
Update Date:	11/02/2012
Case Number:	Not reported
Name:	POWER KLEEN DIESEL PERFORMANCE ENHANCER
Other Information:	Not reported
Material Waste:	Material
Hazardous Categories 1:	FIRE
Hazardous Categories 2:	CHRONIC

Permit Number:	104814
Update Date:	11/02/2012
Case Number:	Not reported
Name:	REGULAR UNLEADED
Other Information:	UNDERGROUND TANK 104814 T006
Material Waste:	Material
Hazardous Categories 1:	FIRE
Hazardous Categories 2:	Not reported

Permit Number:	104814
Update Date:	11/02/2012
Case Number:	Not reported

CNTY OF SD SAN MARCOS RD STATION (Continued) **S104746029**

Name: SODIUM METASILICATE
Other Information: ZEP CONCENTRATED T'N'T TRUCK & TRAILER WASH
Material Waste: Material
Hazardous Categories 1: FIRE
Hazardous Categories 2: CHRONIC

Permit Number: 104814
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 181 INORGANIC SOLID WASTE (OTHER)
Other Information: AQUEOUS PARTS WASHER FILTERS/ ABSORBENT
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Permit Number: 104814
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 221 WASTE OIL & MIXED OIL
Other Information: ROADSIDE WASTE, WASTE OIL
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Permit Number: 104814
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 342 ORGANIC LIQUIDS W/METALS
Other Information: ANTIFREEZE
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Permit Number: 104814
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 491 UNSPECIFIED SLUDGE WASTE
Other Information: SUMP SLUDGE FM AUTO CLNG
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Permit Number: 104814
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 888 USED OIL FILTERS
Other Information: USED OIL & FUEL FILTERS
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Violations Active Permits:
Permit Number: 104814
Update Date: 11/02/2012
Inspection Date: 09/29/2005
Violation Code: 6HV1604
Violation: 2ND. CONTAINMENT NOT KEPT EMPTY

CNTY OF SD SAN MARCOS RD STATION (Continued) **S104746029**

Violation Citation:	Secondary containment not kept empty. 66265.196(b)(c), 66265.194(c)
Activity:	ACTIVE
Permit Number:	104814
Update Date:	11/02/2012
Inspection Date:	12/20/2007
Violation Code:	6HV3252
Violation:	AUDIO&VISUAL ALARMS NOT WORKING OK
Violation Citation:	All audible and/or visual alarms not functioning properly. 2632(c)(2)(B), 2636(f)(1)
Activity:	ACTIVE
Permit Number:	104814
Update Date:	11/02/2012
Inspection Date:	12/20/2007
Violation Code:	6HV3255
Violation:	SPILL CONTAIN. NOT DRY/IN GOOD CONDITION
Violation Citation:	Spill container is not in good condition and/or liquid free. 2635(b)(1), 2636(a)(1)
Activity:	ACTIVE
Permit Number:	104814
Update Date:	11/02/2012
Inspection Date:	12/20/2007
Violation Code:	6HV1601
Violation:	HAZWASTE TANKS W/O P.E. ASSESSMENT
Violation Citation:	Failed to obtain a P.E. assessment for hazardous waste tank system. 66265.191(a) or 66265.192(a)
Activity:	ACTIVE
Permit Number:	104814
Update Date:	11/02/2012
Inspection Date:	12/20/2007
Violation Code:	6HV1605
Violation:	NO DAILY TANK INSPECTION/LOG
Violation Citation:	Failed to inspect and/or document daily HW tank system inspections. 66265.195 (c)
Activity:	ACTIVE
Permit Number:	104814
Update Date:	11/02/2012
Inspection Date:	12/29/2009
Violation Code:	6HV1601
Violation:	HAZWASTE TANKS W/O P.E. ASSESSMENT
Violation Citation:	Failed to obtain a P.E. assessment for hazardous waste tank system. 66265.191(a) or 66265.192(a)
Activity:	ACTIVE
Permit Number:	104814
Update Date:	11/02/2012
Inspection Date:	12/29/2009
Violation Code:	6HV1605
Violation:	NO DAILY TANK INSPECTION/LOG
Violation Citation:	Failed to inspect and/or document daily HW tank system inspections. 66265.195 (c)
Activity:	ACTIVE

CNTY OF SD SAN MARCOS RD STATION (Continued) **S104746029**

Permit Number:	104814
Update Date:	11/02/2012
Inspection Date:	12/29/2009
Violation Code:	6HV1604
Violation:	2ND. CONTAINMENT NOT KEPT EMPTY
Violation Citation:	Secondary containment not kept empty. 66265.196(b)(c), 66265.194(c)
Activity:	ACTIVE
Permit Number:	104814
Update Date:	11/02/2012
Inspection Date:	12/29/2009
Violation Code:	6HV1012
Violation:	SPCC PLAN NOT PREPARED
Violation Citation:	Spill Prevention Countermeasures & Control Plan not prepared as required. 25270.5 (c)
Activity:	ACTIVE
Permit Number:	104814
Update Date:	11/02/2012
Inspection Date:	12/13/2010
Violation Code:	6HV0209
Violation:	WASTE ONSITE >90/180/270 DAYS
Violation Citation:	Hazardous waste is stored in excess of allowable time period (90 days) without a State permit or written variance. CCR 25201(a) & 66262.34(a)&(c)
Activity:	ACTIVE
Permit Number:	104814
Update Date:	11/02/2012
Inspection Date:	12/13/2010
Violation Code:	6HV0401
Violation:	TRAINING RECORDS UNAVAILABLE
Violation Citation:	Personnel training records are not maintained to document compliance with requirements for current and former employees. CCR 66265.16(d)&(e)
Activity:	ACTIVE
Permit Number:	104814
Update Date:	11/02/2012
Inspection Date:	12/13/2010
Violation Code:	6HV3152
Violation:	ALL MAINT/MONITOR RECORDS NOT AVAILABLE
Violation Citation:	All maintenance/monitoring/calibration/ repair records not available. 25293; 2712 (b)
Activity:	ACTIVE
Permit Number:	104814
Update Date:	11/02/2012
Inspection Date:	12/30/2008
Violation Code:	6HV3102
Violation:	OPER. PERMIT NOT CURRENT/ONSITE
Violation Citation:	Current Operating Permit not available at facility. 25284(a), 25286(a); 2712(i); 68.1003
Activity:	ACTIVE
Permit Number:	104814
Update Date:	11/02/2012

CNTY OF SD SAN MARCOS RD STATION (Continued) **S104746029**

Inspection Date:	12/30/2008
Violation Code:	6HV3193
Violation:	NO TRAINING/RECORD INCOMPLETE-NOT ONSITE
Violation Citation:	Facility employee(s) are not trained, training records are incomplete, and/or not onsite. 2715(f)
Activity:	ACTIVE
Permit Number:	104814
Update Date:	11/02/2012
Inspection Date:	12/30/2008
Violation Code:	6HV1601
Violation:	HAZWASTE TANKS W/O P.E. ASSESSMENT
Violation Citation:	Failed to obtain a P.E. assessment for hazardous waste tank system. 66265.191(a) or 66265.192(a)
Activity:	ACTIVE
Permit Number:	104814
Update Date:	11/02/2012
Inspection Date:	12/30/2008
Violation Code:	6HV1605
Violation:	NO DAILY TANK INSPECTION/LOG
Violation Citation:	Failed to inspect and/or document daily HW tank system inspections. 66265.195 (c)
Activity:	ACTIVE
Permit Number:	104814
Update Date:	11/02/2012
Inspection Date:	12/30/2008
Violation Code:	6HV0413
Violation:	ER CONTINGENCY PLAN NOT ADEQUATE
Violation Citation:	Failed to have an adequate emergency contingency plan. 66265.52
Activity:	ACTIVE

UST:

UST Name:	UNDERGROUND TANK 104814 T001
Last Update:	2012-11-02 14:17:38
Permit Number:	104814
Tank Type:	SINGLE WALL
Additional Id:	PWO 73
Capacity Gallons:	2000
UST Contents:	DIESEL
Other Content Info:	DIESEL
Reg Status:	REMOVED
Remove Close Date:	1999-06-29 00:00:00
Year Installed:	Not reported
Pipe Type:	SINGLE WALL
Delivery System:	SUCTION
Monitor Code:	01
UST Monitor Method:	SW TANK SW SUCTION PIPE W/ SIRS: SIR DATA ANALYSIS MONTHLY, TANK TEST BIENNIALLY, PIPE TEST TRIENNIALLY
UST Name:	UNDERGROUND TANK 104814 T002
Last Update:	2012-11-02 14:17:38
Permit Number:	104814
Tank Type:	SINGLE WALL
Additional Id:	PWO 74
Capacity Gallons:	8000

CNTY OF SD SAN MARCOS RD STATION (Continued) **S104746029**

UST Contents:	REGULAR UNLEADED
Other Content Info:	REGULAR UNLEADED
Reg Status:	REMOVED
Remove Close Date:	1999-06-29 00:00:00
Year Installed:	Not reported
Pipe Type:	SINGLE WALL
Delivery System:	SUCTION
Monitor Code:	01
UST Monitor Method:	SW TANK SW SUCTION PIPE W/ SIRS: SIR DATA ANALYSIS MONTHLY, TANK TEST BIENNIALLY, PIPE TEST TRIENNIALLY
UST Name:	UNDERGROUND TANK 104814 T003
Last Update:	2012-11-02 14:17:38
Permit Number:	104814
Tank Type:	SINGLE WALL
Additional Id:	PWO 75
Capacity Gallons:	3000
UST Contents:	DIESEL
Other Content Info:	DIESEL
Reg Status:	REMOVED
Remove Close Date:	1997-09-07 00:00:00
Year Installed:	1974-01-01 00:00:00
Pipe Type:	SINGLE WALL
Delivery System:	SUCTION
Monitor Code:	05
UST Monitor Method:	SW TANK DW PIPE W/ POS SHUTOFF-ALARM ON LLD W/ SIRS:SIR ANALY MONTHLY, TANK TEST BIENNIALLY, PIPE TEST ANN 0.1 G/HR OR MO 0.2 G/HR
UST Name:	UNDERGROUND TANK 104814 T004
Last Update:	2012-11-02 14:17:38
Permit Number:	104814
Tank Type:	SINGLE WALL
Additional Id:	PWO 76
Capacity Gallons:	6000
UST Contents:	DIESEL
Other Content Info:	DIESEL
Reg Status:	REMOVED
Remove Close Date:	1997-09-07 00:00:00
Year Installed:	1974-01-01 00:00:00
Pipe Type:	SINGLE WALL
Delivery System:	SUCTION
Monitor Code:	05
UST Monitor Method:	SW TANK DW PIPE W/ POS SHUTOFF-ALARM ON LLD W/ SIRS:SIR ANALY MONTHLY, TANK TEST BIENNIALLY, PIPE TEST ANN 0.1 G/HR OR MO 0.2 G/HR
UST Name:	UNDERGROUND TANK 104814 T005
Last Update:	2012-11-02 14:17:38
Permit Number:	104814
Tank Type:	SINGLE WALL
Additional Id:	AT4499
Capacity Gallons:	500
UST Contents:	Not reported
Other Content Info:	WASTE OIL
Reg Status:	REMOVED
Remove Close Date:	1999-09-13 00:00:00
Year Installed:	Not reported
Pipe Type:	SINGLE WALL

CNTY OF SD SAN MARCOS RD STATION (Continued) **S104746029**

Delivery System:	GRAVITY
Monitor Code:	99
UST Monitor Method:	OTHER - BLIND REMARK REQUIRED
UST Name:	UNDERGROUND TANK 104814 T006
Last Update:	2012-11-02 14:17:38
Permit Number:	104814
Tank Type:	DOUBLE WALL
Additional Id:	NT2081; RT 4762,RT5292
Capacity Gallons:	12000
UST Contents:	REGULAR UNLEADED
Other Content Info:	REGULAR UNLEADED
Reg Status:	ACTIVE
Remove Close Date:	Not reported
Year Installed:	Not reported
Pipe Type:	DOUBLE WALL
Delivery System:	PRESSURE
Monitor Code:	31B
UST Monitor Method:	DW TANK, DW PRESSURIZED PIPE W/ DRY TANK ANNULAR; POSITIVE SHUT-OFF & FAILSAFE, 3.0 LLD; UDC W/ MECHANICAL FLOAT
UST Name:	UNDERGROUND TANK 104814 T007
Last Update:	2012-11-02 14:17:38
Permit Number:	104814
Tank Type:	DOUBLE WALL
Additional Id:	NT2081,RT5292
Capacity Gallons:	12000
UST Contents:	DIESEL
Other Content Info:	DIESEL
Reg Status:	ACTIVE
Remove Close Date:	Not reported
Year Installed:	Not reported
Pipe Type:	DOUBLE WALL
Delivery System:	PRESSURE
Monitor Code:	31B
UST Monitor Method:	DW TANK, DW PRESSURIZED PIPE W/ DRY TANK ANNULAR; POSITIVE SHUT-OFF & FAILSAFE, 3.0 LLD; UDC W/ MECHANICAL FLOAT
Name:	CNTY OF SD SAN MARCOS RD STATION
Address:	1579 OSAGE ST
City,State,Zip:	SAN MARCOS, CA 92078
Permit Number:	200955
Business Type:	6HK70
EPA Id Number:	CAL000314402
APN:	219-093-19-00
Last HMMD Inspection:	05/04/2011
Facility Telephone:	760-510-2440
Permit Status:	OPEN
Permit Expiration:	06/30/2013
Date Last Updated:	11/02/2012
Facility Owner:	COUNTY OF SAN DIEGO - DPW
Facility Mailing Address:	5469 KEARNY VILLA RD #201
Facility Mailing City:	SAN DIEGO
Facility Mailing State:	CA
Facility Mailing Zip:	92123
UST Owner:	Not reported

CNTY OF SD SAN MARCOS RD STATION (Continued) **S104746029**

Handle Regulated Hazmat: Not reported
Own Or Operate UST: Not reported
Subject To APSA: Not reported
Generate Haz Waste: Not reported
Treat Haz Waste: Not reported
Generate Medical Waste: Not reported

Inventory Active Permits (not SQG Medical):
Permit Number: 200955
Update Date: 11/02/2012
Case Number: Not reported
Name: ASPHALT RELEASE
Other Information: SUPERCO
Material Waste: Material
Hazardous Categories 1: ACUTE
Hazardous Categories 2: Not reported

Permit Number: 200955
Update Date: 11/02/2012
Case Number: 68955-27-1
Name: SC CUTBACK ASPHALT
Other Information: SC800
Material Waste: Material
Hazardous Categories 1: ACUTE
Hazardous Categories 2: Not reported

Permit Number: 200955
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 343 UNSPEC ORGANIC LIQUID MIXTURE
Other Information: DIESEL/BITUMAL/ASPHALT
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Permit Number: 200955
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 352 ORGANIC SOLIDS (OTHER)
Other Information: FUEL/OIL CONTAMINATED SOLIDS
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Permit Number: 200955
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 612 HOUSEHOLD WASTES
Other Information: ORPHANED WASTE OILS/PAINTS/SOLVENTS
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Violations Active Permits:
Permit Number: 200955
Update Date: 11/02/2012
Inspection Date: 12/21/2006

CNTY OF SD SAN MARCOS RD STATION (Continued) **S104746029**

Violation Code: 6HV0135
Violation: MANIFESTS/RECEIPTS FOR 3 YEARS NOT ONSIT
Violation Citation: Hazardous waste manifests/receipts for 3 years are not maintained onsite to document proper disposal of hazardous waste. CCR 66262.40(a) & 25160.2(b)(3)
Activity: ACTIVE

Permit Number: 200955
Update Date: 11/02/2012
Inspection Date: 08/21/2008
Violation Code: 6HV1014
Violation: HMBP INCOMPLETE/NOT AMENDED
Violation Citation: HMBP is incomplete/inadequate/not amended to reflect changes. 25504, 25505(a)(2) &/or 25509(a); 25505(b); 19 CCR 2729
Activity: ACTIVE

Name: CNTY OF SD SAN MARCOS RD STATION
Address: 1579 OSAGE ST
City,State,Zip: SAN MARCOS, CA 92078
Permit Number: 200955
Business Type: 6HK70
EPA Id Number: CAL000314402
APN: 219-093-19-00
Last HMMD Inspection: 05/04/2011
Facility Telephone: 760-510-2440
Permit Status: OPEN
Permit Expiration: 06/30/2013
Date Last Updated: 11/02/2012
Facility Owner: COUNTY OF SAN DIEGO - DPW
Facility Mailing Address: 5469 KEARNY VILLA RD #201
Facility Mailing City: SAN DIEGO
Facility Mailing State: CA
Facility Mailing Zip: 92123
UST Owner: Not reported
Handle Regulated Hazmat: Y
Own Or Operate UST: Not reported
Subject To APSA: Not reported
Generate Haz Waste: Y
Treat Haz Waste: Not reported
Generate Medical Waste: Not reported

Inventory Active Permits (not SQG Medical):
Permit Number: 200955
Update Date: 11/02/2012
Case Number: Not reported
Name: ASPHALT RELEASE
Other Information: SUPERCO
Material Waste: Material
Hazardous Categories 1: ACUTE
Hazardous Categories 2: Not reported

Permit Number: 200955
Update Date: 11/02/2012
Case Number: 68955-27-1
Name: SC CUTBACK ASPHALT
Other Information: SC800
Material Waste: Material

CNTY OF SD SAN MARCOS RD STATION (Continued) **S104746029**

Hazardous Categories 1: ACUTE
Hazardous Categories 2: Not reported

Permit Number: 200955
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 343 UNSPEC ORGANIC LIQUID MIXTURE
Other Information: DIESEL/BITUMAL/ASPHALT
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Permit Number: 200955
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 352 ORGANIC SOLIDS (OTHER)
Other Information: FUEL/OIL CONTAMINATED SOLIDS
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Permit Number: 200955
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 612 HOUSEHOLD WASTES
Other Information: ORPHANED WASTE OILS/PAINTS/SOLVENTS
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Violations Active Permits:

Permit Number: 200955
Update Date: 11/02/2012
Inspection Date: 12/21/2006
Violation Code: 6HV0135
Violation: MANIFESTS/RECEIPTS FOR 3 YEARS NOT ONSIT
Violation Citation: Hazardous waste manifests/receipts for 3 years are not maintained onsite to document proper disposal of hazardous waste. CCR 66262.40(a) & 25160.2(b)(3)
Activity: ACTIVE

Permit Number: 200955
Update Date: 11/02/2012
Inspection Date: 08/21/2008
Violation Code: 6HV1014
Violation: HMBP INCOMPLETE/NOT AMENDED
Violation Citation: HMBP is incomplete/inadequate/not amended to reflect changes. 25504, 25505(a)(2) &/or 25509(a); 25505(b); 19 CCR 2729
Activity: ACTIVE

Name: CNTY OF SD SAN MARCOS RD STATION
Address: 1579 OSAGE ST
City,State,Zip: SAN MARCOS, CA 92078
Permit Number: 200955
Business Type: 6HK70
EPA Id Number: CAL000314402

CNTY OF SD SAN MARCOS RD STATION (Continued) **S104746029**

APN:	219-093-19-00
Last HMMD Inspection:	05/04/2011
Facility Telephone:	760-510-2440
Permit Status:	OPEN
Permit Expiration:	06/30/2013
Date Last Updated:	11/02/2012
Facility Owner:	COUNTY OF SAN DIEGO - DPW
Facility Mailing Address:	5469 KEARNY VILLA RD #201
Facility Mailing City:	SAN DIEGO
Facility Mailing State:	CA
Facility Mailing Zip:	92123
UST Owner:	Not reported
Handle Regulated Hazmat:	Not reported
Own Or Operate UST:	Not reported
Subject To APSA:	Not reported
Generate Haz Waste:	Not reported
Treat Haz Waste:	Not reported
Generate Medical Waste:	Not reported

Inventory Active Permits (not SQG Medical):

Permit Number:	200955
Update Date:	11/02/2012
Case Number:	Not reported
Name:	ASPHALT RELEASE
Other Information:	SUPERCO
Material Waste:	Material
Hazardous Categories 1:	ACUTE
Hazardous Categories 2:	Not reported

Permit Number:	200955
Update Date:	11/02/2012
Case Number:	68955-27-1
Name:	SC CUTBACK ASPHALT
Other Information:	SC800
Material Waste:	Material
Hazardous Categories 1:	ACUTE
Hazardous Categories 2:	Not reported

Permit Number:	200955
Update Date:	11/02/2012
Case Number:	Not reported
Name:	WASTE 343 UNSPEC ORGANIC LIQUID MIXTURE
Other Information:	DIESEL/BITUMAL/ASPHALT
Material Waste:	Waste
Hazardous Categories 1:	Not reported
Hazardous Categories 2:	Not reported

Permit Number:	200955
Update Date:	11/02/2012
Case Number:	Not reported
Name:	WASTE 352 ORGANIC SOLIDS (OTHER)
Other Information:	FUEL/OIL CONTAMINATED SOLIDS
Material Waste:	Waste
Hazardous Categories 1:	Not reported
Hazardous Categories 2:	Not reported

Permit Number:	200955
Update Date:	11/02/2012

CNTY OF SD SAN MARCOS RD STATION (Continued) **S104746029**

Case Number:	Not reported
Name:	WASTE 612 HOUSEHOLD WASTES
Other Information:	ORPHANED WASTE OILS/PAINTS/SOLVENTS
Material Waste:	Waste
Hazardous Categories 1:	Not reported
Hazardous Categories 2:	Not reported

Violations Active Permits:

Permit Number:	200955
Update Date:	11/02/2012
Inspection Date:	12/21/2006
Violation Code:	6HV0135
Violation:	MANIFESTS/RECEIPTS FOR 3 YEARS NOT ONSIT
Violation Citation:	Hazardous waste manifests/receipts for 3 years are not maintained onsite to document proper disposal of hazardous waste. CCR 66262.40(a) & 25160.2(b)(3)
Activity:	ACTIVE

Permit Number:	200955
Update Date:	11/02/2012
Inspection Date:	08/21/2008
Violation Code:	6HV1014
Violation:	HMBP INCOMPLETE/NOT AMENDED
Violation Citation:	HMBP is incomplete/inadequate/not amended to reflect changes. 25504, 25505(a)(2) &/or 25509(a); 25505(b); 19 CCR 2729
Activity:	ACTIVE

Name:	SD CNTY FLEET OPERATIONS SAN MARCOS
Address:	1579 OSAGE ST
City,State,Zip:	SAN MARCOS, CA 92078
Permit Number:	104814
Business Type:	6HK24
EPA Id Number:	CAL000271233
APN:	219-093-19-00
Last HMMD Inspection:	12/27/2011
Facility Telephone:	760-510-2457
Permit Status:	OPEN
Permit Expiration:	06/30/2013
Date Last Updated:	11/02/2012
Facility Owner:	COUNTY OF SAN DIEGO - DPW
Facility Mailing Address:	5560 OVERLAND AVE, 4TH FL, STE #410
Facility Mailing City:	SAN DIEGO
Facility Mailing State:	CA
Facility Mailing Zip:	92121
UST Owner:	COUNTY OF SAN DIEGO/PUBLIC WKS
Handle Regulated Hazmat:	Y
Own Or Operate UST:	Y
Subject To APSA:	Not reported
Generate Haz Waste:	Y
Treat Haz Waste:	Not reported
Generate Medical Waste:	Not reported

Inventory Active Permits (not SQG Medical):

Permit Number:	104814
Update Date:	11/02/2012
Case Number:	74-86-2

CNTY OF SD SAN MARCOS RD STATION (Continued) **S104746029**

Name: ACETYLENE GAS
Other Information: Not reported
Material Waste: Material
Hazardous Categories 1: FIRE
Hazardous Categories 2: Not reported

Permit Number: 104814
Update Date: 11/02/2012
Case Number: Not reported
Name: ANTIFREEZE
Other Information: Not reported
Material Waste: Material
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Permit Number: 104814
Update Date: 11/02/2012
Case Number: 7440-37-1
Name: ARGON GAS
Other Information: Not reported
Material Waste: Material
Hazardous Categories 1: PRESSURE RELEASE
Hazardous Categories 2: Not reported

Permit Number: 104814
Update Date: 11/02/2012
Case Number: Not reported
Name: ARGON/CO2
Other Information: Not reported
Material Waste: Material
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Permit Number: 104814
Update Date: 11/02/2012
Case Number: Not reported
Name: DIESEL
Other Information: UNDERGROUND TANK 104814 T007
Material Waste: Material
Hazardous Categories 1: FIRE
Hazardous Categories 2: Not reported

Permit Number: 104814
Update Date: 11/02/2012
Case Number: 8002-05-9
Name: OILS, LUBRICATING
Other Information: Not reported
Material Waste: Not reported
Hazardous Categories 1: FIRE
Hazardous Categories 2: CHRONIC

Permit Number: 104814
Update Date: 11/02/2012
Case Number: 7782-44-7
Name: OXYGEN GAS
Other Information: Not reported
Material Waste: Material

CNTY OF SD SAN MARCOS RD STATION (Continued) **S104746029**

Hazardous Categories 1: PRESSURE RELEASE
Hazardous Categories 2: Not reported

Permit Number: 104814
Update Date: 11/02/2012
Case Number: Not reported
Name: POWER KLEEN DIESEL PERFORMANCE ENHANCER
Other Information: Not reported
Material Waste: Material
Hazardous Categories 1: FIRE
Hazardous Categories 2: CHRONIC

Permit Number: 104814
Update Date: 11/02/2012
Case Number: Not reported
Name: REGULAR UNLEADED
Other Information: UNDERGROUND TANK 104814 T006
Material Waste: Material
Hazardous Categories 1: FIRE
Hazardous Categories 2: Not reported

Permit Number: 104814
Update Date: 11/02/2012
Case Number: Not reported
Name: SODIUM METASILICATE
Other Information: ZEP CONCENTRATED T'N'T TRUCK & TRAILER WASH
Material Waste: Material
Hazardous Categories 1: FIRE
Hazardous Categories 2: CHRONIC

Permit Number: 104814
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 181 INORGANIC SOLID WASTE (OTHER)
Other Information: AQUEOUS PARTS WASHER FILTERS/ ABSORBENT
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Permit Number: 104814
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 221 WASTE OIL & MIXED OIL
Other Information: ROADSIDE WASTE, WASTE OIL
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Permit Number: 104814
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 342 ORGANIC LIQUIDS W/METALS
Other Information: ANTIFREEZE
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

CNTY OF SD SAN MARCOS RD STATION (Continued) **S104746029**

Permit Number: 104814
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 491 UNSPECIFIED SLUDGE WASTE
Other Information: SUMP SLUDGE FM AUTO CLNG
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Permit Number: 104814
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 888 USED OIL FILTERS
Other Information: USED OIL & FUEL FILTERS
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Violations Active Permits:
Permit Number: 104814
Update Date: 11/02/2012
Inspection Date: 09/29/2005
Violation Code: 6HV1604
Violation: 2ND. CONTAINMENT NOT KEPT EMPTY
Violation Citation: Secondary containment not kept empty. 66265.196(b)(c), 66265.194(c)
Activity: ACTIVE

Permit Number: 104814
Update Date: 11/02/2012
Inspection Date: 12/20/2007
Violation Code: 6HV3252
Violation: AUDIO&VISUAL ALARMS NOT WORKING OK
Violation Citation: All audible and/or visual alarms not functioning properly. 2632(c)(2)(B), 2636(f)(1)
Activity: ACTIVE

Permit Number: 104814
Update Date: 11/02/2012
Inspection Date: 12/20/2007
Violation Code: 6HV3255
Violation: SPILL CONTAIN. NOT DRY/IN GOOD CONDITION
Violation Citation: Spill container is not in good condition and/or liquid free. 2635(b)(1), 2636(a)(1)
Activity: ACTIVE

Permit Number: 104814
Update Date: 11/02/2012
Inspection Date: 12/20/2007
Violation Code: 6HV1601
Violation: HAZWASTE TANKS W/O P.E. ASSESSMENT
Violation Citation: Failed to obtain a P.E. assessment for hazardous waste tank system. 66265.191(a) or 66265.192(a)
Activity: ACTIVE

Permit Number: 104814
Update Date: 11/02/2012
Inspection Date: 12/20/2007

CNTY OF SD SAN MARCOS RD STATION (Continued) **S104746029**

Violation Code:	6HV1605
Violation:	NO DAILY TANK INSPECTION/LOG
Violation Citation:	Failed to inspect and/or document daily HW tank system inspections. 66265.195 (c)
Activity:	ACTIVE
Permit Number:	104814
Update Date:	11/02/2012
Inspection Date:	12/29/2009
Violation Code:	6HV1601
Violation:	HAZWASTE TANKS W/O P.E. ASSESSMENT
Violation Citation:	Failed to obtain a P.E. assessment for hazardous waste tank system. 66265.191(a) or 66265.192(a)
Activity:	ACTIVE
Permit Number:	104814
Update Date:	11/02/2012
Inspection Date:	12/29/2009
Violation Code:	6HV1605
Violation:	NO DAILY TANK INSPECTION/LOG
Violation Citation:	Failed to inspect and/or document daily HW tank system inspections. 66265.195 (c)
Activity:	ACTIVE
Permit Number:	104814
Update Date:	11/02/2012
Inspection Date:	12/29/2009
Violation Code:	6HV1604
Violation:	2ND. CONTAINMENT NOT KEPT EMPTY
Violation Citation:	Secondary containment not kept empty. 66265.196(b)(c), 66265.194(c)
Activity:	ACTIVE
Permit Number:	104814
Update Date:	11/02/2012
Inspection Date:	12/29/2009
Violation Code:	6HV1012
Violation:	SPCC PLAN NOT PREPARED
Violation Citation:	Spill Prevention Countermeasures & Control Plan not prepared as required. 25270.5 (c)
Activity:	ACTIVE
Permit Number:	104814
Update Date:	11/02/2012
Inspection Date:	12/13/2010
Violation Code:	6HV0209
Violation:	WASTE ONSITE >90/180/270 DAYS
Violation Citation:	Hazardous waste is stored in excess of allowable time period (90 days) without a State permit or written variance. CCR 25201(a) & 66262.34(a)&(c)
Activity:	ACTIVE
Permit Number:	104814
Update Date:	11/02/2012
Inspection Date:	12/13/2010
Violation Code:	6HV0401
Violation:	TRAINING RECORDS UNAVAILABLE
Violation Citation:	Personnel training records are not maintained to document compliance

CNTY OF SD SAN MARCOS RD STATION (Continued) **S104746029**

	with requirements for current and former employees. CCR 66265.16(d)&(e)
Activity:	ACTIVE
Permit Number:	104814
Update Date:	11/02/2012
Inspection Date:	12/13/2010
Violation Code:	6HV3152
Violation:	ALL MAINT/MONITOR RECORDS NOT AVAILABLE
Violation Citation:	All maintenance/monitoring/calibration/ repair records not available. 25293; 2712 (b)
Activity:	ACTIVE
Permit Number:	104814
Update Date:	11/02/2012
Inspection Date:	12/30/2008
Violation Code:	6HV3102
Violation:	OPER. PERMIT NOT CURRENT/ONSITE
Violation Citation:	Current Operating Permit not available at facility. 25284(a), 25286(a); 2712(i); 68.1003
Activity:	ACTIVE
Permit Number:	104814
Update Date:	11/02/2012
Inspection Date:	12/30/2008
Violation Code:	6HV3193
Violation:	NO TRAINING/RECORD INCOMPLETE-NOT ONSITE
Violation Citation:	Facility employee(s) are not trained, training records are incomplete, and/or not onsite. 2715(f)
Activity:	ACTIVE
Permit Number:	104814
Update Date:	11/02/2012
Inspection Date:	12/30/2008
Violation Code:	6HV1601
Violation:	HAZWASTE TANKS W/O P.E. ASSESSMENT
Violation Citation:	Failed to obtain a P.E. assessment for hazardous waste tank system. 66265.191(a) or 66265.192(a)
Activity:	ACTIVE
Permit Number:	104814
Update Date:	11/02/2012
Inspection Date:	12/30/2008
Violation Code:	6HV1605
Violation:	NO DAILY TANK INSPECTION/LOG
Violation Citation:	Failed to inspect and/or document daily HW tank system inspections. 66265.195 (c)
Activity:	ACTIVE
Permit Number:	104814
Update Date:	11/02/2012
Inspection Date:	12/30/2008
Violation Code:	6HV0413
Violation:	ER CONTINGENCY PLAN NOT ADEQUATE
Violation Citation:	Failed to have an adequate emergency contingency plan. 66265.52
Activity:	ACTIVE

CNTY OF SD SAN MARCOS RD STATION (Continued) **S104746029**

UST:

UST Name:	UNDERGROUND TANK 104814 T001
Last Update:	2012-11-02 14:17:38
Permit Number:	104814
Tank Type:	SINGLE WALL
Additional Id:	PWO 73
Capacity Gallons:	2000
UST Contents:	DIESEL
Other Content Info:	DIESEL
Reg Status:	REMOVED
Remove Close Date:	1999-06-29 00:00:00
Year Installed:	Not reported
Pipe Type:	SINGLE WALL
Delivery System:	SUCTION
Monitor Code:	01
UST Monitor Method:	SW TANK SW SUCTION PIPE W/ SIRS: SIR DATA ANALYSIS MONTHLY, TANK TEST BIENNIALLY, PIPE TEST TRIENNIALLY

UST Name:	UNDERGROUND TANK 104814 T002
Last Update:	2012-11-02 14:17:38
Permit Number:	104814
Tank Type:	SINGLE WALL
Additional Id:	PWO 74
Capacity Gallons:	8000
UST Contents:	REGULAR UNLEADED
Other Content Info:	REGULAR UNLEADED
Reg Status:	REMOVED
Remove Close Date:	1999-06-29 00:00:00
Year Installed:	Not reported
Pipe Type:	SINGLE WALL
Delivery System:	SUCTION
Monitor Code:	01
UST Monitor Method:	SW TANK SW SUCTION PIPE W/ SIRS: SIR DATA ANALYSIS MONTHLY, TANK TEST BIENNIALLY, PIPE TEST TRIENNIALLY

UST Name:	UNDERGROUND TANK 104814 T003
Last Update:	2012-11-02 14:17:38
Permit Number:	104814
Tank Type:	SINGLE WALL
Additional Id:	PWO 75
Capacity Gallons:	3000
UST Contents:	DIESEL
Other Content Info:	DIESEL
Reg Status:	REMOVED
Remove Close Date:	1997-09-07 00:00:00
Year Installed:	1974-01-01 00:00:00
Pipe Type:	SINGLE WALL
Delivery System:	SUCTION
Monitor Code:	05
UST Monitor Method:	SW TANK DW PIPE W/ POS SHUTOFF-ALARM ON LLD W/ SIRS:SIR ANALY MONTHLY, TANK TEST BIENNIALLY, PIPE TEST ANN 0.1 G/HR OR MO 0.2 G/HR

UST Name:	UNDERGROUND TANK 104814 T004
Last Update:	2012-11-02 14:17:38
Permit Number:	104814
Tank Type:	SINGLE WALL
Additional Id:	PWO 76

CNTY OF SD SAN MARCOS RD STATION (Continued) **S104746029**

Capacity Gallons:	6000
UST Contents:	DIESEL
Other Content Info:	DIESEL
Reg Status:	REMOVED
Remove Close Date:	1997-09-07 00:00:00
Year Installed:	1974-01-01 00:00:00
Pipe Type:	SINGLE WALL
Delivery System:	SUCTION
Monitor Code:	05
UST Monitor Method:	SW TANK DW PIPE W/ POS SHUTOFF-ALARM ON LLD W/ SIRS:SIR ANALY MONTHLY, TANK TEST BIENNIALLY, PIPE TEST ANN 0.1 G/HR OR MO 0.2 G/HR
UST Name:	UNDERGROUND TANK 104814 T005
Last Update:	2012-11-02 14:17:38
Permit Number:	104814
Tank Type:	SINGLE WALL
Additional Id:	AT4499
Capacity Gallons:	500
UST Contents:	Not reported
Other Content Info:	WASTE OIL
Reg Status:	REMOVED
Remove Close Date:	1999-09-13 00:00:00
Year Installed:	Not reported
Pipe Type:	SINGLE WALL
Delivery System:	GRAVITY
Monitor Code:	99
UST Monitor Method:	OTHER - BLIND REMARK REQUIRED
UST Name:	UNDERGROUND TANK 104814 T006
Last Update:	2012-11-02 14:17:38
Permit Number:	104814
Tank Type:	DOUBLE WALL
Additional Id:	NT2081; RT 4762,RT5292
Capacity Gallons:	12000
UST Contents:	REGULAR UNLEADED
Other Content Info:	REGULAR UNLEADED
Reg Status:	ACTIVE
Remove Close Date:	Not reported
Year Installed:	Not reported
Pipe Type:	DOUBLE WALL
Delivery System:	PRESSURE
Monitor Code:	31B
UST Monitor Method:	DW TANK, DW PRESSURIZED PIPE W/ DRY TANK ANNULAR; POSITIVE SHUT-OFF & FAILSAFE, 3.0 LLD; UDC W/ MECHANICAL FLOAT
UST Name:	UNDERGROUND TANK 104814 T007
Last Update:	2012-11-02 14:17:38
Permit Number:	104814
Tank Type:	DOUBLE WALL
Additional Id:	NT2081,RT5292
Capacity Gallons:	12000
UST Contents:	DIESEL
Other Content Info:	DIESEL
Reg Status:	ACTIVE
Remove Close Date:	Not reported
Year Installed:	Not reported
Pipe Type:	DOUBLE WALL

CNTY OF SD SAN MARCOS RD STATION (Continued) **S104746029**

Delivery System:	PRESSURE
Monitor Code:	31B
UST Monitor Method:	DW TANK, DW PRESSURIZED PIPE W/ DRY TANK ANNULAR; POSITIVE SHUT-OFF & FAILSAFE, 3.0 LLD; UDC W/ MECHANICAL FLOAT

Name:	SD CNTY FLEET OPERATIONS SAN MARCOS
Address:	1579 OSAGE ST
City,State,Zip:	SAN MARCOS, CA 92078
Permit Number:	104814
Business Type:	6HK24
EPA Id Number:	CAL000271233
APN:	219-093-19-00
Last HMMD Inspection:	12/27/2011
Facility Telephone:	760-510-2457
Permit Status:	OPEN
Permit Expiration:	06/30/2013
Date Last Updated:	11/02/2012
Facility Owner:	COUNTY OF SAN DIEGO - DPW
Facility Mailing Address:	5560 OVERLAND AVE, 4TH FL, STE #410
Facility Mailing City:	SAN DIEGO
Facility Mailing State:	CA
Facility Mailing Zip:	92121
UST Owner:	COUNTY OF SAN DIEGO/PUBLIC WKS
Handle Regulated Hazmat:	Y
Own Or Operate UST:	Y
Subject To APSA:	Y
Generate Haz Waste:	Y
Treat Haz Waste:	Not reported
Generate Medical Waste:	Not reported

Inventory Active Permits (not SQG Medical):

Permit Number:	104814
Update Date:	11/02/2012
Case Number:	74-86-2
Name:	ACETYLENE GAS
Other Information:	Not reported
Material Waste:	Material
Hazardous Categories 1:	FIRE
Hazardous Categories 2:	Not reported

Permit Number:	104814
Update Date:	11/02/2012
Case Number:	Not reported
Name:	ANTIFREEZE
Other Information:	Not reported
Material Waste:	Material
Hazardous Categories 1:	Not reported
Hazardous Categories 2:	Not reported

Permit Number:	104814
Update Date:	11/02/2012
Case Number:	7440-37-1
Name:	ARGON GAS
Other Information:	Not reported
Material Waste:	Material
Hazardous Categories 1:	PRESSURE RELEASE
Hazardous Categories 2:	Not reported

CNTY OF SD SAN MARCOS RD STATION (Continued) **S104746029**

Permit Number:	104814
Update Date:	11/02/2012
Case Number:	Not reported
Name:	ARGON/CO2
Other Information:	Not reported
Material Waste:	Material
Hazardous Categories 1:	Not reported
Hazardous Categories 2:	Not reported

Permit Number:	104814
Update Date:	11/02/2012
Case Number:	Not reported
Name:	DIESEL
Other Information:	UNDERGROUND TANK 104814 T007
Material Waste:	Material
Hazardous Categories 1:	FIRE
Hazardous Categories 2:	Not reported

Permit Number:	104814
Update Date:	11/02/2012
Case Number:	8002-05-9
Name:	OILS, LUBRICATING
Other Information:	Not reported
Material Waste:	Not reported
Hazardous Categories 1:	FIRE
Hazardous Categories 2:	CHRONIC

Permit Number:	104814
Update Date:	11/02/2012
Case Number:	7782-44-7
Name:	OXYGEN GAS
Other Information:	Not reported
Material Waste:	Material
Hazardous Categories 1:	PRESSURE RELEASE
Hazardous Categories 2:	Not reported

Permit Number:	104814
Update Date:	11/02/2012
Case Number:	Not reported
Name:	POWER KLEEN DIESEL PERFORMANCE ENHANCER
Other Information:	Not reported
Material Waste:	Material
Hazardous Categories 1:	FIRE
Hazardous Categories 2:	CHRONIC

Permit Number:	104814
Update Date:	11/02/2012
Case Number:	Not reported
Name:	REGULAR UNLEADED
Other Information:	UNDERGROUND TANK 104814 T006
Material Waste:	Material
Hazardous Categories 1:	FIRE
Hazardous Categories 2:	Not reported

Permit Number:	104814
Update Date:	11/02/2012
Case Number:	Not reported

CNTY OF SD SAN MARCOS RD STATION (Continued) **S104746029**

Name: SODIUM METASILICATE
Other Information: ZEP CONCENTRATED T'N'T TRUCK & TRAILER WASH
Material Waste: Material
Hazardous Categories 1: FIRE
Hazardous Categories 2: CHRONIC

Permit Number: 104814
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 181 INORGANIC SOLID WASTE (OTHER)
Other Information: AQUEOUS PARTS WASHER FILTERS/ ABSORBENT
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Permit Number: 104814
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 221 WASTE OIL & MIXED OIL
Other Information: ROADSIDE WASTE, WASTE OIL
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Permit Number: 104814
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 342 ORGANIC LIQUIDS W/METALS
Other Information: ANTIFREEZE
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Permit Number: 104814
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 491 UNSPECIFIED SLUDGE WASTE
Other Information: SUMP SLUDGE FM AUTO CLNG
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Permit Number: 104814
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 888 USED OIL FILTERS
Other Information: USED OIL & FUEL FILTERS
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Violations Active Permits:
Permit Number: 104814
Update Date: 11/02/2012
Inspection Date: 09/29/2005
Violation Code: 6HV1604
Violation: 2ND. CONTAINMENT NOT KEPT EMPTY

CNTY OF SD SAN MARCOS RD STATION (Continued) **S104746029**

Violation Citation:	Secondary containment not kept empty. 66265.196(b)(c), 66265.194(c)
Activity:	ACTIVE
Permit Number:	104814
Update Date:	11/02/2012
Inspection Date:	12/20/2007
Violation Code:	6HV3252
Violation:	AUDIO&VISUAL ALARMS NOT WORKING OK
Violation Citation:	All audible and/or visual alarms not functioning properly. 2632(c)(2)(B), 2636(f)(1)
Activity:	ACTIVE
Permit Number:	104814
Update Date:	11/02/2012
Inspection Date:	12/20/2007
Violation Code:	6HV3255
Violation:	SPILL CONTAIN. NOT DRY/IN GOOD CONDITION
Violation Citation:	Spill container is not in good condition and/or liquid free. 2635(b)(1), 2636(a)(1)
Activity:	ACTIVE
Permit Number:	104814
Update Date:	11/02/2012
Inspection Date:	12/20/2007
Violation Code:	6HV1601
Violation:	HAZWASTE TANKS W/O P.E. ASSESSMENT
Violation Citation:	Failed to obtain a P.E. assessment for hazardous waste tank system. 66265.191(a) or 66265.192(a)
Activity:	ACTIVE
Permit Number:	104814
Update Date:	11/02/2012
Inspection Date:	12/20/2007
Violation Code:	6HV1605
Violation:	NO DAILY TANK INSPECTION/LOG
Violation Citation:	Failed to inspect and/or document daily HW tank system inspections. 66265.195 (c)
Activity:	ACTIVE
Permit Number:	104814
Update Date:	11/02/2012
Inspection Date:	12/29/2009
Violation Code:	6HV1601
Violation:	HAZWASTE TANKS W/O P.E. ASSESSMENT
Violation Citation:	Failed to obtain a P.E. assessment for hazardous waste tank system. 66265.191(a) or 66265.192(a)
Activity:	ACTIVE
Permit Number:	104814
Update Date:	11/02/2012
Inspection Date:	12/29/2009
Violation Code:	6HV1605
Violation:	NO DAILY TANK INSPECTION/LOG
Violation Citation:	Failed to inspect and/or document daily HW tank system inspections. 66265.195 (c)
Activity:	ACTIVE

CNTY OF SD SAN MARCOS RD STATION (Continued) **S104746029**

Permit Number:	104814
Update Date:	11/02/2012
Inspection Date:	12/29/2009
Violation Code:	6HV1604
Violation:	2ND. CONTAINMENT NOT KEPT EMPTY
Violation Citation:	Secondary containment not kept empty. 66265.196(b)(c), 66265.194(c)
Activity:	ACTIVE
Permit Number:	104814
Update Date:	11/02/2012
Inspection Date:	12/29/2009
Violation Code:	6HV1012
Violation:	SPCC PLAN NOT PREPARED
Violation Citation:	Spill Prevention Countermeasures & Control Plan not prepared as required. 25270.5 (c)
Activity:	ACTIVE
Permit Number:	104814
Update Date:	11/02/2012
Inspection Date:	12/13/2010
Violation Code:	6HV0209
Violation:	WASTE ONSITE >90/180/270 DAYS
Violation Citation:	Hazardous waste is stored in excess of allowable time period (90 days) without a State permit or written variance. CCR 25201(a) & 66262.34(a)&(c)
Activity:	ACTIVE
Permit Number:	104814
Update Date:	11/02/2012
Inspection Date:	12/13/2010
Violation Code:	6HV0401
Violation:	TRAINING RECORDS UNAVAILABLE
Violation Citation:	Personnel training records are not maintained to document compliance with requirements for current and former employees. CCR 66265.16(d)&(e)
Activity:	ACTIVE
Permit Number:	104814
Update Date:	11/02/2012
Inspection Date:	12/13/2010
Violation Code:	6HV3152
Violation:	ALL MAINT/MONITOR RECORDS NOT AVAILABLE
Violation Citation:	All maintenance/monitoring/calibration/ repair records not available. 25293; 2712 (b)
Activity:	ACTIVE
Permit Number:	104814
Update Date:	11/02/2012
Inspection Date:	12/30/2008
Violation Code:	6HV3102
Violation:	OPER. PERMIT NOT CURRENT/ONSITE
Violation Citation:	Current Operating Permit not available at facility. 25284(a), 25286(a); 2712(i); 68.1003
Activity:	ACTIVE
Permit Number:	104814
Update Date:	11/02/2012

CNTY OF SD SAN MARCOS RD STATION (Continued) **S104746029**

Inspection Date:	12/30/2008
Violation Code:	6HV3193
Violation:	NO TRAINING/RECORD INCOMPLETE-NOT ONSITE
Violation Citation:	Facility employee(s) are not trained, training records are incomplete, and/or not onsite. 2715(f)
Activity:	ACTIVE
Permit Number:	104814
Update Date:	11/02/2012
Inspection Date:	12/30/2008
Violation Code:	6HV1601
Violation:	HAZWASTE TANKS W/O P.E. ASSESSMENT
Violation Citation:	Failed to obtain a P.E. assessment for hazardous waste tank system. 66265.191(a) or 66265.192(a)
Activity:	ACTIVE
Permit Number:	104814
Update Date:	11/02/2012
Inspection Date:	12/30/2008
Violation Code:	6HV1605
Violation:	NO DAILY TANK INSPECTION/LOG
Violation Citation:	Failed to inspect and/or document daily HW tank system inspections. 66265.195 (c)
Activity:	ACTIVE
Permit Number:	104814
Update Date:	11/02/2012
Inspection Date:	12/30/2008
Violation Code:	6HV0413
Violation:	ER CONTINGENCY PLAN NOT ADEQUATE
Violation Citation:	Failed to have an adequate emergency contingency plan. 66265.52
Activity:	ACTIVE

UST:

UST Name:	UNDERGROUND TANK 104814 T001
Last Update:	2012-11-02 14:17:38
Permit Number:	104814
Tank Type:	SINGLE WALL
Additional Id:	PWO 73
Capacity Gallons:	2000
UST Contents:	DIESEL
Other Content Info:	DIESEL
Reg Status:	REMOVED
Remove Close Date:	1999-06-29 00:00:00
Year Installed:	Not reported
Pipe Type:	SINGLE WALL
Delivery System:	SUCTION
Monitor Code:	01
UST Monitor Method:	SW TANK SW SUCTION PIPE W/ SIRS: SIR DATA ANALYSIS MONTHLY, TANK TEST BIENNIALLY, PIPE TEST TRIENNIALLY
UST Name:	UNDERGROUND TANK 104814 T002
Last Update:	2012-11-02 14:17:38
Permit Number:	104814
Tank Type:	SINGLE WALL
Additional Id:	PWO 74
Capacity Gallons:	8000

CNTY OF SD SAN MARCOS RD STATION (Continued) **S104746029**

UST Contents:	REGULAR UNLEADED
Other Content Info:	REGULAR UNLEADED
Reg Status:	REMOVED
Remove Close Date:	1999-06-29 00:00:00
Year Installed:	Not reported
Pipe Type:	SINGLE WALL
Delivery System:	SUCTION
Monitor Code:	01
UST Monitor Method:	SW TANK SW SUCTION PIPE W/ SIRS: SIR DATA ANALYSIS MONTHLY, TANK TEST BIENNIALLY, PIPE TEST TRIENNIALLY
UST Name:	UNDERGROUND TANK 104814 T003
Last Update:	2012-11-02 14:17:38
Permit Number:	104814
Tank Type:	SINGLE WALL
Additional Id:	PWO 75
Capacity Gallons:	3000
UST Contents:	DIESEL
Other Content Info:	DIESEL
Reg Status:	REMOVED
Remove Close Date:	1997-09-07 00:00:00
Year Installed:	1974-01-01 00:00:00
Pipe Type:	SINGLE WALL
Delivery System:	SUCTION
Monitor Code:	05
UST Monitor Method:	SW TANK DW PIPE W/ POS SHUTOFF-ALARM ON LLD W/ SIRS:SIR ANALY MONTHLY, TANK TEST BIENNIALLY, PIPE TEST ANN 0.1 G/HR OR MO 0.2 G/HR
UST Name:	UNDERGROUND TANK 104814 T004
Last Update:	2012-11-02 14:17:38
Permit Number:	104814
Tank Type:	SINGLE WALL
Additional Id:	PWO 76
Capacity Gallons:	6000
UST Contents:	DIESEL
Other Content Info:	DIESEL
Reg Status:	REMOVED
Remove Close Date:	1997-09-07 00:00:00
Year Installed:	1974-01-01 00:00:00
Pipe Type:	SINGLE WALL
Delivery System:	SUCTION
Monitor Code:	05
UST Monitor Method:	SW TANK DW PIPE W/ POS SHUTOFF-ALARM ON LLD W/ SIRS:SIR ANALY MONTHLY, TANK TEST BIENNIALLY, PIPE TEST ANN 0.1 G/HR OR MO 0.2 G/HR
UST Name:	UNDERGROUND TANK 104814 T005
Last Update:	2012-11-02 14:17:38
Permit Number:	104814
Tank Type:	SINGLE WALL
Additional Id:	AT4499
Capacity Gallons:	500
UST Contents:	Not reported
Other Content Info:	WASTE OIL
Reg Status:	REMOVED
Remove Close Date:	1999-09-13 00:00:00
Year Installed:	Not reported
Pipe Type:	SINGLE WALL

CNTY OF SD SAN MARCOS RD STATION (Continued) **S104746029**

Delivery System:	GRAVITY
Monitor Code:	99
UST Monitor Method:	OTHER - BLIND REMARK REQUIRED
UST Name:	UNDERGROUND TANK 104814 T006
Last Update:	2012-11-02 14:17:38
Permit Number:	104814
Tank Type:	DOUBLE WALL
Additional Id:	NT2081; RT 4762,RT5292
Capacity Gallons:	12000
UST Contents:	REGULAR UNLEADED
Other Content Info:	REGULAR UNLEADED
Reg Status:	ACTIVE
Remove Close Date:	Not reported
Year Installed:	Not reported
Pipe Type:	DOUBLE WALL
Delivery System:	PRESSURE
Monitor Code:	31B
UST Monitor Method:	DW TANK, DW PRESSURIZED PIPE W/ DRY TANK ANNULAR; POSITIVE SHUT-OFF & FAILSAFE, 3.0 LLD; UDC W/ MECHANICAL FLOAT
UST Name:	UNDERGROUND TANK 104814 T007
Last Update:	2012-11-02 14:17:38
Permit Number:	104814
Tank Type:	DOUBLE WALL
Additional Id:	NT2081,RT5292
Capacity Gallons:	12000
UST Contents:	DIESEL
Other Content Info:	DIESEL
Reg Status:	ACTIVE
Remove Close Date:	Not reported
Year Installed:	Not reported
Pipe Type:	DOUBLE WALL
Delivery System:	PRESSURE
Monitor Code:	31B
UST Monitor Method:	DW TANK, DW PRESSURIZED PIPE W/ DRY TANK ANNULAR; POSITIVE SHUT-OFF & FAILSAFE, 3.0 LLD; UDC W/ MECHANICAL FLOAT
Name:	SD CNTY FLEET OPERATIONS SAN MARCOS
Address:	1579 OSAGE ST
City,State,Zip:	SAN MARCOS, CA 92078
Permit Number:	104814
Business Type:	6HK24
EPA Id Number:	CAL000271233
APN:	219-093-19-00
Last HMMD Inspection:	12/27/2011
Facility Telephone:	760-510-2457
Permit Status:	OPEN
Permit Expiration:	06/30/2013
Date Last Updated:	11/02/2012
Facility Owner:	COUNTY OF SAN DIEGO - DPW
Facility Mailing Address:	5560 OVERLAND AVE, 4TH FL, STE #410
Facility Mailing City:	SAN DIEGO
Facility Mailing State:	CA
Facility Mailing Zip:	92121
UST Owner:	COUNTY OF SAN DIEGO/PUBLIC WKS

CNTY OF SD SAN MARCOS RD STATION (Continued) **S104746029**

Handle Regulated Hazmat: Y
Own Or Operate UST: Y
Subject To APSA: Not reported
Generate Haz Waste: Y
Treat Haz Waste: Not reported
Generate Medical Waste: Not reported

Inventory Active Permits (not SQG Medical):
Permit Number: 104814
Update Date: 11/02/2012
Case Number: 74-86-2
Name: ACETYLENE GAS
Other Information: Not reported
Material Waste: Material
Hazardous Categories 1: FIRE
Hazardous Categories 2: Not reported

Permit Number: 104814
Update Date: 11/02/2012
Case Number: Not reported
Name: ANTIFREEZE
Other Information: Not reported
Material Waste: Material
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Permit Number: 104814
Update Date: 11/02/2012
Case Number: 7440-37-1
Name: ARGON GAS
Other Information: Not reported
Material Waste: Material
Hazardous Categories 1: PRESSURE RELEASE
Hazardous Categories 2: Not reported

Permit Number: 104814
Update Date: 11/02/2012
Case Number: Not reported
Name: ARGON/CO2
Other Information: Not reported
Material Waste: Material
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Permit Number: 104814
Update Date: 11/02/2012
Case Number: Not reported
Name: DIESEL
Other Information: UNDERGROUND TANK 104814 T007
Material Waste: Material
Hazardous Categories 1: FIRE
Hazardous Categories 2: Not reported

Permit Number: 104814
Update Date: 11/02/2012
Case Number: 8002-05-9
Name: OILS, LUBRICATING
Other Information: Not reported

CNTY OF SD SAN MARCOS RD STATION (Continued) **S104746029**

Material Waste: Not reported
Hazardous Categories 1: FIRE
Hazardous Categories 2: CHRONIC

Permit Number: 104814
Update Date: 11/02/2012
Case Number: 7782-44-7
Name: OXYGEN GAS
Other Information: Not reported
Material Waste: Material
Hazardous Categories 1: PRESSURE RELEASE
Hazardous Categories 2: Not reported

Permit Number: 104814
Update Date: 11/02/2012
Case Number: Not reported
Name: POWER KLEEN DIESEL PERFORMANCE ENHANCER
Other Information: Not reported
Material Waste: Material
Hazardous Categories 1: FIRE
Hazardous Categories 2: CHRONIC

Permit Number: 104814
Update Date: 11/02/2012
Case Number: Not reported
Name: REGULAR UNLEADED
Other Information: UNDERGROUND TANK 104814 T006
Material Waste: Material
Hazardous Categories 1: FIRE
Hazardous Categories 2: Not reported

Permit Number: 104814
Update Date: 11/02/2012
Case Number: Not reported
Name: SODIUM METASILICATE
Other Information: ZEP CONCENTRATED T'N'T TRUCK & TRAILER WASH
Material Waste: Material
Hazardous Categories 1: FIRE
Hazardous Categories 2: CHRONIC

Permit Number: 104814
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 181 INORGANIC SOLID WASTE (OTHER)
Other Information: AQUEOUS PARTS WASHER FILTERS/ ABSORBENT
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Permit Number: 104814
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 221 WASTE OIL & MIXED OIL
Other Information: ROADSIDE WASTE, WASTE OIL
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

CNTY OF SD SAN MARCOS RD STATION (Continued) **S104746029**

Permit Number:	104814
Update Date:	11/02/2012
Case Number:	Not reported
Name:	WASTE 342 ORGANIC LIQUIDS W/METALS
Other Information:	ANTIFREEZE
Material Waste:	Waste
Hazardous Categories 1:	Not reported
Hazardous Categories 2:	Not reported

Permit Number:	104814
Update Date:	11/02/2012
Case Number:	Not reported
Name:	WASTE 491 UNSPECIFIED SLUDGE WASTE
Other Information:	SUMP SLUDGE FM AUTO CLNG
Material Waste:	Waste
Hazardous Categories 1:	Not reported
Hazardous Categories 2:	Not reported

Permit Number:	104814
Update Date:	11/02/2012
Case Number:	Not reported
Name:	WASTE 888 USED OIL FILTERS
Other Information:	USED OIL & FUEL FILTERS
Material Waste:	Waste
Hazardous Categories 1:	Not reported
Hazardous Categories 2:	Not reported

Violations Active Permits:

Permit Number:	104814
Update Date:	11/02/2012
Inspection Date:	09/29/2005
Violation Code:	6HV1604
Violation:	2ND. CONTAINMENT NOT KEPT EMPTY
Violation Citation:	Secondary containment not kept empty. 66265.196(b)(c), 66265.194(c)
Activity:	ACTIVE

Permit Number:	104814
Update Date:	11/02/2012
Inspection Date:	12/20/2007
Violation Code:	6HV3252
Violation:	AUDIO&VISUAL ALARMS NOT WORKING OK
Violation Citation:	All audible and/or visual alarms not functioning properly. 2632(c)(2)(B), 2636(f)(1)
Activity:	ACTIVE

Permit Number:	104814
Update Date:	11/02/2012
Inspection Date:	12/20/2007
Violation Code:	6HV3255
Violation:	SPILL CONTAIN. NOT DRY/IN GOOD CONDITION
Violation Citation:	Spill container is not in good condition and/or liquid free. 2635(b)(1), 2636(a)(1)
Activity:	ACTIVE

Permit Number:	104814
Update Date:	11/02/2012
Inspection Date:	12/20/2007

CNTY OF SD SAN MARCOS RD STATION (Continued) **S104746029**

Violation Code:	6HV1601
Violation:	HAZWASTE TANKS W/O P.E. ASSESSMENT
Violation Citation:	Failed to obtain a P.E. assessment for hazardous waste tank system. 66265.191(a) or 66265.192(a)
Activity:	ACTIVE
Permit Number:	104814
Update Date:	11/02/2012
Inspection Date:	12/20/2007
Violation Code:	6HV1605
Violation:	NO DAILY TANK INSPECTION/LOG
Violation Citation:	Failed to inspect and/or document daily HW tank system inspections. 66265.195 (c)
Activity:	ACTIVE
Permit Number:	104814
Update Date:	11/02/2012
Inspection Date:	12/29/2009
Violation Code:	6HV1601
Violation:	HAZWASTE TANKS W/O P.E. ASSESSMENT
Violation Citation:	Failed to obtain a P.E. assessment for hazardous waste tank system. 66265.191(a) or 66265.192(a)
Activity:	ACTIVE
Permit Number:	104814
Update Date:	11/02/2012
Inspection Date:	12/29/2009
Violation Code:	6HV1605
Violation:	NO DAILY TANK INSPECTION/LOG
Violation Citation:	Failed to inspect and/or document daily HW tank system inspections. 66265.195 (c)
Activity:	ACTIVE
Permit Number:	104814
Update Date:	11/02/2012
Inspection Date:	12/29/2009
Violation Code:	6HV1604
Violation:	2ND. CONTAINMENT NOT KEPT EMPTY
Violation Citation:	Secondary containment not kept empty. 66265.196(b)(c), 66265.194(c)
Activity:	ACTIVE
Permit Number:	104814
Update Date:	11/02/2012
Inspection Date:	12/29/2009
Violation Code:	6HV1012
Violation:	SPCC PLAN NOT PREPARED
Violation Citation:	Spill Prevention Countermeasures & Control Plan not prepared as required. 25270.5 (c)
Activity:	ACTIVE
Permit Number:	104814
Update Date:	11/02/2012
Inspection Date:	12/13/2010
Violation Code:	6HV0209
Violation:	WASTE ONSITE >90/180/270 DAYS
Violation Citation:	Hazardous waste is stored in excess of allowable time period (90 days) without a State permit or written variance. CCR 25201(a) &

CNTY OF SD SAN MARCOS RD STATION (Continued) **S104746029**

	66262.34(a)&(c)
Activity:	ACTIVE
Permit Number:	104814
Update Date:	11/02/2012
Inspection Date:	12/13/2010
Violation Code:	6HV0401
Violation:	TRAINING RECORDS UNAVAILABLE
Violation Citation:	Personnel training records are not maintained to document compliance with requirements for current and former employees. CCR 66265.16(d)&(e)
Activity:	ACTIVE
Permit Number:	104814
Update Date:	11/02/2012
Inspection Date:	12/13/2010
Violation Code:	6HV3152
Violation:	ALL MAINT/MONITOR RECORDS NOT AVAILABLE
Violation Citation:	All maintenance/monitoring/calibration/ repair records not available. 25293; 2712 (b)
Activity:	ACTIVE
Permit Number:	104814
Update Date:	11/02/2012
Inspection Date:	12/30/2008
Violation Code:	6HV3102
Violation:	OPER. PERMIT NOT CURRENT/ONSITE
Violation Citation:	Current Operating Permit not available at facility. 25284(a), 25286(a); 2712(i); 68.1003
Activity:	ACTIVE
Permit Number:	104814
Update Date:	11/02/2012
Inspection Date:	12/30/2008
Violation Code:	6HV3193
Violation:	NO TRAINING/RECORD INCOMPLETE-NOT ONSITE
Violation Citation:	Facility employee(s) are not trained, training records are incomplete, and/or not onsite. 2715(f)
Activity:	ACTIVE
Permit Number:	104814
Update Date:	11/02/2012
Inspection Date:	12/30/2008
Violation Code:	6HV1601
Violation:	HAZWASTE TANKS W/O P.E. ASSESSMENT
Violation Citation:	Failed to obtain a P.E. assessment for hazardous waste tank system. 66265.191(a) or 66265.192(a)
Activity:	ACTIVE
Permit Number:	104814
Update Date:	11/02/2012
Inspection Date:	12/30/2008
Violation Code:	6HV1605
Violation:	NO DAILY TANK INSPECTION/LOG
Violation Citation:	Failed to inspect and/or document daily HW tank system inspections. 66265.195 (c)
Activity:	ACTIVE

CNTY OF SD SAN MARCOS RD STATION (Continued) **S104746029**

Permit Number:	104814
Update Date:	11/02/2012
Inspection Date:	12/30/2008
Violation Code:	6HV0413
Violation:	ER CONTINGENCY PLAN NOT ADEQUATE
Violation Citation:	Failed to have an adequate emergency contingency plan. 66265.52
Activity:	ACTIVE

UST:

UST Name:	UNDERGROUND TANK 104814 T001
Last Update:	2012-11-02 14:17:38
Permit Number:	104814
Tank Type:	SINGLE WALL
Additional Id:	PWO 73
Capacity Gallons:	2000
UST Contents:	DIESEL
Other Content Info:	DIESEL
Reg Status:	REMOVED
Remove Close Date:	1999-06-29 00:00:00
Year Installed:	Not reported
Pipe Type:	SINGLE WALL
Delivery System:	SUCTION
Monitor Code:	01
UST Monitor Method:	SW TANK SW SUCTION PIPE W/ SIRS: SIR DATA ANALYSIS MONTHLY, TANK TEST BIENNIALLY, PIPE TEST TRIENNIALLY

UST Name:	UNDERGROUND TANK 104814 T002
Last Update:	2012-11-02 14:17:38
Permit Number:	104814
Tank Type:	SINGLE WALL
Additional Id:	PWO 74
Capacity Gallons:	8000
UST Contents:	REGULAR UNLEADED
Other Content Info:	REGULAR UNLEADED
Reg Status:	REMOVED
Remove Close Date:	1999-06-29 00:00:00
Year Installed:	Not reported
Pipe Type:	SINGLE WALL
Delivery System:	SUCTION
Monitor Code:	01
UST Monitor Method:	SW TANK SW SUCTION PIPE W/ SIRS: SIR DATA ANALYSIS MONTHLY, TANK TEST BIENNIALLY, PIPE TEST TRIENNIALLY

UST Name:	UNDERGROUND TANK 104814 T003
Last Update:	2012-11-02 14:17:38
Permit Number:	104814
Tank Type:	SINGLE WALL
Additional Id:	PWO 75
Capacity Gallons:	3000
UST Contents:	DIESEL
Other Content Info:	DIESEL
Reg Status:	REMOVED
Remove Close Date:	1997-09-07 00:00:00
Year Installed:	1974-01-01 00:00:00
Pipe Type:	SINGLE WALL
Delivery System:	SUCTION
Monitor Code:	05

CNTY OF SD SAN MARCOS RD STATION (Continued) **S104746029**

UST Monitor Method:	SW TANK DW PIPE W/ POS SHUTOFF-ALARM ON LLD W/ SIRS:SIR ANALY MONTHLY, TANK TEST BIENNIALLY, PIPE TEST ANN 0.1 G/HR OR MO 0.2 G/HR
UST Name:	UNDERGROUND TANK 104814 T004
Last Update:	2012-11-02 14:17:38
Permit Number:	104814
Tank Type:	SINGLE WALL
Additional Id:	PWO 76
Capacity Gallons:	6000
UST Contents:	DIESEL
Other Content Info:	DIESEL
Reg Status:	REMOVED
Remove Close Date:	1997-09-07 00:00:00
Year Installed:	1974-01-01 00:00:00
Pipe Type:	SINGLE WALL
Delivery System:	SUCTION
Monitor Code:	05
UST Monitor Method:	SW TANK DW PIPE W/ POS SHUTOFF-ALARM ON LLD W/ SIRS:SIR ANALY MONTHLY, TANK TEST BIENNIALLY, PIPE TEST ANN 0.1 G/HR OR MO 0.2 G/HR
UST Name:	UNDERGROUND TANK 104814 T005
Last Update:	2012-11-02 14:17:38
Permit Number:	104814
Tank Type:	SINGLE WALL
Additional Id:	AT4499
Capacity Gallons:	500
UST Contents:	Not reported
Other Content Info:	WASTE OIL
Reg Status:	REMOVED
Remove Close Date:	1999-09-13 00:00:00
Year Installed:	Not reported
Pipe Type:	SINGLE WALL
Delivery System:	GRAVITY
Monitor Code:	99
UST Monitor Method:	OTHER - BLIND REMARK REQUIRED
UST Name:	UNDERGROUND TANK 104814 T006
Last Update:	2012-11-02 14:17:38
Permit Number:	104814
Tank Type:	DOUBLE WALL
Additional Id:	NT2081; RT 4762,RT5292
Capacity Gallons:	12000
UST Contents:	REGULAR UNLEADED
Other Content Info:	REGULAR UNLEADED
Reg Status:	ACTIVE
Remove Close Date:	Not reported
Year Installed:	Not reported
Pipe Type:	DOUBLE WALL
Delivery System:	PRESSURE
Monitor Code:	31B
UST Monitor Method:	DW TANK, DW PRESSURIZED PIPE W/ DRY TANK ANNULAR; POSITIVE SHUT-OFF & FAILSAFE, 3.0 LLD; UDC W/ MECHANICAL FLOAT
UST Name:	UNDERGROUND TANK 104814 T007
Last Update:	2012-11-02 14:17:38
Permit Number:	104814
Tank Type:	DOUBLE WALL

CNTY OF SD SAN MARCOS RD STATION (Continued) **S104746029**

Additional Id:	NT2081,RT5292
Capacity Gallons:	12000
UST Contents:	DIESEL
Other Content Info:	DIESEL
Reg Status:	ACTIVE
Remove Close Date:	Not reported
Year Installed:	Not reported
Pipe Type:	DOUBLE WALL
Delivery System:	PRESSURE
Monitor Code:	31B
UST Monitor Method:	DW TANK, DW PRESSURIZED PIPE W/ DRY TANK ANNULAR; POSITIVE SHUT-OFF & FAILSAFE, 3.0 LLD; UDC W/ MECHANICAL FLOAT

Name:	CNTY OF SD SAN MARCOS RD STATION
Address:	1579 OSAGE ST
City,State,Zip:	SAN MARCOS, CA 92078
Permit Number:	200955
Business Type:	6HK70
EPA Id Number:	CAL000314402
APN:	219-093-19-00
Last HMMD Inspection:	05/04/2011
Facility Telephone:	760-510-2440
Permit Status:	OPEN
Permit Expiration:	06/30/2013
Date Last Updated:	11/02/2012
Facility Owner:	COUNTY OF SAN DIEGO - DPW
Facility Mailing Address:	5469 KEARNY VILLA RD #201
Facility Mailing City:	SAN DIEGO
Facility Mailing State:	CA
Facility Mailing Zip:	92123
UST Owner:	Not reported
Handle Regulated Hazmat:	Not reported
Own Or Operate UST:	Not reported
Subject To APSA:	Not reported
Generate Haz Waste:	Not reported
Treat Haz Waste:	Not reported
Generate Medical Waste:	Not reported

Inventory Active Permits (not SQG Medical):

Permit Number:	200955
Update Date:	11/02/2012
Case Number:	Not reported
Name:	ASPHALT RELEASE
Other Information:	SUPERCO
Material Waste:	Material
Hazardous Categories 1:	ACUTE
Hazardous Categories 2:	Not reported

Permit Number:	200955
Update Date:	11/02/2012
Case Number:	68955-27-1
Name:	SC CUTBACK ASPHALT
Other Information:	SC800
Material Waste:	Material
Hazardous Categories 1:	ACUTE
Hazardous Categories 2:	Not reported

CNTY OF SD SAN MARCOS RD STATION (Continued) **S104746029**

Permit Number:	200955
Update Date:	11/02/2012
Case Number:	Not reported
Name:	WASTE 343 UNSPEC ORGANIC LIQUID MIXTURE
Other Information:	DIESEL/BITUMAL/ASPHALT
Material Waste:	Waste
Hazardous Categories 1:	Not reported
Hazardous Categories 2:	Not reported

Permit Number:	200955
Update Date:	11/02/2012
Case Number:	Not reported
Name:	WASTE 352 ORGANIC SOLIDS (OTHER)
Other Information:	FUEL/OIL CONTAMINATED SOLIDS
Material Waste:	Waste
Hazardous Categories 1:	Not reported
Hazardous Categories 2:	Not reported

Permit Number:	200955
Update Date:	11/02/2012
Case Number:	Not reported
Name:	WASTE 612 HOUSEHOLD WASTES
Other Information:	ORPHANED WASTE OILS/PAINTS/SOLVENTS
Material Waste:	Waste
Hazardous Categories 1:	Not reported
Hazardous Categories 2:	Not reported

Violations Active Permits:

Permit Number:	200955
Update Date:	11/02/2012
Inspection Date:	12/21/2006
Violation Code:	6HV0135
Violation:	MANIFESTS/RECEIPTS FOR 3 YEARS NOT ONSIT
Violation Citation:	Hazardous waste manifests/receipts for 3 years are not maintained onsite to document proper disposal of hazardous waste. CCR 66262.40(a) & 25160.2(b)(3)
Activity:	ACTIVE

Permit Number:	200955
Update Date:	11/02/2012
Inspection Date:	08/21/2008
Violation Code:	6HV1014
Violation:	HMBP INCOMPLETE/NOT AMENDED
Violation Citation:	HMBP is incomplete/inadequate/not amended to reflect changes. 25504, 25505(a)(2) &/or 25509(a); 25505(b); 19 CCR 2729
Activity:	ACTIVE

Name:	SD CNTY FLEET OPERATIONS SAN MARCOS
Address:	1579 OSAGE ST
City,State,Zip:	SAN MARCOS, CA 92078
Permit Number:	104814
Business Type:	6HK24
EPA Id Number:	CAL000271233
APN:	219-093-19-00
Last HMMD Inspection:	12/27/2011
Facility Telephone:	760-510-2457

CNTY OF SD SAN MARCOS RD STATION (Continued) **S104746029**

Permit Status:	OPEN
Permit Expiration:	06/30/2013
Date Last Updated:	11/02/2012
Facility Owner:	COUNTY OF SAN DIEGO - DPW
Facility Mailing Address:	5560 OVERLAND AVE, 4TH FL, STE #410
Facility Mailing City:	SAN DIEGO
Facility Mailing State:	CA
Facility Mailing Zip:	92121
UST Owner:	COUNTY OF SAN DIEGO/PUBLIC WKS
Handle Regulated Hazmat:	Y
Own Or Operate UST:	Y
Subject To APSA:	Y
Generate Haz Waste:	Y
Treat Haz Waste:	Not reported
Generate Medical Waste:	Not reported

Inventory Active Permits (not SQG Medical):

Permit Number:	104814
Update Date:	11/02/2012
Case Number:	74-86-2
Name:	ACETYLENE GAS
Other Information:	Not reported
Material Waste:	Material
Hazardous Categories 1:	FIRE
Hazardous Categories 2:	Not reported

Permit Number:	104814
Update Date:	11/02/2012
Case Number:	Not reported
Name:	ANTIFREEZE
Other Information:	Not reported
Material Waste:	Material
Hazardous Categories 1:	Not reported
Hazardous Categories 2:	Not reported

Permit Number:	104814
Update Date:	11/02/2012
Case Number:	7440-37-1
Name:	ARGON GAS
Other Information:	Not reported
Material Waste:	Material
Hazardous Categories 1:	PRESSURE RELEASE
Hazardous Categories 2:	Not reported

Permit Number:	104814
Update Date:	11/02/2012
Case Number:	Not reported
Name:	ARGON/CO2
Other Information:	Not reported
Material Waste:	Material
Hazardous Categories 1:	Not reported
Hazardous Categories 2:	Not reported

Permit Number:	104814
Update Date:	11/02/2012
Case Number:	Not reported
Name:	DIESEL
Other Information:	UNDERGROUND TANK 104814 T007

CNTY OF SD SAN MARCOS RD STATION (Continued) **S104746029**

Material Waste: Material
Hazardous Categories 1: FIRE
Hazardous Categories 2: Not reported

Permit Number: 104814
Update Date: 11/02/2012
Case Number: 8002-05-9
Name: OILS, LUBRICATING
Other Information: Not reported
Material Waste: Not reported
Hazardous Categories 1: FIRE
Hazardous Categories 2: CHRONIC

Permit Number: 104814
Update Date: 11/02/2012
Case Number: 7782-44-7
Name: OXYGEN GAS
Other Information: Not reported
Material Waste: Material
Hazardous Categories 1: PRESSURE RELEASE
Hazardous Categories 2: Not reported

Permit Number: 104814
Update Date: 11/02/2012
Case Number: Not reported
Name: POWER KLEEN DIESEL PERFORMANCE ENHANCER
Other Information: Not reported
Material Waste: Material
Hazardous Categories 1: FIRE
Hazardous Categories 2: CHRONIC

Permit Number: 104814
Update Date: 11/02/2012
Case Number: Not reported
Name: REGULAR UNLEADED
Other Information: UNDERGROUND TANK 104814 T006
Material Waste: Material
Hazardous Categories 1: FIRE
Hazardous Categories 2: Not reported

Permit Number: 104814
Update Date: 11/02/2012
Case Number: Not reported
Name: SODIUM METASILICATE
Other Information: ZEP CONCENTRATED T'N'T TRUCK & TRAILER WASH
Material Waste: Material
Hazardous Categories 1: FIRE
Hazardous Categories 2: CHRONIC

Permit Number: 104814
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 181 INORGANIC SOLID WASTE (OTHER)
Other Information: AQUEOUS PARTS WASHER FILTERS/ ABSORBENT
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

CNTY OF SD SAN MARCOS RD STATION (Continued) **S104746029**

Permit Number: 104814
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 221 WASTE OIL & MIXED OIL
Other Information: ROADSIDE WASTE, WASTE OIL
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Permit Number: 104814
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 342 ORGANIC LIQUIDS W/METALS
Other Information: ANTIFREEZE
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Permit Number: 104814
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 491 UNSPECIFIED SLUDGE WASTE
Other Information: SUMP SLUDGE FM AUTO CLNG
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Permit Number: 104814
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 888 USED OIL FILTERS
Other Information: USED OIL & FUEL FILTERS
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Violations Active Permits:

Permit Number: 104814
Update Date: 11/02/2012
Inspection Date: 09/29/2005
Violation Code: 6HV1604
Violation: 2ND. CONTAINMENT NOT KEPT EMPTY
Violation Citation: Secondary containment not kept empty. 66265.196(b)(c), 66265.194(c)
Activity: ACTIVE

Permit Number: 104814
Update Date: 11/02/2012
Inspection Date: 12/20/2007
Violation Code: 6HV3252
Violation: AUDIO&VISUAL ALARMS NOT WORKING OK
Violation Citation: All audible and/or visual alarms not functioning properly. 2632(c)(2)(B), 2636(f)(1)
Activity: ACTIVE

Permit Number: 104814
Update Date: 11/02/2012
Inspection Date: 12/20/2007

CNTY OF SD SAN MARCOS RD STATION (Continued) **S104746029**

Violation Code:	6HV3255
Violation:	SPILL CONTAIN. NOT DRY/IN GOOD CONDITION
Violation Citation:	Spill container is not in good condition and/or liquid free. 2635(b)(1), 2636(a)(1)
Activity:	ACTIVE
Permit Number:	104814
Update Date:	11/02/2012
Inspection Date:	12/20/2007
Violation Code:	6HV1601
Violation:	HAZWASTE TANKS W/O P.E. ASSESSMENT
Violation Citation:	Failed to obtain a P.E. assessment for hazardous waste tank system. 66265.191(a) or 66265.192(a)
Activity:	ACTIVE
Permit Number:	104814
Update Date:	11/02/2012
Inspection Date:	12/20/2007
Violation Code:	6HV1605
Violation:	NO DAILY TANK INSPECTION/LOG
Violation Citation:	Failed to inspect and/or document daily HW tank system inspections. 66265.195 (c)
Activity:	ACTIVE
Permit Number:	104814
Update Date:	11/02/2012
Inspection Date:	12/29/2009
Violation Code:	6HV1601
Violation:	HAZWASTE TANKS W/O P.E. ASSESSMENT
Violation Citation:	Failed to obtain a P.E. assessment for hazardous waste tank system. 66265.191(a) or 66265.192(a)
Activity:	ACTIVE
Permit Number:	104814
Update Date:	11/02/2012
Inspection Date:	12/29/2009
Violation Code:	6HV1605
Violation:	NO DAILY TANK INSPECTION/LOG
Violation Citation:	Failed to inspect and/or document daily HW tank system inspections. 66265.195 (c)
Activity:	ACTIVE
Permit Number:	104814
Update Date:	11/02/2012
Inspection Date:	12/29/2009
Violation Code:	6HV1604
Violation:	2ND. CONTAINMENT NOT KEPT EMPTY
Violation Citation:	Secondary containment not kept empty. 66265.196(b)(c), 66265.194(c)
Activity:	ACTIVE
Permit Number:	104814
Update Date:	11/02/2012
Inspection Date:	12/29/2009
Violation Code:	6HV1012
Violation:	SPCC PLAN NOT PREPARED
Violation Citation:	Spill Prevention Countermeasures & Control Plan not prepared as required. 25270.5 (c)

CNTY OF SD SAN MARCOS RD STATION (Continued) **S104746029**

Activity:	ACTIVE
Permit Number:	104814
Update Date:	11/02/2012
Inspection Date:	12/13/2010
Violation Code:	6HV0209
Violation:	WASTE ONSITE >90/180/270 DAYS
Violation Citation:	Hazardous waste is stored in excess of allowable time period (90 days) without a State permit or written variance. CCR 25201(a) & 66262.34(a)&(c)
Activity:	ACTIVE
Permit Number:	104814
Update Date:	11/02/2012
Inspection Date:	12/13/2010
Violation Code:	6HV0401
Violation:	TRAINING RECORDS UNAVAILABLE
Violation Citation:	Personnel training records are not maintained to document compliance with requirements for current and former employees. CCR 66265.16(d)&(e)
Activity:	ACTIVE
Permit Number:	104814
Update Date:	11/02/2012
Inspection Date:	12/13/2010
Violation Code:	6HV3152
Violation:	ALL MAINT/MONITOR RECORDS NOT AVAILABLE
Violation Citation:	All maintenance/monitoring/calibration/ repair records not available. 25293; 2712 (b)
Activity:	ACTIVE
Permit Number:	104814
Update Date:	11/02/2012
Inspection Date:	12/30/2008
Violation Code:	6HV3102
Violation:	OPER. PERMIT NOT CURRENT/ONSITE
Violation Citation:	Current Operating Permit not available at facility. 25284(a), 25286(a); 2712(i); 68.1003
Activity:	ACTIVE
Permit Number:	104814
Update Date:	11/02/2012
Inspection Date:	12/30/2008
Violation Code:	6HV3193
Violation:	NO TRAINING/RECORD INCOMPLETE-NOT ONSITE
Violation Citation:	Facility employee(s) are not trained, training records are incomplete, and/or not onsite. 2715(f)
Activity:	ACTIVE
Permit Number:	104814
Update Date:	11/02/2012
Inspection Date:	12/30/2008
Violation Code:	6HV1601
Violation:	HAZWASTE TANKS W/O P.E. ASSESSMENT
Violation Citation:	Failed to obtain a P.E. assessment for hazardous waste tank system. 66265.191(a) or 66265.192(a)
Activity:	ACTIVE

CNTY OF SD SAN MARCOS RD STATION (Continued) **S104746029**

Permit Number:	104814
Update Date:	11/02/2012
Inspection Date:	12/30/2008
Violation Code:	6HV1605
Violation:	NO DAILY TANK INSPECTION/LOG
Violation Citation:	Failed to inspect and/or document daily HW tank system inspections. 66265.195 (c)
Activity:	ACTIVE

Permit Number:	104814
Update Date:	11/02/2012
Inspection Date:	12/30/2008
Violation Code:	6HV0413
Violation:	ER CONTINGENCY PLAN NOT ADEQUATE
Violation Citation:	Failed to have an adequate emergency contingency plan. 66265.52
Activity:	ACTIVE

UST:

UST Name:	UNDERGROUND TANK 104814 T001
Last Update:	2012-11-02 14:17:38
Permit Number:	104814
Tank Type:	SINGLE WALL
Additional Id:	PWO 73
Capacity Gallons:	2000
UST Contents:	DIESEL
Other Content Info:	DIESEL
Reg Status:	REMOVED
Remove Close Date:	1999-06-29 00:00:00
Year Installed:	Not reported
Pipe Type:	SINGLE WALL
Delivery System:	SUCTION
Monitor Code:	01
UST Monitor Method:	SW TANK SW SUCTION PIPE W/ SIRS: SIR DATA ANALYSIS MONTHLY, TANK TEST BIENNIALLY, PIPE TEST TRIENNIALLY

UST Name:	UNDERGROUND TANK 104814 T002
Last Update:	2012-11-02 14:17:38
Permit Number:	104814
Tank Type:	SINGLE WALL
Additional Id:	PWO 74
Capacity Gallons:	8000
UST Contents:	REGULAR UNLEADED
Other Content Info:	REGULAR UNLEADED
Reg Status:	REMOVED
Remove Close Date:	1999-06-29 00:00:00
Year Installed:	Not reported
Pipe Type:	SINGLE WALL
Delivery System:	SUCTION
Monitor Code:	01
UST Monitor Method:	SW TANK SW SUCTION PIPE W/ SIRS: SIR DATA ANALYSIS MONTHLY, TANK TEST BIENNIALLY, PIPE TEST TRIENNIALLY

UST Name:	UNDERGROUND TANK 104814 T003
Last Update:	2012-11-02 14:17:38
Permit Number:	104814
Tank Type:	SINGLE WALL
Additional Id:	PWO 75

CNTY OF SD SAN MARCOS RD STATION (Continued) **S104746029**

Capacity Gallons:	3000
UST Contents:	DIESEL
Other Content Info:	DIESEL
Reg Status:	REMOVED
Remove Close Date:	1997-09-07 00:00:00
Year Installed:	1974-01-01 00:00:00
Pipe Type:	SINGLE WALL
Delivery System:	SUCTION
Monitor Code:	05
UST Monitor Method:	SW TANK DW PIPE W/ POS SHUTOFF-ALARM ON LLD W/ SIRS:SIR ANALY MONTHLY, TANK TEST BIENNIALLY, PIPE TEST ANN 0.1 G/HR OR MO 0.2 G/HR
UST Name:	UNDERGROUND TANK 104814 T004
Last Update:	2012-11-02 14:17:38
Permit Number:	104814
Tank Type:	SINGLE WALL
Additional Id:	PWO 76
Capacity Gallons:	6000
UST Contents:	DIESEL
Other Content Info:	DIESEL
Reg Status:	REMOVED
Remove Close Date:	1997-09-07 00:00:00
Year Installed:	1974-01-01 00:00:00
Pipe Type:	SINGLE WALL
Delivery System:	SUCTION
Monitor Code:	05
UST Monitor Method:	SW TANK DW PIPE W/ POS SHUTOFF-ALARM ON LLD W/ SIRS:SIR ANALY MONTHLY, TANK TEST BIENNIALLY, PIPE TEST ANN 0.1 G/HR OR MO 0.2 G/HR
UST Name:	UNDERGROUND TANK 104814 T005
Last Update:	2012-11-02 14:17:38
Permit Number:	104814
Tank Type:	SINGLE WALL
Additional Id:	AT4499
Capacity Gallons:	500
UST Contents:	Not reported
Other Content Info:	WASTE OIL
Reg Status:	REMOVED
Remove Close Date:	1999-09-13 00:00:00
Year Installed:	Not reported
Pipe Type:	SINGLE WALL
Delivery System:	GRAVITY
Monitor Code:	99
UST Monitor Method:	OTHER - BLIND REMARK REQUIRED
UST Name:	UNDERGROUND TANK 104814 T006
Last Update:	2012-11-02 14:17:38
Permit Number:	104814
Tank Type:	DOUBLE WALL
Additional Id:	NT2081; RT 4762,RT5292
Capacity Gallons:	12000
UST Contents:	REGULAR UNLEADED
Other Content Info:	REGULAR UNLEADED
Reg Status:	ACTIVE
Remove Close Date:	Not reported
Year Installed:	Not reported
Pipe Type:	DOUBLE WALL

CNTY OF SD SAN MARCOS RD STATION (Continued) **S104746029**

Delivery System:	PRESSURE
Monitor Code:	31B
UST Monitor Method:	DW TANK, DW PRESSURIZED PIPE W/ DRY TANK ANNULAR; POSITIVE SHUT-OFF & FAILSAFE, 3.0 LLD; UDC W/ MECHANICAL FLOAT
UST Name:	UNDERGROUND TANK 104814 T007
Last Update:	2012-11-02 14:17:38
Permit Number:	104814
Tank Type:	DOUBLE WALL
Additional Id:	NT2081,RT5292
Capacity Gallons:	12000
UST Contents:	DIESEL
Other Content Info:	DIESEL
Reg Status:	ACTIVE
Remove Close Date:	Not reported
Year Installed:	Not reported
Pipe Type:	DOUBLE WALL
Delivery System:	PRESSURE
Monitor Code:	31B
UST Monitor Method:	DW TANK, DW PRESSURIZED PIPE W/ DRY TANK ANNULAR; POSITIVE SHUT-OFF & FAILSAFE, 3.0 LLD; UDC W/ MECHANICAL FLOAT

CERS HAZ WASTE:

Name:	CNTY OF SD SAN MARCOS RD STATION
Address:	1579 OSAGE ST
City,State,Zip:	SAN MARCOS, CA 92078
Site ID:	107003
CERS ID:	10376029
CERS Description:	Hazardous Waste Generator
Name:	SD CNTY FLEET OPERATIONS SAN MARCOS
Address:	1579 OSAGE ST
City,State,Zip:	SAN MARCOS, CA 92078
Site ID:	151873
CERS ID:	10375723
CERS Description:	Hazardous Waste Generator

CERS TANKS:

Name:	SD CNTY FLEET OPERATIONS SAN MARCOS
Address:	1579 OSAGE ST
City,State,Zip:	SAN MARCOS, CA 92078
Site ID:	151873
CERS ID:	10375723
CERS Description:	Underground Storage Tank

CORTESE:

Name:	SAN MARCOS HDQTRS/DIVISION II
Address:	1579 OSAGE ST
City,State,Zip:	SAN MARCOS, CA 920692504
Region:	CORTESE
Envirostor Id:	Not reported
Global ID:	T0607302282
Site/Facility Type:	LUST CLEANUP SITE
Cleanup Status:	COMPLETED - CASE CLOSED
Status Date:	Not reported

CNTY OF SD SAN MARCOS RD STATION (Continued) **S104746029**

Site Code:	Not reported
Latitude:	Not reported
Longitude:	Not reported
Owner:	Not reported
Enf Type:	Not reported
Swat R:	Not reported
Flag:	active
Order No:	Not reported
Waste Discharge System No:	Not reported
Effective Date:	Not reported
Region 2:	Not reported
WID Id:	Not reported
Solid Waste Id No:	Not reported
Waste Management Uit Name:	Not reported
File Name:	Active Open

Name:	SAN MARCOS HDQTRS/DIVISION II
Address:	1579 OSAGE ST
City,State,Zip:	SAN MARCOS, CA 920692504
Region:	CORTESE
Envirostor Id:	Not reported
Global ID:	T0607302697
Site/Facility Type:	LUST CLEANUP SITE
Cleanup Status:	COMPLETED - CASE CLOSED
Status Date:	Not reported
Site Code:	Not reported
Latitude:	Not reported
Longitude:	Not reported
Owner:	Not reported
Enf Type:	Not reported
Swat R:	Not reported
Flag:	active
Order No:	Not reported
Waste Discharge System No:	Not reported
Effective Date:	Not reported
Region 2:	Not reported
WID Id:	Not reported
Solid Waste Id No:	Not reported
Waste Management Uit Name:	Not reported
File Name:	Active Open

SAN DIEGO CO LOP:

Name:	SAN MARCOS HDQTRS/DIVISION II
Address:	1579 OSAGE ST
City,State,Zip:	SAN MARCOS, CA 92069
Record ID:	DEH1997-LSAM-H04814-001
Record Status:	Completed
Opened Date:	07/09/1997
Parcel Number:	219-093-18-00
Case Type:	LOP - Local Oversight Program
Historical Name:	COUNTY OF SD-DPW SAN MARCOS
SWRCB Global ID:	T0607302282
Funding:	F - LOP Federal Fund
Lead Agency:	DEH/SAM
Lead Agency Date:	07/09/1997
Census Tract:	200.29
Community:	San Marcos

CNTY OF SD SAN MARCOS RD STATION (Continued) **S104746029**

Jurisdiction:	SAN MARCOS
Watershed Basin Number:	904.52
Water Purveyor:	VALLECITOS WATER DISTRICT
Fire Agency:	SAN MARCOS FIRE PROT DIST
Latitude:	33.1465108
Longitude:	-117.1955664
X MapCoord:	6272041.178
Y MapCoord:	1998455.945

Name:	SAN MARCOS HDQTRS/DIVISION II
Address:	1579 OSAGE ST
City,State,Zip:	SAN MARCOS, CA 92069
Record ID:	DEH1999-LSAM-H04814-002
Record Status:	Completed
Opened Date:	06/02/1999
Parcel Number:	219-093-18-00
Case Type:	LOP - Local Oversight Program
Historical Name:	COUNTY OF SD-SAN MARCOS RS
SWRCB Global ID:	T0607302697
Funding:	S - LOP State Fund
Lead Agency:	DEH/SAM
Lead Agency Date:	06/29/1999
Census Tract:	200.29
Community:	San Marcos
Jurisdiction:	SAN MARCOS
Watershed Basin Number:	904.52
Water Purveyor:	VALLECITOS WATER DISTRICT
Fire Agency:	SAN MARCOS FIRE PROT DIST
Latitude:	33.1465108
Longitude:	-117.1955664
X MapCoord:	6272041.178
Y MapCoord:	1998455.945

CERS:

Name:	SAN MARCOS HDQTRS/DIVISION II
Address:	1579 OSAGE ST
City,State,Zip:	SAN MARCOS, CA 920692504
Site ID:	210778
CERS ID:	T0607302697
CERS Description:	Leaking Underground Storage Tank Cleanup Site

Coordinates:

Site ID:	210778
Facility Name:	SAN MARCOS HDQTRS/DIVISION II
Env Int Type Code:	LUSTCS
Program ID:	T0607302282
Coord Name:	Not reported
Ref Point Type Desc:	Unknown
Latitude:	33.148398
Longitude:	-117.197650

Affiliation:

Affiliation Type Desc:	Local Agency Caseworker
Entity Name:	JAMES CLAY - SAN DIEGO COUNTY LOP
Entity Title:	Not reported
Affiliation Address:	P.O. Box 129261
Affiliation City:	San Diego

CNTY OF SD SAN MARCOS RD STATION (Continued) **S104746029**

Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Name: SAN MARCOS HDQTRS/DIVISION II
Address: 1579 OSAGE ST
City,State,Zip: SAN MARCOS, CA 920692504
Site ID: 210778
CERS ID: T0607302282
CERS Description: Leaking Underground Storage Tank Cleanup Site

Coordinates:
Site ID: 210778
Facility Name: SAN MARCOS HDQTRS/DIVISION II
Env Int Type Code: LUSTCS
Program ID: T0607302282
Coord Name: Not reported
Ref Point Type Desc: Unknown
Latitude: 33.148398
Longitude: -117.197650

Affiliation:
Affiliation Type Desc: Local Agency Caseworker
Entity Name: JAMES CLAY - SAN DIEGO COUNTY LOP
Entity Title: Not reported
Affiliation Address: P.O. Box 129261
Affiliation City: San Diego
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Name: CNTY OF SD SAN MARCOS RD STATION
Address: 1579 OSAGE ST
City,State,Zip: SAN MARCOS, CA 92078
Site ID: 107003
CERS ID: 10376029
CERS Description: Chemical Storage Facilities

Evaluation:
Eval General Type: Compliance Evaluation Inspection
Eval Date: 06-15-2017
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Inspector: Burke Mike Inspection ID:5647058
Eval Division: San Diego County Department of Env Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 06-15-2017
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Inspector: Burke Mike Inspection ID:5647058
Eval Division: San Diego County Department of Env Health

CNTY OF SD SAN MARCOS RD STATION (Continued) **S104746029**

Eval Program: HW
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 09-02-2014
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Inspector: Kasprovich Christina Inspection ID:4094133
Eval Division: San Diego County Department of Env Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 09-02-2014
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Inspector: Kasprovich Christina Inspection ID:4094133
Eval Division: San Diego County Department of Env Health
Eval Program: HW
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 12-12-2019
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Inspector: Delino Faith Inspection ID:6240530
Eval Division: San Diego County Department of Env Health
Eval Program: HMRRP
Eval Source: CERS

Coordinates:
Site ID: 107003
Facility Name: CNTY OF SD SAN MARCOS RD STATION
Env Int Type Code: HWG
Program ID: 10376029
Coord Name: Not reported
Ref Point Type Desc: Center of a facility or station.
Latitude: 33.147360
Longitude: -117.197440

Affiliation:
Affiliation Type Desc: Legal Owner
Entity Name: county of san diego
Entity Title: Not reported
Affiliation Address: 5510 Overland Ave ,Ste 410, Rm 470
Affiliation City: San Diego
Affiliation State: CA
Affiliation Country: United States
Affiliation Zip: 92123
Affiliation Phone: (858) 694-3850

Affiliation Type Desc: Operator
Entity Name: COUNTY OF SAN DIEGO-DPW
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported

CNTY OF SD SAN MARCOS RD STATION (Continued) **S104746029**

Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(760) 510-2440
Affiliation Type Desc:	Parent Corporation
Entity Name:	DPW/ROADS DIV II
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported
Affiliation Type Desc:	CUPA District
Entity Name:	San Diego County Env Health
Entity Title:	Not reported
Affiliation Address:	PO Box 129261
Affiliation City:	San Diego
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	92112-9261
Affiliation Phone:	(858) 505-6880
Affiliation Type Desc:	Facility Mailing Address
Entity Name:	Mailing Address
Entity Title:	Not reported
Affiliation Address:	1579 OSAGE STREET
Affiliation City:	SAN MARCOS
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	92078
Affiliation Phone:	Not reported
Affiliation Type Desc:	Identification Signer
Entity Name:	Burt Quick
Entity Title:	Assistant Superintendent
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported
Affiliation Type Desc:	Document Preparer
Entity Name:	Nate Wright
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported
Affiliation Type Desc:	Environmental Contact
Entity Name:	ANTHONY ARIOSTA

CNTY OF SD SAN MARCOS RD STATION (Continued) **S104746029**

Entity Title:	Not reported
Affiliation Address:	1579 OSAGE ST
Affiliation City:	SAN MARCOS
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	92078
Affiliation Phone:	Not reported
Affiliation Type Desc:	Property Owner
Entity Name:	COUNTY OF SAN DIEGO
Entity Title:	Not reported
Affiliation Address:	5501 Overland Ave , Ste 410 Rm 470
Affiliation City:	San Diego
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	92123
Affiliation Phone:	(858) 694-3850
Name:	SD CNTY FLEET OPERATIONS SAN MARCOS
Address:	1579 OSAGE ST
City,State,Zip:	SAN MARCOS, CA 92078
Site ID:	151873
CERS ID:	10375723
CERS Description:	Chemical Storage Facilities

Violations:

Site ID:	151873
Site Name:	SD CNTY FLEET OPERATIONS SAN MARCOS
Violation Date:	12-12-2019
Citation:	22 CCR 15 66265.195(c) - California Code of Regulations, Title 22, Chapter 15, Section(s) 66265.195(c)
Violation Description:	Failure to conduct and document inspections of hazardous waste tank systems each operating day and retain records of those inspections at the facility.
Violation Notes:	Returned to compliance on 01/06/2020. Inspection Sequence ID:6313486
Violation Division:	San Diego County Department of Env Health
Violation Program:	HW
Violation Source:	CERS
Site ID:	151873
Site Name:	SD CNTY FLEET OPERATIONS SAN MARCOS
Violation Date:	12-12-2019
Citation:	HSC 6.5 Multiple - California Health and Safety Code, Chapter 6.5, Section(s) Multiple
Violation Description:	Hazardous Waste Generator Program - Training - General
Violation Notes:	Returned to compliance on 01/06/2020. Inspection Sequence ID:6313486;Violation:HMD0414 Failed to train employees at least annually. 22 CCR 66265.16(c)
Violation Division:	San Diego County Department of Env Health
Violation Program:	HW
Violation Source:	CERS
Site ID:	151873
Site Name:	SD CNTY FLEET OPERATIONS SAN MARCOS
Violation Date:	12-12-2019
Citation:	23 CCR 16 2636(f)(2) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2636(f)(2)

CNTY OF SD SAN MARCOS RD STATION (Continued) **S104746029**

Violation Description:	Failure of the functional line leak detector (LLD) monitoring pressurized piping to meet one or more of the following requirements: Monitored at least hourly with the capability of detecting a release of 3.0 gallons per hour leak at 10 pounds per square inch and restrict or shut off the flow of product through the piping when a leak is detected.
Violation Notes:	Returned to compliance on 12/12/2019. Inspection Sequence ID:6313486;Tank ID:18571;Violation Description:(TCR 9d) Failure of the line leak detector (LLD) monitoring pressurized piping to meet one or more of the following requirements: Monitored at least hourly. with the capability of detecting a release of 3.0 gallons per hour leak at 10 pounds per square inch and restrict or shut off the flow of product through the piping when a leak is detected. 23 CCR 2636(f)(2)
Violation Division:	San Diego County Department of Env Health
Violation Program:	UST
Violation Source:	CERS
Site ID:	151873
Site Name:	SD CNTY FLEET OPERATIONS SAN MARCOS
Violation Date:	12-12-2019
Citation:	HSC 6.5 Multiple - California Health and Safety Code, Chapter 6.5, Section(s) Multiple
Violation Description:	Hazardous Waste Generator Program - Administration/Documentation - General
Violation Notes:	Returned to compliance on 01/06/2020. Inspection Sequence ID:6313486;Violation:HMD0138 Manifest signed by the TSDF not available for inspection. 22 CCR 66262.40(a); HSC 25185(a)(4)
Violation Division:	San Diego County Department of Env Health
Violation Program:	HW
Violation Source:	CERS
Site ID:	151873
Site Name:	SD CNTY FLEET OPERATIONS SAN MARCOS
Violation Date:	12-08-2020
Citation:	HSC 6.7 25284.2 - California Health and Safety Code, Chapter 6.7, Section(s) 25284.2
Violation Description:	"Failure to meet one or more of the following requirements: Install or maintain a liquid-tight spill container. Have a minimum capacity of five gallons. Have a functional drain valve or other method for the removal of liquid from the spill container. Be resistant to galvanic corrosion. Perform a tightness test at installation, every 12 months thereafter, or within 30 days after a repair to the spill container. Tested using applicable manufacturer guidelines, industry codes, engineering standards, or a method approved by a professional engineer. Tested by a certified UST service technician. Maintain records of spill containment testing for 36 months. "
Violation Notes:	Returned to compliance on 12/08/2020. Inspection Sequence ID:6634318;Tank ID:18570;Violation Description:(TCR 9a) Failure to meet one or more of the following requirements: Install or maintain a liquid-tight spill container. Have a minimum capacity of 5 gallons. Have a functional drain valve or other method for the removal of liquid from the spill container. Be resistant to galvanic corrosion. Perform a tightness test at installation, every 12 months thereafter, or within 30 days after a repair to the spill container, tested using applicable manufacturer guidelines, industry codes, engineering standards, or a method approved by a professional engineer. Tested by a certified UST service technician. Maintain records of spill

CNTY OF SD SAN MARCOS RD STATION (Continued) **S104746029**

containment testing for 36 months. 23 CCR 2635(b), 2637.1(a-c), 2665(a-b), 2712(b)(1)(F); HSC 25284.2
Violation Division: San Diego County Department of Env Health
Violation Program: UST
Violation Source: CERS

Site ID: 151873
Site Name: SD CNTY FLEET OPERATIONS SAN MARCOS
Violation Date: 12-12-2019
Citation: HSC 6.95 25505(a)(4) - California Health and Safety Code, Chapter 6.95, Section(s) 25505(a)(4)
Violation Description: Failure to provide initial and annual training to all employees in safety procedures in the event of a release or threatened release of a hazardous material or failure to document and maintain training records for a minimum of three years.
Violation Notes: Returned to compliance on 01/06/2020. Inspection Sequence ID:6313486
Violation Division: San Diego County Department of Env Health
Violation Program: HMRRP
Violation Source: CERS

Evaluation:
Eval General Type: Other/Unknown
Eval Date: 01-10-2013
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Inspector: Kasprovich Christina Inspection ID:4086583
Eval Division: San Diego County Department of Env Health
Eval Program: HW
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 01-10-2013
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Inspector: Kasprovich Christina Inspection ID:4086583
Eval Division: San Diego County Department of Env Health
Eval Program: UST
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 12-08-2020
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Inspector: Harrison Candice Inspection ID:6634318
Eval Division: San Diego County Department of Env Health
Eval Program: UST
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 12-12-2017
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Inspector: Herrera Zoraida Inspection ID:5783639
Eval Division: San Diego County Department of Env Health
Eval Program: APSA
Eval Source: CERS

CNTY OF SD SAN MARCOS RD STATION (Continued) **S104746029**

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	12-12-2017
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Inspector: Herrera Zoraida Inspection ID:5783639
Eval Division:	San Diego County Department of Env Health
Eval Program:	HMRRP
Eval Source:	CERS

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	12-12-2017
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Inspector: Herrera Zoraida Inspection ID:5783639
Eval Division:	San Diego County Department of Env Health
Eval Program:	HW
Eval Source:	CERS

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	12-12-2017
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Inspector: Herrera Zoraida Inspection ID:5783639
Eval Division:	San Diego County Department of Env Health
Eval Program:	UST
Eval Source:	CERS

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	12-12-2019
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Inspector: Delino Faith Inspection ID:6313486
Eval Division:	San Diego County Department of Env Health
Eval Program:	HMRRP
Eval Source:	CERS

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	12-12-2019
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Inspector: Delino Faith Inspection ID:6313486
Eval Division:	San Diego County Department of Env Health
Eval Program:	HW
Eval Source:	CERS

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	12-12-2019
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Inspector: Delino Faith Inspection ID:6313486
Eval Division:	San Diego County Department of Env Health
Eval Program:	UST
Eval Source:	CERS

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	12-16-2016
Violations Found:	No

CNTY OF SD SAN MARCOS RD STATION (Continued) **S104746029**

Eval Type:	Routine done by local agency
Eval Notes:	Inspector: Herrera Zoraida Inspection ID:5550977
Eval Division:	San Diego County Department of Env Health
Eval Program:	UST
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	12-17-2015
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Inspector: Garcia Grissel Inspection ID:5399403
Eval Division:	San Diego County Department of Env Health
Eval Program:	APSA
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	12-17-2015
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Inspector: Garcia Grissel Inspection ID:5399403
Eval Division:	San Diego County Department of Env Health
Eval Program:	HMRRP
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	12-17-2015
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Inspector: Garcia Grissel Inspection ID:5399403
Eval Division:	San Diego County Department of Env Health
Eval Program:	HW
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	12-17-2015
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Inspector: Garcia Grissel Inspection ID:5399403
Eval Division:	San Diego County Department of Env Health
Eval Program:	UST
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	12-18-2014
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Inspector: Central HC067 Inspection ID:4982912
Eval Division:	San Diego County Department of Env Health
Eval Program:	APSA
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	12-18-2014
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Inspector: Central HC067 Inspection ID:4982912
Eval Division:	San Diego County Department of Env Health

CNTY OF SD SAN MARCOS RD STATION (Continued) **S104746029**

Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 12-18-2014
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Inspector: Central HC067 Inspection ID:4982912
Eval Division: San Diego County Department of Env Health
Eval Program: HW
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 12-18-2014
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Inspector: Central HC067 Inspection ID:4982912
Eval Division: San Diego County Department of Env Health
Eval Program: UST
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 12-18-2018
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Inspector: Delino Faith Inspection ID:6040087
Eval Division: San Diego County Department of Env Health
Eval Program: UST
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 12-31-2013
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Inspector: Kasprovich Christina Inspection ID:4835459
Eval Division: San Diego County Department of Env Health
Eval Program: APSA
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 12-31-2013
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Inspector: Kasprovich Christina Inspection ID:4835459
Eval Division: San Diego County Department of Env Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 12-31-2013
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Inspector: Kasprovich Christina Inspection ID:4835459
Eval Division: San Diego County Department of Env Health
Eval Program: HW
Eval Source: CERS

CNTY OF SD SAN MARCOS RD STATION (Continued) **S104746029**

Eval General Type: Compliance Evaluation Inspection
Eval Date: 12-31-2013
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Inspector: Kasprovich Christina Inspection ID:4835459
Eval Division: San Diego County Department of Env Health
Eval Program: UST
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 01-10-2013
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Inspector: Kasprovich Christina Inspection ID:4086583
Eval Division: San Diego County Department of Env Health
Eval Program: APSA
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 01-10-2013
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Inspector: Kasprovich Christina Inspection ID:4086583
Eval Division: San Diego County Department of Env Health
Eval Program: HMRRP
Eval Source: CERS

Affiliation:
Affiliation Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title: Not reported
Affiliation Address: 5560 Overland Ave, 4th Floor, Suite 410
Affiliation City: San Diego
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 92123
Affiliation Phone: Not reported

Affiliation Type Desc: Parent Corporation
Entity Name: DGS FLEET
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: UST Property Owner Name
Entity Name: COUNTY OF SAN DIEGO
Entity Title: Not reported
Affiliation Address: 5560 OVERLAND AV 4TH FLOOR
Affiliation City: SAN DIEGO
Affiliation State: CA
Affiliation Country: United States
Affiliation Zip: 92123
Affiliation Phone: (858) 694-2151

CNTY OF SD SAN MARCOS RD STATION (Continued) **S104746029**

Affiliation Type Desc:	UST Tank Operator
Entity Name:	county of san diego
Entity Title:	Not reported
Affiliation Address:	5560 OVERLAND AV 4TH FLOOR
Affiliation City:	SAN DIEGO
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	92123
Affiliation Phone:	(858) 495-5443

Affiliation Type Desc:	Identification Signer
Entity Name:	Robert Frank
Entity Title:	Safety Coordinator
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

Affiliation Type Desc:	UST Tank Owner
Entity Name:	county of san diego
Entity Title:	Not reported
Affiliation Address:	5560 OVERLAND AV 4TH FLOOR
Affiliation City:	SAN DIEGO
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	92123
Affiliation Phone:	(858) 694-2151

Affiliation Type Desc:	CUPA District
Entity Name:	San Diego County Env Health
Entity Title:	Not reported
Affiliation Address:	PO Box 129261
Affiliation City:	San Diego
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	92112-9261
Affiliation Phone:	(858) 505-6880

Affiliation Type Desc:	Document Preparer
Entity Name:	MARK MIDDLESTEAD
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

Affiliation Type Desc:	Environmental Contact
Entity Name:	JAMES CLARK
Entity Title:	Not reported
Affiliation Address:	5560 Overland Ave, 4th Floor
Affiliation City:	San Diego
Affiliation State:	CA
Affiliation Country:	Not reported

CNTY OF SD SAN MARCOS RD STATION (Continued) **S104746029**

Affiliation Zip:	92123
Affiliation Phone:	Not reported
Affiliation Type Desc:	Legal Owner
Entity Name:	county of san diego
Entity Title:	Not reported
Affiliation Address:	5560 Overland Ave, 4th Floor, Suite 410
Affiliation City:	San Marcos
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	92078
Affiliation Phone:	(858) 694-2151
Affiliation Type Desc:	Operator
Entity Name:	county of san diego
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(760) 510-2457
Affiliation Type Desc:	UST Permit Applicant
Entity Name:	GORDON MARTINEZ
Entity Title:	FUEL SPECIALIST
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(858) 495-5443

P78 **DEWEY PEST CONTROL** **RCRA-SQG** **1000226169**
SSW **1370 GRAND AVENUE** **LUST** **CAD981430937**
1/4-1/2 **SAN MARCOS, CA 92069** **SAN DIEGO CO. SAM**
0.427 mi. **CPS-SLIC**
2255 ft. **Site 1 of 2 in cluster P** **UST**
San Diego Co. HMMD
Relative: **CERS HAZ WASTE**
Lower **SWEEPS UST**
Actual: **FINDS**
547 ft. **ECHO**
HAZNET
HIST CORTESE
CERS
HWTS

RCRA-SQG:

Date Form Received by Agency:		1996-09-01 00:00:00.0
Handler Name:	DEWEY PEST CONTROL	
Handler Address:		1370 GRAND AVENUE
Handler City,State,Zip:		SAN MARCOS, CA 92069
EPA ID:		CAD981430937
Contact Name:		Not reported
Contact Address:		Not reported
Contact City,State,Zip:		Not reported

DEWEY PEST CONTROL (Continued) **1000226169**

Contact Telephone:	Not reported
Contact Fax:	Not reported
Contact Email:	Not reported
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Small Quantity Generator
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	CA
State District:	4
Mailing Address:	3711 BEVERLY BLVD
Mailing City,State,Zip:	LOS ANGELES, CA 90004
Owner Name:	Not reported
Owner Type:	Not reported
Operator Name:	NOT REQUIRED
Operator Type:	Private
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	NN
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No

DEWEY PEST CONTROL (Continued) **1000226169**

Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2002-06-27 03:25:05.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	Not reported
Manifest Broker:	Not reported
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Operator
Owner/Operator Name:	NOT REQUIRED
Legal Status:	Private
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	NOT REQUIRED
Owner/Operator City,State,Zip:	NOT REQUIRED, ME 99999
Owner/Operator Telephone:	415-555-1212
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name:	DEWEY SERVICES INC
Legal Status:	Private
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	NOT REQUIRED
Owner/Operator City,State,Zip:	NOT REQUIRED, ME 99999
Owner/Operator Telephone:	415-555-1212
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	1996-09-01 00:00:00.0
Handler Name: DEWEY PEST CONTROL	
Federal Waste Generator Description:	Small Quantity Generator
State District Owner:	CA
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	Not reported

DEWEY PEST CONTROL (Continued) **1000226169**

Electronic Manifest Broker: Not reported

Receive Date: 1986-07-30 00:00:00.0
Handler Name: DEWEY PEST CONTROL
Federal Waste Generator Description: Large Quantity Generator
State District Owner: CA
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 56171
NAICS Description: EXTERMINATING AND PEST CONTROL SERVICES

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

LUST REG 9:
Region: 9
Status: Case Closed
Case Number: 9UT301
Local Case: H04345-001
Substance: 0
Qty Leaked: 0
Abate Method: Not reported
Local Agency: San Diego
How Found: Tank Closure
How Stopped: Remove Contents
Source: Tank
Cause: Corrosion
Lead Agency: Local Agency
Case Type: Other ground water affected
Date Found: 04/07/1987
Date Stopped: 04/07/1987
Confirm Date: / /
Submit Workplan: Not reported
Prelim Assess: 08/20/1987
Desc Pollution: Not reported
Remed Plan: / /
Remed Action: Not reported
Began Monitor: Not reported
Release Date: 04/09/1987
Enforce Date: Not reported
Closed Date: 8/26/87
Enforce Type: Not reported
Pilot Program: LOP

DEWEY PEST CONTROL (Continued) **1000226169**

Basin Number: 904.52
GW Depth: ~10
Beneficial Use: Municipal groundwater use
NPDES Number: Not reported
Priority: Low priority. Priority ranking can change over time.
File Dispn: File discarded, case closed
Interim Remedial Actions: Yes
Cleanup and Abatement order Number: Not reported
Waste Discharge Requirement Number: Not reported

SAN DIEGO CO. SAM:
Name: DEWEY PEST CONTROL
Address: 1370 GRAND AV
City,State,Zip: SAN MARCOS, CA 920692404
Case Number: H04345-001
Agency: DEH Site Assessment & Mitigation
Funding: **Private - VAP**
Facility Type: Soils Only
Facility Status: Closed Case
Date: 8/26/1987
Date Began: 4/13/1987

CPS-SLIC:
Name: DEWEY PEST CONTROL
Address: 1370 GRAND AV
City,State,Zip: SAN MARCOS, CA 920692404
Region: STATE
Facility Status: **Completed - Case Closed**
Status Date: 08/26/1987
Global Id: T0607301777
Lead Agency: SAN DIEGO COUNTY LOP
Lead Agency Case Number: H04345-001
Latitude: 33.1436369
Longitude: -117.1931738
Case Type: Cleanup Program Site
Case Worker: Not reported
Local Agency: Not reported
RB Case Number: 9UT301
File Location: Local Agency
Potential Media Affected: Not reported
Potential Contaminants of Concern: Not reported
Site History: Not reported

Click here to access the California GeoTracker records for this facility:

UST:
Name: DEWEY PEST CONTROL
Address: 1370 GRAND AVE
City,State,Zip: SAN MARCOS, CA 92078
Facility ID: H04345
Permitting Agency: SAN DIEGO COUNTY
Latitude: 33.1451126
Longitude: -117.1922712

HMMD SAN DIEGO:

DEWEY PEST CONTROL (Continued) **1000226169**

Name:	BORAL STONE PRODUCTS LLC
Address:	1370 GRAND AVE B
City,State,Zip:	SAN MARCOS, CA 92078
Permit Number:	Not reported
Business Type:	Not reported
EPA Id Number:	CAL000303770
APN:	Not reported
Last HMMD Inspection:	Not reported
Facility Telephone:	760-736-3232
Permit Status:	Permit Renewed
Permit Expiration:	Not reported
Date Last Updated:	07/23/2020
Facility Owner:	Not reported
Facility Mailing Address:	1370 Grand Ave Bldg B, SAN MARCOS, CA 92078
Facility Mailing City:	Not reported
Facility Mailing State:	Not reported
Facility Mailing Zip:	Not reported
UST Owner:	N
Handle Regulated Hazmat:	Not reported
Own Or Operate UST:	Not reported
Subject To APSA:	Not reported
Generate Haz Waste:	Y
Treat Haz Waste:	N
Generate Medical Waste:	Not reported

Inspection Violation:

Record ID:	DEH2002-HUPFP-113398
Permit Status:	Permit Renewed
Active Permit:	Y
Facility Id Number:	37-000-113398
Program Element:	Hazardous Materials Release Response Plans
Inspection Type:	Routine
Inspection Number:	5097516
Return To Compliance Date:	2014-09-06T00:00:00.000
Nov:	No
Violation Classification:	Minor
Underground Storage Tank Id:	Not reported
Container/Tank Id:	Not reported
Last Update:	2020-07-23T01:01:12.000
Inspection Date:	2014-08-07T07:41:00.000
Violation Code:	1010008 Failure to submit inventory reports (Activities, Owner/Operator, Hazardous Materials Descriptions and Map pages, if required. Documentation must be resubmitted (for facilities which exceed EPCRA thresholds) or re-certified (for facilities which do not exceed EPCRA thresholds) by March 1; 19 CCR 4 2729.4(b), 2729.5.

Waste and Materials:

Record ID:	DEH2002-HUPFP-113398
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2020-HCHEM-0261164
Trade Secret:	N
Hazardous Material Type:	Mixture
Last Updated:	2020-07-23T01:01:18.000
Chemical Name:	POLYURETHAN FOAM RESIN
Common Name:	Instapak Component A (Component A)
Case Number:	Not reported

DEWEY PEST CONTROL (Continued) **1000226169**

Record ID: DEH2002-HUPFP-113398
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2020-HCHEM-0261165
Trade Secret: N
Hazardous Material Type: Mixture
Last Updated: 2020-07-23T01:01:18.000
Chemical Name: POLYMETHYLENE POLYPHENYLISOCYANATE
Common Name: Instapak Component 40W Component B
Case Number: Not reported

Record ID: DEH2002-HUPFP-113398
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2020-HCHEM-0261166
Trade Secret: N
Hazardous Material Type: Pure
Last Updated: 2020-07-23T01:01:18.000
Chemical Name: CRYSTALLINE SILICA
Common Name: SILICA SAND
Case Number: 14808-60-7

Record ID: DEH2002-HUPFP-113398
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2020-HCHEM-0261167
Trade Secret: N
Hazardous Material Type: Pure
Last Updated: 2020-07-23T01:01:18.000
Chemical Name: FERROUS SULFATE
Common Name: COPPERAS, IRON SULFATE, GREEN VITROL
Case Number: 7782-63-0

Record ID: DEH2002-HUPFP-113398
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2018-HCHEM-0184907
Trade Secret: N
Hazardous Material Type: Mixture
Last Updated: 2018-06-06T04:01:22.000
Chemical Name: POLYURETHAN FOAM RESIN
Common Name: Instapak Component A (Component A)
Case Number: Not reported

Record ID: DEH2002-HUPFP-113398
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2018-HCHEM-0184908
Trade Secret: N
Hazardous Material Type: Mixture
Last Updated: 2018-06-06T04:01:22.000
Chemical Name: POLYMETHYLENE POLYPHENYLISOCYANATE
Common Name: Instapak Component 40W Component B
Case Number: Not reported

Record ID: DEH2002-HUPFP-113398
Permit Status: Permit Renewed

DEWEY PEST CONTROL (Continued) **1000226169**

Active Permit:	Y
Child Record Id:	DEH2018-HCHEM-0184909
Trade Secret:	N
Hazardous Material Type:	Pure
Last Updated:	2018-06-06T04:01:22.000
Chemical Name:	CRYSTALLINE SILICA
Common Name:	SILICA SAND
Case Number:	14808-60-7

Record ID:	DEH2002-HUPFP-113398
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2018-HCHEM-0184910
Trade Secret:	N
Hazardous Material Type:	Pure
Last Updated:	2018-06-06T04:01:22.000
Chemical Name:	FERROUS SULFATE
Common Name:	COPPERAS, IRON SULFATE, GREEN VITROL
Case Number:	7782-63-0

Record ID:	DEH2002-HUPFP-113398
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2018-HCHEM-0184911
Trade Secret:	N
Hazardous Material Type:	Pure
Last Updated:	2018-06-06T04:01:22.000
Chemical Name:	PROPANE
Common Name:	PROPANE
Case Number:	74-98-6

Record ID:	DEH2002-HUPFP-113398
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2018-HCHEM-0184912
Trade Secret:	N
Hazardous Material Type:	Mixture
Last Updated:	2018-06-06T04:01:22.000
Chemical Name:	Inorganic Oxide Pigments
Common Name:	Iron Oxide Color (Various colors)
Case Number:	7439-92-1

Record ID:	DEH2002-HUPFP-113398
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2018-HCHEM-0184913
Trade Secret:	N
Hazardous Material Type:	Pure
Last Updated:	2018-06-06T04:01:22.000
Chemical Name:	Portland Cement
Common Name:	Portland Cement
Case Number:	65997-15-1

Record ID:	DEH2002-HUPFP-113398
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2018-HCHEM-0184914

DEWEY PEST CONTROL (Continued) **1000226169**

Trade Secret:	N
Hazardous Material Type:	Pure
Last Updated:	2018-06-06T04:01:22.000
Chemical Name:	Inorganic Metal Oxide
Common Name:	Inorganic Green Pigment
Case Number:	1308-38-9
Record ID:	DEH2002-HUPFP-113398
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2018-HWAST-0159456
Trade Secret:	N
Hazardous Material Type:	Not reported
Last Updated:	2018-06-06T04:01:23.000
Chemical Name:	Waste Paint Related Material
Common Name:	Waste Paint
Case Number:	Not reported
Record ID:	DEH2002-HUPFP-113398
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2019-HCHEM-0211726
Trade Secret:	N
Hazardous Material Type:	Pure
Last Updated:	2020-03-03T02:35:32.000
Chemical Name:	FERROUS SULFATE
Common Name:	COPPERAS, IRON SULFATE, GREEN VITROL
Case Number:	7782-63-0
Record ID:	DEH2002-HUPFP-113398
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2019-HCHEM-0211727
Trade Secret:	N
Hazardous Material Type:	Pure
Last Updated:	2020-03-03T02:35:32.000
Chemical Name:	PROPANE
Common Name:	PROPANE
Case Number:	74-98-6
Record ID:	DEH2002-HUPFP-113398
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2019-HCHEM-0211728
Trade Secret:	N
Hazardous Material Type:	Mixture
Last Updated:	2020-03-03T02:35:32.000
Chemical Name:	Inorganic Oxide Pigments
Common Name:	Iron Oxide Color (Various colors)
Case Number:	7439-92-1
Record ID:	DEH2002-HUPFP-113398
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2019-HCHEM-0211730
Trade Secret:	N
Hazardous Material Type:	Pure

DEWEY PEST CONTROL (Continued) **1000226169**

Last Updated: 2020-03-03T02:35:32.000
Chemical Name: Inorganic Metal Oxide
Common Name: Inorganic Green Pigment
Case Number: 1308-38-9

Record ID: DEH2002-HUPFP-113398
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2019-HWAST-0183965
Trade Secret: N
Hazardous Material Type: Not reported
Last Updated: 2020-03-03T02:35:32.000
Chemical Name: Waste Paint Related Material
Common Name: Waste Paint
Case Number: Not reported

Record ID: DEH2002-HUPFP-113398
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2016-HCHEM-0113613
Trade Secret: N
Hazardous Material Type: Pure
Last Updated: 2018-03-07T02:30:47.000
Chemical Name: POLYURETHAN FOAM RESIN
Common Name: POLYOL PART A
Case Number: Not reported

Record ID: DEH2002-HUPFP-113398
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2016-HCHEM-0113614
Trade Secret: N
Hazardous Material Type: Pure
Last Updated: 2018-03-07T02:30:47.000
Chemical Name: POLYMETHYLENE POLYPHENYLISOCYANATE
Common Name: POLYMERIC MDI PART B
Case Number: 9016-87-9

Record ID: DEH2002-HUPFP-113398
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2016-HCHEM-0113615
Trade Secret: N
Hazardous Material Type: Pure
Last Updated: 2018-03-07T02:30:47.000
Chemical Name: CRYSTALLINE SILICA
Common Name: SILICA SAND
Case Number: 14808-60-7

Record ID: DEH2002-HUPFP-113398
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2016-HCHEM-0113616
Trade Secret: N
Hazardous Material Type: Pure
Last Updated: 2018-03-07T02:30:47.000
Chemical Name: FERROUS SULFATE

DEWEY PEST CONTROL (Continued) **1000226169**

Common Name: COPPERAS, IRON SULFATE, GREEN VITROL
Case Number: 7782-63-0

Record ID: DEH2002-HUPFP-113398
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2016-HCHEM-0113617
Trade Secret: N
Hazardous Material Type: Mixture
Last Updated: 2018-03-07T02:30:47.000
Chemical Name: MODIFIED POLYCARBOXYLATE
Common Name: EUCON SPC
Case Number: Not reported

Record ID: DEH2002-HUPFP-113398
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2016-HCHEM-0113618
Trade Secret: N
Hazardous Material Type: Mixture
Last Updated: 2018-03-07T02:30:47.000
Chemical Name: EUCON AIR
Common Name: 40 BULK GALLON
Case Number: Not reported

Record ID: DEH2002-HUPFP-113398
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2016-HCHEM-0113619
Trade Secret: N
Hazardous Material Type: Pure
Last Updated: 2018-03-07T02:30:47.000
Chemical Name: PROPANE
Common Name: PROPANE
Case Number: 74-98-6

Record ID: DEH2002-HUPFP-113398
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2016-HCHEM-0113620
Trade Secret: N
Hazardous Material Type: Pure
Last Updated: 2018-03-07T02:30:47.000
Chemical Name: INORGANIC METAL OXIDE
Common Name: IRON OXIDE PIGMENT (VARIOUS COLORS)
Case Number: 7439-92-1

Record ID: DEH2002-HUPFP-113398
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2016-HCHEM-0113621
Trade Secret: N
Hazardous Material Type: Mixture
Last Updated: 2018-03-07T02:30:47.000
Chemical Name: EUCON ACN
Common Name: 200 BULK GALLON
Case Number: Not reported

DEWEY PEST CONTROL (Continued) **1000226169**

Record ID:	DEH2002-HUPFP-113398
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2016-HWAST-0094922
Trade Secret:	N
Hazardous Material Type:	Not reported
Last Updated:	2018-03-07T02:30:47.000
Chemical Name:	WASTE PAINT RELATED MATERIAL
Common Name:	WASTE PAINT RELATED MATERIAL
Case Number:	Not reported

Record ID:	DEH2002-HUPFP-113398
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2020-HCHEM-0261168
Trade Secret:	N
Hazardous Material Type:	Pure
Last Updated:	2020-07-23T01:01:18.000
Chemical Name:	PROPANE
Common Name:	PROPANE
Case Number:	74-98-6

Record ID:	DEH2002-HUPFP-113398
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2020-HCHEM-0261169
Trade Secret:	N
Hazardous Material Type:	Mixture
Last Updated:	2020-07-23T01:01:18.000
Chemical Name:	Inorganic Oxide Pigments
Common Name:	Iron Oxide Color (Various colors)
Case Number:	7439-92-1

Record ID:	DEH2002-HUPFP-113398
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2020-HCHEM-0261170
Trade Secret:	N
Hazardous Material Type:	Pure
Last Updated:	2020-07-23T01:01:18.000
Chemical Name:	Portland Cement
Common Name:	Portland Cement
Case Number:	65997-15-1

Record ID:	DEH2002-HUPFP-113398
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2020-HWAST-0232385
Trade Secret:	N
Hazardous Material Type:	Not reported
Last Updated:	2020-07-23T01:01:18.000
Chemical Name:	Waste Paint Related Material
Common Name:	Waste Paint
Case Number:	Not reported

Record ID:	DEH2002-HUPFP-113398
Permit Status:	Permit Renewed

DEWEY PEST CONTROL (Continued) **1000226169**

Active Permit: Y
Child Record Id: DEH2019-HCHEM-0211725
Trade Secret: N
Hazardous Material Type: Pure
Last Updated: 2020-03-03T02:35:32.000
Chemical Name: CRYSTALLINE SILICA
Common Name: SILICA SAND
Case Number: 14808-60-7

Record ID: DEH2002-HUPFP-113398
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2019-HCHEM-0211723
Trade Secret: N
Hazardous Material Type: Mixture
Last Updated: 2020-03-03T02:35:32.000
Chemical Name: POLYURETHAN FOAM RESIN
Common Name: Instapak Component A (Component A)
Case Number: Not reported

Record ID: DEH2002-HUPFP-113398
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2019-HCHEM-0211724
Trade Secret: N
Hazardous Material Type: Mixture
Last Updated: 2020-03-03T02:35:32.000
Chemical Name: POLYMETHYLENE POLYPHENYLISOCYANATE
Common Name: Instapak Component 40W Component B
Case Number: Not reported

Record ID: DEH2002-HUPFP-113398
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2019-HCHEM-0211729
Trade Secret: N
Hazardous Material Type: Pure
Last Updated: 2020-03-03T02:35:32.000
Chemical Name: Portland Cement
Common Name: Portland Cement
Case Number: 65997-15-1

Record ID: DEH2002-HUPFP-113398
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2018-HCHEM-0190771
Trade Secret: N
Hazardous Material Type: Mixture
Last Updated: 2019-02-26T02:35:39.000
Chemical Name: POLYURETHAN FOAM RESIN
Common Name: Instapak Component A (Component A)
Case Number: Not reported

Record ID: DEH2002-HUPFP-113398
Permit Status: Permit Renewed
Active Permit: Y
Child Record Id: DEH2018-HCHEM-0190772

DEWEY PEST CONTROL (Continued) **1000226169**

Trade Secret:	N
Hazardous Material Type:	Mixture
Last Updated:	2019-02-26T02:35:39.000
Chemical Name:	POLYMETHYLENE POLYPHENYLISOCYANATE
Common Name:	Instapak Component 40W Component B
Case Number:	Not reported
Record ID:	DEH2002-HUPFP-113398
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2018-HCHEM-0190773
Trade Secret:	N
Hazardous Material Type:	Pure
Last Updated:	2019-02-26T02:35:39.000
Chemical Name:	CRYSTALLINE SILICA
Common Name:	SILICA SAND
Case Number:	14808-60-7
Record ID:	DEH2002-HUPFP-113398
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2018-HCHEM-0190774
Trade Secret:	N
Hazardous Material Type:	Pure
Last Updated:	2019-02-26T02:35:39.000
Chemical Name:	FERROUS SULFATE
Common Name:	COPPERAS, IRON SULFATE, GREEN VITROL
Case Number:	7782-63-0
Record ID:	DEH2002-HUPFP-113398
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2018-HCHEM-0190775
Trade Secret:	N
Hazardous Material Type:	Pure
Last Updated:	2019-02-26T02:35:39.000
Chemical Name:	PROPANE
Common Name:	PROPANE
Case Number:	74-98-6
Record ID:	DEH2002-HUPFP-113398
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2018-HCHEM-0190776
Trade Secret:	N
Hazardous Material Type:	Mixture
Last Updated:	2019-02-26T02:35:39.000
Chemical Name:	Inorganic Oxide Pigments
Common Name:	Iron Oxide Color (Various colors)
Case Number:	7439-92-1
Record ID:	DEH2002-HUPFP-113398
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2018-HCHEM-0190777
Trade Secret:	N
Hazardous Material Type:	Pure

DEWEY PEST CONTROL (Continued) **1000226169**

Last Updated:	2019-02-26T02:35:39.000
Chemical Name:	Portland Cement
Common Name:	Portland Cement
Case Number:	65997-15-1
Record ID:	DEH2002-HUPFP-113398
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2018-HCHEM-0190778
Trade Secret:	N
Hazardous Material Type:	Pure
Last Updated:	2019-02-26T02:35:39.000
Chemical Name:	Inorganic Metal Oxide
Common Name:	Inorganic Green Pigment
Case Number:	1308-38-9
Record ID:	DEH2002-HUPFP-113398
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2018-HWAST-0165190
Trade Secret:	N
Hazardous Material Type:	Not reported
Last Updated:	2019-02-26T02:35:39.000
Chemical Name:	Waste Paint Related Material
Common Name:	Waste Paint
Case Number:	Not reported
Name:	NASH FABRICATORS, INC
Address:	1370 GRAND AV
City,State,Zip:	SAN MARCOS, CA 92078
Permit Number:	203988
Business Type:	6HK35
EPA Id Number:	Not reported
APN:	219-130-19-00
Last HMMD Inspection:	02/09/2006
Facility Telephone:	760-761-4749
Permit Status:	INAC
Permit Expiration:	12/31/2007
Date Last Updated:	11/02/2012
Facility Owner:	TIM NASH
Facility Mailing Address:	PO BOX 413
Facility Mailing City:	FALLBROOK
Facility Mailing State:	CA
Facility Mailing Zip:	92088-0413
UST Owner:	Not reported
Handle Regulated Hazmat:	Not reported
Own Or Operate UST:	Not reported
Subject To APSA:	Not reported
Generate Haz Waste:	Not reported
Treat Haz Waste:	Not reported
Generate Medical Waste:	Not reported
Name:	NASH FABRICATORS, INC
Address:	1370 GRAND AV
City,State,Zip:	SAN MARCOS, CA 92078
Permit Number:	203988

DEWEY PEST CONTROL (Continued) **1000226169**

Business Type:	6HK35
EPA Id Number:	Not reported
APN:	219-130-19-00
Last HMMD Inspection:	02/09/2006
Facility Telephone:	760-761-4749
Permit Status:	INAC
Permit Expiration:	12/31/2007
Date Last Updated:	11/02/2012
Facility Owner:	TIM NASH
Facility Mailing Address:	PO BOX 413
Facility Mailing City:	FALLBROOK
Facility Mailing State:	CA
Facility Mailing Zip:	92088-0413
UST Owner:	Not reported
Handle Regulated Hazmat:	Y
Own Or Operate UST:	Not reported
Subject To APSA:	Not reported
Generate Haz Waste:	Y
Treat Haz Waste:	Not reported
Generate Medical Waste:	Not reported

Name:	DEWEY PEST CONTROL
Address:	1370 GRAND AV
City,State,Zip:	SAN MARCOS, CA 92069
Permit Number:	104345
Business Type:	6HK69
EPA Id Number:	Not reported
APN:	219-130-20-00
Last HMMD Inspection:	08/11/2003
Facility Telephone:	760-744-3170
Permit Status:	INAC
Permit Expiration:	06/30/2004
Date Last Updated:	11/02/2012
Facility Owner:	Not reported
Facility Mailing Address:	1370 GRAND AV
Facility Mailing City:	SAN MARCOS
Facility Mailing State:	CA
Facility Mailing Zip:	92069-2404
UST Owner:	DEWEY PEST CONTROL
Handle Regulated Hazmat:	Y
Own Or Operate UST:	Y
Subject To APSA:	Not reported
Generate Haz Waste:	Not reported
Treat Haz Waste:	Not reported
Generate Medical Waste:	Not reported

Violations Inactive Permits:

Permit Number:	104345
Update Date:	11/02/2012
Inspection Date:	08/11/2003
Violation Code:	6HV3103
Violation:	NO UST PLAN CHECK PERMIT OBTAINED
Violation Citation:	UST repair/modify/closure permit not obtained .68.1004, 68.1005, 68.1009.5
Activity:	Inactive Permit

Permit Number:	104345
Update Date:	11/02/2012

DEWEY PEST CONTROL (Continued) **1000226169**

Inspection Date: 08/11/2003
Violation Code: 6HV3263
Violation: MONITOR SYSTEM NOT ALL FUNCTIONAL
Violation Citation: Monitoring system components &/or devices are not all functional. 2630, 2641(j), 2632
Activity: Inactive Permit

UST:
UST Name: UNDERGROUND TANK 104345 T001
Last Update: 2012-11-02 14:17:38
Permit Number: 104345
Tank Type: SINGLE WALL
Additional Id: 1
Capacity Gallons: 550
UST Contents: REGULAR UNLEADED
Other Content Info: REGULAR UNLEADED
Reg Status: REMOVED
Remove Close Date: 1987-01-12 00:00:00
Year Installed: Not reported
Pipe Type: Not reported
Delivery System: Not reported
Monitor Code: 90
UST Monitor Method: NO MONITORING ALTERNATIVE SELECTED. VERIFY AND ENTER MONITORING ALTERNATIVE DURING INSPECTION.

UST Name: UNDERGROUND TANK 104345 T002
Last Update: 2012-11-02 14:17:38
Permit Number: 104345
Tank Type: SINGLE WALL
Additional Id: 2
Capacity Gallons: 550
UST Contents: LEADED
Other Content Info: LEADED
Reg Status: REMOVED
Remove Close Date: 1987-01-12 00:00:00
Year Installed: Not reported
Pipe Type: Not reported
Delivery System: Not reported
Monitor Code: 90
UST Monitor Method: NO MONITORING ALTERNATIVE SELECTED. VERIFY AND ENTER MONITORING ALTERNATIVE DURING INSPECTION.

UST Name: UNDERGROUND TANK 104345 T003
Last Update: 2012-11-02 14:17:38
Permit Number: 104345
Tank Type: DOUBLE WALL
Additional Id: 3 UNLEADED/AT4983
Capacity Gallons: 5000
UST Contents: REGULAR UNLEADED
Other Content Info: REGULAR UNLEADED
Reg Status: REMOVED
Remove Close Date: 2004-01-06 00:00:00
Year Installed: 1987-01-01 00:00:00
Pipe Type: DOUBLE WALL
Delivery System: SUCTION
Monitor Code: 21
UST Monitor Method: DW TANK DW SUCTION AND/ OR GRAVITY PIPING WITH INTERSTITIAL

DEWEY PEST CONTROL (Continued) **1000226169**

MONITORS: INTERSTITIAL.

CERS HAZ WASTE:
Name: BORAL STONE PRODUCTS LLC
Address: 1370 GRAND AVE
City,State,Zip: SAN MARCOS, CA 92069
Site ID: 392105
CERS ID: 10375876
CERS Description: Hazardous Waste Generator

SWEEPS UST:
Name: DEWEY PEST CONTROL
Address: 1370 GRAND AVE
City: SAN MARCOS
Status: Active
Comp Number: 4345
Number: 9
Board Of Equalization: 44-006091
Referral Date: Not reported
Action Date: 06-26-92
Created Date: 02-29-88
Owner Tank Id: Not reported
SWRCB Tank Id: 37-000-004345-000003
Tank Status: A
Capacity: 5000
Active Date: Not reported
Tank Use: M.V. FUEL
STG: P
Content: REG UNLEADED
Number Of Tanks: 1

Name: DEWEY PEST CONTROL
Address: 1370 GRAND AVE
City: SAN MARCOS
Status: Not reported
Comp Number: 4345
Number: Not reported
Board Of Equalization: 44-006091
Referral Date: Not reported
Action Date: Not reported
Created Date: Not reported
Owner Tank Id: Not reported
SWRCB Tank Id: 37-000-004345-000001
Tank Status: Not reported
Capacity: 550
Active Date: Not reported
Tank Use: M.V. FUEL
STG: PRODUCT
Content: REG UNLEADED
Number Of Tanks: 2

Name: DEWEY PEST CONTROL
Address: 1370 GRAND AVE
City: SAN MARCOS
Status: Not reported

DEWEY PEST CONTROL (Continued) **1000226169**

Comp Number: 4345
Number: Not reported
Board Of Equalization: 44-006091
Referral Date: Not reported
Action Date: Not reported
Created Date: Not reported
Owner Tank Id: Not reported
SWRCB Tank Id: 37-000-004345-000002
Tank Status: Not reported
Capacity: 550
Active Date: Not reported
Tank Use: M.V. FUEL
STG: PRODUCT
Content: LEADED
Number Of Tanks: Not reported

FINDS:
Registry ID: 110002702950

Click Here:

Environmental Interest/Information System:
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.
STATE MASTER

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1000226169
Registry ID: 110002702950
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110002702950
Name: DEWEY PEST CONTROL
Address: 1370 GRAND AVENUE
City,State,Zip: SAN MARCOS, CA 92069

HAZNET:
Name: DEWEY PEST CONTROL
Address: 1370 GRAND AVENUE
Address 2: Not reported
City,State,Zip: SAN MARCOS, CA 920690000
Contact: CANCEL PER SURVEY 1-27-95 LC
Telephone: --
Mailing Name: Not reported
Mailing Address: 3711 BEVERLY BLVD

Year: 1997
Gepaid: CAD981430937
TSD EPA ID: CAT080013352
CA Waste Code: 223 - Unspecified oil-containing waste
Disposal Method: R01 - Recycler
Tons: 0.5004

DEWEY PEST CONTROL (Continued) **1000226169**

Year: 1993
Gepaid: CAD981430937
TSD EPA ID: CAT080011059
CA Waste Code: 223 - Unspecified oil-containing waste
Disposal Method: -
Tons: 0.175

Year: 1993
Gepaid: CAD981430937
TSD EPA ID: CAT080011059
CA Waste Code: -
Disposal Method: -
Tons: 1.251

Year: 1993
Gepaid: CAD981430937
TSD EPA ID: CAT080011059
CA Waste Code: 331 - Off-specification, aged or surplus organics
Disposal Method: -
Tons: 0.4

Year: 1993
Gepaid: CAD981430937
TSD EPA ID: CAT080011059
CA Waste Code: 221 - Waste oil and mixed oil
Disposal Method: R01 - Recycler
Tons: 0.18

Additional Info:
Year: 1997
Gen EPA ID: CAD981430937

Shipment Date: 19970811
Creation Date: 7/23/1998 0:00:00
Receipt Date: 19970815
Manifest ID: 96582235
Trans EPA ID: CAD982525024
Trans Name: Not reported
Trans 2 EPA ID: Not reported
Trans 2 Name: Not reported
TSDF EPA ID: CAT080013352
Trans Name: Not reported
TSDF Alt EPA ID: CAT080013352
TSDF Alt Name: Not reported
Waste Code Description: 223 - Unspecified oil-containing waste
RCRA Code: D001
Meth Code: R01 - Recycler
Quantity Tons: 0.5004
Waste Quantity: 120
Quantity Unit: G
Additional Code 1: Not reported
Additional Code 2: Not reported
Additional Code 3: Not reported
Additional Code 4: Not reported
Additional Code 5: Not reported

DEWEY PEST CONTROL (Continued) **1000226169**

Additional Info:

Year:	1993
Gen EPA ID:	CAD981430937
Shipment Date:	19930816
Creation Date:	9/12/1995 0:00:00
Receipt Date:	19930816
Manifest ID:	92765648
Trans EPA ID:	CAT080011059
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAT080011059
Trans Name:	Not reported
TSDF Alt EPA ID:	CAT080011059
TSDF Alt Name:	Not reported
Waste Code Description:	221 - Waste oil and mixed oil
RCRA Code:	Not reported
Meth Code:	R01 - Recycler
Quantity Tons:	0.18
Waste Quantity:	360
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19930816
Creation Date:	9/12/1995 0:00:00
Receipt Date:	19930816
Manifest ID:	92765648
Trans EPA ID:	CAT080011059
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAT080011059
Trans Name:	Not reported
TSDF Alt EPA ID:	CAT080011059
TSDF Alt Name:	Not reported
Waste Code Description:	223 - Unspecified oil-containing waste
RCRA Code:	Not reported
Meth Code:	- Not reported
Quantity Tons:	0.175
Waste Quantity:	350
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19930816
Creation Date:	9/12/1995 0:00:00
Receipt Date:	19930816
Manifest ID:	92765648
Trans EPA ID:	CAT080011059

DEWEY PEST CONTROL (Continued) **1000226169**

Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAT080011059
Trans Name:	Not reported
TSDF Alt EPA ID:	CAT080011059
TSDF Alt Name:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	F001
Meth Code:	- Not reported
Quantity Tons:	1.251
Waste Quantity:	300
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	19930816
Creation Date:	9/12/1995 0:00:00
Receipt Date:	19930816
Manifest ID:	92765648
Trans EPA ID:	CAT080011059
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAT080011059
Trans Name:	Not reported
TSDF Alt EPA ID:	CAT080011059
TSDF Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	Not reported
Meth Code:	- Not reported
Quantity Tons:	0.4
Waste Quantity:	800
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

HIST CORTESE:

edr_fname:	DEWEY PEST CONTROL
edr_fadd1:	1370 GRAND
City,State,Zip:	SAN MARCOS, CA 92069
Region:	CORTESE
Facility County Code:	37
Reg By:	LTNKA
Reg Id:	9UT301

CERS:

Name:	DEWEY PEST CONTROL
Address:	1370 GRAND AV
City,State,Zip:	SAN MARCOS, CA 920692404

DEWEY PEST CONTROL (Continued) **1000226169**

Site ID: 207449
CERS ID: T0607301777
CERS Description: Cleanup Program Site

Name: BORAL STONE PRODUCTS LLC
Address: 1370 GRAND AVE
City,State,Zip: SAN MARCOS, CA 92069
Site ID: 392105
CERS ID: 10375876
CERS Description: Chemical Storage Facilities

Violations:
Site ID: 392105
Site Name: Boral Stone Products LLC
Violation Date: 08-07-2014
Citation: HSC 6.95 25508.2 - California Health and Safety Code, Chapter 6.95, Section(s) 25508.2
Violation Description: Failure to annually review and electronically certify that the business plan is complete, accurate, and up-to-date.
Violation Notes: Returned to compliance on 09/06/2014.
Violation Division: San Diego County Department of Env Health
Violation Program: HMRRP
Violation Source: CERS

Evaluation:
Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-12-2018
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Inspector: Kieu Bridget Inspection ID:6001971
Eval Division: San Diego County Department of Env Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-12-2018
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Inspector: Kieu Bridget Inspection ID:6001971
Eval Division: San Diego County Department of Env Health
Eval Program: HW
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 08-07-2014
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Inspector: Beacon Ellen Inspection ID:5097516
Eval Division: San Diego County Department of Env Health
Eval Program: HW
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 08-07-2014
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Inspector: Beacon Ellen Inspection ID:5097516

DEWEY PEST CONTROL (Continued) **1000226169**

Eval Division: San Diego County Department of Env Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 09-19-2016
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Inspector: Calcagno Leonardo Inspection ID:5486849
Eval Division: San Diego County Department of Env Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 09-19-2016
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Inspector: Calcagno Leonardo Inspection ID:5486849
Eval Division: San Diego County Department of Env Health
Eval Program: HW
Eval Source: CERS

Affiliation:
Affiliation Type Desc: Document Preparer
Entity Name: Francisco Rios
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: Operator
Entity Name: Boral Stone Products LLC
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: (760) 736-3232

Affiliation Type Desc: Legal Owner
Entity Name: Boral Industries Inc.
Entity Title: Not reported
Affiliation Address: 200 Mansell Court East Suite 305
Affiliation City: Roswell
Affiliation State: GA
Affiliation Country: United States
Affiliation Zip: 30076
Affiliation Phone: (770) 645-4500

Affiliation Type Desc: Environmental Contact
Entity Name: FRANCISCO RIOS
Entity Title: Not reported
Affiliation Address: 1370 Grand Ave Bldg B

DEWEY PEST CONTROL (Continued) **1000226169**

Affiliation City:	San Marcos
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	92078
Affiliation Phone:	Not reported
Affiliation Type Desc:	Identification Signer
Entity Name:	Francisco Rios
Entity Title:	Facility Manager
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported
Affiliation Type Desc:	Parent Corporation
Entity Name:	Boral Stone - San Marcos
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported
Affiliation Type Desc:	CUPA District
Entity Name:	San Diego County Env Health
Entity Title:	Not reported
Affiliation Address:	PO Box 129261
Affiliation City:	San Diego
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	92112-9261
Affiliation Phone:	(858) 505-6880
Affiliation Type Desc:	Facility Mailing Address
Entity Name:	Mailing Address
Entity Title:	Not reported
Affiliation Address:	1370 Grand Ave Bldg B
Affiliation City:	SAN MARCOS
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	92069
Affiliation Phone:	Not reported

HWTS:

Name:	DEWEY PEST CONTROL
Address:	1370 GRAND AVENUE
Address 2:	Not reported
City,State,Zip:	SAN MARCOS, CA 920690000
EPA ID:	CAD981430937
Inactive Date:	01/01/1995
Create Date:	04/10/1987
Last Act Date:	09/14/2004
Mailing Name:	Not reported

DEWEY PEST CONTROL (Continued) **1000226169**

Mailing Address:	3711 BEVERLY BLVD
Mailing Address 2:	Not reported
Mailing City,State,Zip:	LOS ANGELES, CA 900040000
Owner Name:	--
Owner Address:	--
Owner Address 2:	Not reported
Owner City,State,Zip:	--, 99 --
Contact Name:	CANCEL PER SURVEY 1-27-95 LC
Contact Address:	--
Contact Address 2:	Not reported
City,State,Zip:	--, 99 --

P79 **COLUCCI DEVELOPMENT** **CPS-SLIC** **S106519075**
SSW **1325 GRAND AVE** **N/A**
1/4-1/2 **SAN MARCOS, CA 92069**
0.443 mi.
2338 ft. **Site 2 of 2 in cluster P**

Relative: **Lower**
Actual: **546 ft.**

SLIC REG 9:

Name:	COLUCCI DEVELOPMENT
Address:	1325 GRAND AVE
City:	SAN MARCOS
Region:	9
Facilty Type:	Not reported
Status:	Dead
Sort Code:	20-0305.05
Waste Discharger Id:	Not reported
Local Case Num:	Not reported
Responsible Party:	GRAND AVENUE BUSINESS PARK
Category:	ENFORCEMENT
Class:	SLIC
Order Number:	Not reported
File Number:	1
Date Entered:	11/1986
End Date:	12/1986
Archive Box #:	928
Archive Box Storage:	3-1-15F
Archive Box Storage Location:	MR. ALBERT COLUCCI
Remarks:	Not reported

Q80 **AIR PRODUCTS AND CHEMICALS INC** **LUST** **S102423760**
SSW **1415 GRAND AVE** **SWEEPS UST** **N/A**
1/4-1/2 **SAN MARCOS, CA 92069** **SAN DIEGO CO LOP**
0.451 mi.
2382 ft. **Site 1 of 2 in cluster Q**

Relative: **Lower**
Actual: **551 ft.**

LUST REG 9:

Region:	9
Status:	Case Closed
Case Number:	9UT1661
Local Case:	H02614-001
Substance:	Diesel
Qty Leaked:	Not reported
Abate Method:	Excavate and Dispose - remove contaminated soil and dispose in approved site
Local Agency:	San Diego

AIR PRODUCTS AND CHEMICALS INC (Continued) **S102423760**

How Found: Tank Closure
How Stopped: Close Tank
Source: Unknown
Cause: Unknown
Lead Agency: Local Agency
Case Type: Other ground water affected
Date Found: 03/23/1990
Date Stopped: 03/23/1990
Confirm Date: 03/23/1990
Submit Workplan: Not reported
Prelim Assess: / /
Desc Pollution: Not reported
Remed Plan: / /
Remed Action: Not reported
Began Monitor: Not reported
Release Date: 03/23/1990
Enforce Date: Not reported
Closed Date: 2/4/91
Enforce Type: Not reported
Pilot Program: LOP
Basin Number: 904.52
GW Depth: 10
Beneficial Use: Municipal groundwater use
NPDES Number: Not reported
Priority: Low priority. Priority ranking can change over time.
File Dispn: File discarded, case closed
Interim Remedial Actions: Yes
Cleanup and Abatement order Number: Not reported
Waste Discharge Requirement Number: Not reported

SWEEPS UST:
Name: AIR PRODUCTS & CHEMICALS INC
Address: 1415 GRAND AVE
City: SAN MARCOS
Status: Active
Comp Number: 2614
Number: 9
Board Of Equalization: Not reported
Referral Date: Not reported
Action Date: 06-26-92
Created Date: 02-29-88
Owner Tank Id: Not reported
SWRCB Tank Id: Not reported
Tank Status: Not reported
Capacity: Not reported
Active Date: Not reported
Tank Use: Not reported
STG: Not reported
Content: Not reported
Number Of Tanks: Not reported

Name: AIR PRODUCTS & CHEMICALS INC
Address: 1415 GRAND AVE
City: SAN MARCOS
Status: Not reported
Comp Number: 2614
Number: Not reported

AIR PRODUCTS AND CHEMICALS INC (Continued) **S102423760**

Board Of Equalization: Not reported
Referral Date: Not reported
Action Date: Not reported
Created Date: Not reported
Owner Tank Id: Not reported
SWRCB Tank Id: 37-000-002614-000001
Tank Status: Not reported
Capacity: 280
Active Date: Not reported
Tank Use: PETROLEUM
STG: WASTE
Content: Not reported
Number Of Tanks: 3

Name: AIR PRODUCTS & CHEMICALS INC
Address: 1415 GRAND AVE
City: SAN MARCOS
Status: Not reported
Comp Number: 2614
Number: Not reported
Board Of Equalization: Not reported
Referral Date: Not reported
Action Date: Not reported
Created Date: Not reported
Owner Tank Id: Not reported
SWRCB Tank Id: 37-000-002614-000002
Tank Status: Not reported
Capacity: 5000
Active Date: Not reported
Tank Use: M.V. FUEL
STG: PRODUCT
Content: OTHER
Number Of Tanks: Not reported

Name: AIR PRODUCTS & CHEMICALS INC
Address: 1415 GRAND AVE
City: SAN MARCOS
Status: Not reported
Comp Number: 2614
Number: Not reported
Board Of Equalization: Not reported
Referral Date: Not reported
Action Date: Not reported
Created Date: Not reported
Owner Tank Id: Not reported
SWRCB Tank Id: 37-000-002614-000003
Tank Status: Not reported
Capacity: 2000
Active Date: Not reported
Tank Use: M.V. FUEL
STG: PRODUCT
Content: OTHER
Number Of Tanks: Not reported

SAN DIEGO CO LOP:
Name: AIR PRODUCTS & CHEMICALS INC
Address: 1415 GRAND AVE

AIR PRODUCTS AND CHEMICALS INC (Continued) **S102423760**

City,State,Zip:	SAN MARCOS, CA 92069
Record ID:	DEH1990-LSAM-H02614-001
Record Status:	Completed
Opened Date:	03/23/1990
Parcel Number:	219-140-50-00
Case Type:	LOP - Local Oversight Program
Historical Name:	AIR PRODUCTS & CHEMICALS
SWRCB Global ID:	T0607300476
Funding:	S - LOP State Fund
Lead Agency:	DEH/SAM
Lead Agency Date:	03/23/1990
Census Tract:	200.29
Community:	San Marcos
Jurisdiction:	SAN MARCOS
Watershed Basin Number:	904.52
Water Purveyor:	VALLECITOS WATER DISTRICT
Fire Agency:	SAN MARCOS FIRE PROT DIST
Latitude:	33.1433192
Longitude:	-117.1944233
X MapCoord:	6272593.554
Y MapCoord:	1997104.198

Q81 **AIRGAS USA LLC** **LUST** **S104745513**
SSW **1415 GRAND AVE** **SAN DIEGO CO. SAM** **N/A**
1/4-1/2 **SAN MARCOS, CA 92078** **San Diego Co. HMMD**
0.451 mi. **HIST UST**
2382 ft. **Site 2 of 2 in cluster Q** **Cortese**
HAZNET
Relative: Lower **HIST CORTESE**
CERS
Actual: 551 ft. **HWTS**

LUST:

Name:	AIR PRODUCTS & CHEMICALS INC
Address:	1415 GRAND AV
City,State,Zip:	SAN MARCOS, CA 920692405
Lead Agency:	SAN DIEGO COUNTY LOP
Case Type:	LUST Cleanup Site
Geo Track:	http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0607300476
Global Id:	T0607300476
Latitude:	33.143321
Longitude:	-117.194423
Status:	Completed - Case Closed
Status Date:	02/05/1991
Case Worker:	Not reported
RB Case Number:	9UT1661
Local Agency:	Not reported
File Location:	Local Agency
Local Case Number:	H02614-001
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Diesel
Site History:	Not reported

LUST:

Global Id:	T0607300476
Action Type:	ENFORCEMENT
Date:	02/04/1991
Action:	Closure/No Further Action Letter

AIRGAS USA LLC (Continued) **S104745513**

Global Id: T0607300476
Action Type: Other
Date: 03/23/1990
Action: Leak Began

Global Id: T0607300476
Action Type: Other
Date: 03/23/1990
Action: Leak Discovery

Global Id: T0607300476
Action Type: Other
Date: 03/12/1990
Action: Leak Stopped

Global Id: T0607300476
Action Type: Other
Date: 03/23/1990
Action: Leak Reported

LUST:
Global Id: T0607300476
Status: Open - Case Begin Date
Status Date: 03/12/1990

Global Id: T0607300476
Status: Completed - Case Closed
Status Date: 02/05/1991

SAN DIEGO CO. SAM:
Name: AIR PRODUCTS & CHEMICALS INC
Address: 1415 GRAND AV
City,State,Zip: SAN MARCOS, CA 920692405
Case Number: H02614-001
Agency: DEH Site Assessment & Mitigation
Funding: **LOP - State Fund**
Facility Type: Soils Only
Facility Status: Closed Case
Date: 2/5/1991
Date Began: 3/23/1990

HMMD SAN DIEGO:
Name: AIRGAS USA LLC
Address: 1415 GRAND AV
City,State,Zip: SAN MARCOS, CA 92078
Permit Number: 202025
Business Type: 6HK79
EPA Id Number: Not reported
APN: 219-140-50-00
Last HMMD Inspection: 07/14/2010
Facility Telephone: 760-744-1472
Permit Status: OPEN
Permit Expiration: 01/31/2013
Date Last Updated: 11/02/2012
Facility Owner: AIRGAS USA LLC/WEST DIVISION

AIRGAS USA LLC (Continued) **S104745513**

Facility Mailing Address:	PO BOX 93500
Facility Mailing City:	Long Beach
Facility Mailing State:	CA
Facility Mailing Zip:	90809
UST Owner:	Not reported
Handle Regulated Hazmat:	Y
Own Or Operate UST:	Not reported
Subject To APSA:	Not reported
Generate Haz Waste:	Not reported
Treat Haz Waste:	Not reported
Generate Medical Waste:	Not reported

Inventory Active Permits (not SQG Medical):

Permit Number:	202025
Update Date:	11/02/2012
Case Number:	74-86-2
Name:	ACETYLENE GAS
Other Information:	DISSOLVED
Material Waste:	Material
Hazardous Categories 1:	FIRE
Hazardous Categories 2:	REACTIVE

Permit Number:	202025
Update Date:	11/02/2012
Case Number:	Not reported
Name:	AIR, COMPRESSED
Other Information:	Not reported
Material Waste:	Material
Hazardous Categories 1:	PRESSURE RELEASE
Hazardous Categories 2:	ACUTE

Permit Number:	202025
Update Date:	11/02/2012
Case Number:	7664-41-7
Name:	AMMONIA
Other Information:	Not reported
Material Waste:	Material
Hazardous Categories 1:	FIRE
Hazardous Categories 2:	EXTREMELY HAZARDOUS

Permit Number:	202025
Update Date:	11/02/2012
Case Number:	7440-37-1
Name:	ARGON GAS
Other Information:	Not reported
Material Waste:	Material
Hazardous Categories 1:	PRESSURE RELEASE
Hazardous Categories 2:	Not reported

Permit Number:	202025
Update Date:	11/02/2012
Case Number:	7440-37-1
Name:	ARGON LIQUID
Other Information:	Not reported
Material Waste:	Material
Hazardous Categories 1:	PRESSURE RELEASE
Hazardous Categories 2:	CRYOGENIC

AIRGAS USA LLC (Continued) **S104745513**

Permit Number:	202025
Update Date:	11/02/2012
Case Number:	Not reported
Name:	ARGON/CARBON DIOXIDE MIXTURE
Other Information:	WELDING MIX
Material Waste:	Material
Hazardous Categories 1:	PRESSURE RELEASE
Hazardous Categories 2:	ACUTE

Permit Number:	202025
Update Date:	11/02/2012
Case Number:	Not reported
Name:	ARGON/HYDROGEN MIXTURE
Other Information:	WELDING MIX
Material Waste:	Material
Hazardous Categories 1:	FIRE
Hazardous Categories 2:	PRESSURE RELEASE

Permit Number:	202025
Update Date:	11/02/2012
Case Number:	Not reported
Name:	ARGON/METHANE MIXTURE
Other Information:	WELDING MIX
Material Waste:	Material
Hazardous Categories 1:	FIRE
Hazardous Categories 2:	PRESSURE RELEASE

Permit Number:	202025
Update Date:	11/02/2012
Case Number:	Not reported
Name:	ARGON/OXYGEN
Other Information:	WELDING MIX
Material Waste:	Material
Hazardous Categories 1:	PRESSURE RELEASE
Hazardous Categories 2:	ACUTE

Permit Number:	202025
Update Date:	11/02/2012
Case Number:	106-97-8
Name:	BUTANE
Other Information:	Not reported
Material Waste:	Material
Hazardous Categories 1:	FIRE
Hazardous Categories 2:	PRESSURE RELEASE

Permit Number:	202025
Update Date:	11/02/2012
Case Number:	124-38-9
Name:	CARBON DIOXIDE GAS
Other Information:	CO2, (IN STEEL OR ALUMINUM CYLINDERS)
Material Waste:	Material
Hazardous Categories 1:	PRESSURE RELEASE
Hazardous Categories 2:	ACUTE

Permit Number:	202025
Update Date:	11/02/2012
Case Number:	124-38-9

AIRGAS USA LLC (Continued) **S104745513**

Name: CARBON DIOXIDE LIQUID
Other Information: CO2, BULK REFRIGERATED LIQUID
Material Waste: Material
Hazardous Categories 1: PRESSURE RELEASE
Hazardous Categories 2: ACUTE

Permit Number: 202025
Update Date: 11/02/2012
Case Number: Not reported
Name: CARBON DIOXIDE/ARGON/OXYGEN MIXTURE
Other Information: WELDING GAS
Material Waste: Material
Hazardous Categories 1: PRESSURE RELEASE
Hazardous Categories 2: ACUTE

Permit Number: 202025
Update Date: 11/02/2012
Case Number: Not reported
Name: CARBON DIOXIDE/NITROGEN/HELIUM/CARBON MONOXIDE/HYDROGEN MIX
Other Information: LASER MIX
Material Waste: Material
Hazardous Categories 1: PRESSURE RELEASE
Hazardous Categories 2: ACUTE

Permit Number: 202025
Update Date: 11/02/2012
Case Number: Not reported
Name: CARBON DIOXIDE/NITROGEN/OXYGEN MIXTURE
Other Information: AEROBIC GAS MIX
Material Waste: Material
Hazardous Categories 1: PRESSURE RELEASE
Hazardous Categories 2: ACUTE

Permit Number: 202025
Update Date: 11/02/2012
Case Number: Not reported
Name: CARBON DIOXIDE/OXYGEN-NITROGEN MIX
Other Information: CLINICAL BLOOD GAS
Material Waste: Material
Hazardous Categories 1: PRESSURE RELEASE
Hazardous Categories 2: ACUTE

Permit Number: 202025
Update Date: 11/02/2012
Case Number: 7782-50-5
Name: CHLORINE
Other Information: Not reported
Material Waste: Material
Hazardous Categories 1: FIRE
Hazardous Categories 2: PRESSURE RELEASE

Permit Number: 202025
Update Date: 11/02/2012
Case Number: 74-84-0
Name: ETHANE
Other Information: Not reported
Material Waste: Material

AIRGAS USA LLC (Continued) **S104745513**

Hazardous Categories 1: FIRE
Hazardous Categories 2: PRESSURE RELEASE

Permit Number: 202025
Update Date: 11/02/2012
Case Number: 74-85-1
Name: ETHYLENE
Other Information: NATURE RIPE, BANANA GAS, FRUIT RIPENING GAS
Material Waste: Material
Hazardous Categories 1: FIRE
Hazardous Categories 2: PRESSURE RELEASE

Permit Number: 202025
Update Date: 11/02/2012
Case Number: 7440-59-7
Name: HELIUM GAS (JUMBO TUBE TRAILER)
Other Information: Not reported
Material Waste: Material
Hazardous Categories 1: PRESSURE RELEASE
Hazardous Categories 2: ACUTE

Permit Number: 202025
Update Date: 11/02/2012
Case Number: Not reported
Name: HELIUM/ARGON/CARBON DIOXIDE MIXTURE
Other Information: WELDING MIX
Material Waste: Material
Hazardous Categories 1: PRESSURE RELEASE
Hazardous Categories 2: ACUTE

Permit Number: 202025
Update Date: 11/02/2012
Case Number: 1333-74-0
Name: HYDROGEN
Other Information: Not reported
Material Waste: Material
Hazardous Categories 1: FIRE
Hazardous Categories 2: ACUTE

Permit Number: 202025
Update Date: 11/02/2012
Case Number: 7647-01-0
Name: HYDROGEN CHLORIDE
Other Information: HCL
Material Waste: Material
Hazardous Categories 1: PRESSURE RELEASE
Hazardous Categories 2: EXTREMELY HAZARDOUS

Permit Number: 202025
Update Date: 11/02/2012
Case Number: 7664-39-3
Name: HYDROGEN FLUORIDE
Other Information: Not reported
Material Waste: Material
Hazardous Categories 1: PRESSURE RELEASE
Hazardous Categories 2: ACUTE

AIRGAS USA LLC (Continued) **S104745513**

Permit Number:	202025
Update Date:	11/02/2012
Case Number:	Not reported
Name:	HYDROGEN/CARBON DIOXIDE/NITROGEN MIXES
Other Information:	ANAEROBIC MIX
Material Waste:	Material
Hazardous Categories 1:	FIRE
Hazardous Categories 2:	PRESSURE RELEASE

Permit Number:	202025
Update Date:	11/02/2012
Case Number:	Not reported
Name:	LASER MIX W/HYDROGEN CHLORIDE
Other Information:	Not reported
Material Waste:	Material
Hazardous Categories 1:	PRESSURE RELEASE
Hazardous Categories 2:	ACUTE

Permit Number:	202025
Update Date:	11/02/2012
Case Number:	Not reported
Name:	LASER MIX/FLUORINE
Other Information:	Not reported
Material Waste:	Material
Hazardous Categories 1:	FIRE
Hazardous Categories 2:	PRESSURE RELEASE

Permit Number:	202025
Update Date:	11/02/2012
Case Number:	74-82-8
Name:	METHANE
Other Information:	COMPRESSED/NATURAL GAS
Material Waste:	Material
Hazardous Categories 1:	FIRE
Hazardous Categories 2:	PRESSURE RELEASE

Permit Number:	202025
Update Date:	11/02/2012
Case Number:	7440-01-9
Name:	NEON
Other Information:	Not reported
Material Waste:	Material
Hazardous Categories 1:	PRESSURE RELEASE
Hazardous Categories 2:	ACUTE

Permit Number:	202025
Update Date:	11/02/2012
Case Number:	7727-37-9
Name:	NITROGEN GAS
Other Information:	NITROGEN, COMPRESSED
Material Waste:	Material
Hazardous Categories 1:	PRESSURE RELEASE
Hazardous Categories 2:	ACUTE

Permit Number:	202025
Update Date:	11/02/2012
Case Number:	7727-37-9

AIRGAS USA LLC (Continued) **S104745513**

Name:	NITROGEN LIQUID
Other Information:	Not reported
Material Waste:	Material
Hazardous Categories 1:	PRESSURE RELEASE
Hazardous Categories 2:	CRYOGENIC
Permit Number:	202025
Update Date:	11/02/2012
Case Number:	10024-97-2
Name:	NITROUS OXIDE
Other Information:	Not reported
Material Waste:	Material
Hazardous Categories 1:	FIRE
Hazardous Categories 2:	PRESSURE RELEASE
Permit Number:	202025
Update Date:	11/02/2012
Case Number:	7782-44-7
Name:	OXYGEN GAS
Other Information:	Not reported
Material Waste:	Material
Hazardous Categories 1:	REACTIVE
Hazardous Categories 2:	PRESSURE RELEASE
Permit Number:	202025
Update Date:	11/02/2012
Case Number:	7782-44-7
Name:	OXYGEN LIQUID
Other Information:	Not reported
Material Waste:	Material
Hazardous Categories 1:	REACTIVE
Hazardous Categories 2:	CRYOGENIC
Permit Number:	202025
Update Date:	11/02/2012
Case Number:	Not reported
Name:	PAINT (WATER BASE)
Other Information:	Not reported
Material Waste:	Material
Hazardous Categories 1:	FIRE
Hazardous Categories 2:	CHRONIC
Permit Number:	202025
Update Date:	11/02/2012
Case Number:	74-98-6
Name:	PROPANE
Other Information:	Not reported
Material Waste:	Material
Hazardous Categories 1:	FIRE
Hazardous Categories 2:	PRESSURE RELEASE
Permit Number:	202025
Update Date:	11/02/2012
Case Number:	115-07-1
Name:	PROPYLENE HPG FUEL GAS
Other Information:	Not reported
Material Waste:	Material

AIRGAS USA LLC (Continued) **S104745513**

Hazardous Categories 1: FIRE
Hazardous Categories 2: PRESSURE RELEASE

Permit Number: 202025
Update Date: 11/02/2012
Case Number: 2551-62-4
Name: SULFUR HEXAFLUORIDE
Other Information: SF6, BULK REFRIGERATED LIQUID (TANK & CYLINDERS)
Material Waste: Material
Hazardous Categories 1: PRESSURE RELEASE
Hazardous Categories 2: ACUTE

Permit Number: 202025
Update Date: 11/02/2012
Case Number: 2551-62-4
Name: SULFUR HEXAFLUORIDE
Other Information: SF6, LIQUIFIED GAS IN CYLINDERS
Material Waste: Material
Hazardous Categories 1: PRESSURE RELEASE
Hazardous Categories 2: ACUTE

Permit Number: 202025
Update Date: 11/02/2012
Case Number: 811-97-2
Name: TETRAFLUOROETHANE
Other Information: R-134A
Material Waste: Material
Hazardous Categories 1: PRESSURE RELEASE
Hazardous Categories 2: ACUTE

Permit Number: 202025
Update Date: 11/02/2012
Case Number: 75-46-7
Name: TRIFLUOROMETHANE
Other Information: HALOCARBON 23, 14, 12
Material Waste: Material
Hazardous Categories 1: PRESSURE RELEASE
Hazardous Categories 2: ACUTE

Name: AIR PRODUCTS & CHEMICALS INC
Address: 1415 GRAND AV
City,State,Zip: SAN MARCOS, CA 92069
Permit Number: 102614
Business Type: 6HK79
EPA Id Number: CAL000027654
APN: 219-140-50-00
Last HMMD Inspection: 12/14/2000
Facility Telephone: 619-744-1472
Permit Status: CHNG
Permit Expiration: 01/31/2003
Date Last Updated: 11/02/2012
Facility Owner: AIR PRODUCTS & CHEMICALS, INC.
Facility Mailing Address: 1415 GRAND AV
Facility Mailing City: SAN MARCOS
Facility Mailing State: CA
Facility Mailing Zip: 92069-2405

AIRGAS USA LLC (Continued) **S104745513**

UST Owner:	LEROY LAVINE
Handle Regulated Hazmat:	Y
Own Or Operate UST:	Not reported
Subject To APSA:	Not reported
Generate Haz Waste:	Not reported
Treat Haz Waste:	Not reported
Generate Medical Waste:	Not reported

UST:

UST Name:	UNDERGROUND TANK 102614 T001
Last Update:	2012-11-02 14:17:38
Permit Number:	102614
Tank Type:	SINGLE WALL
Additional Id:	J-106012
Capacity Gallons:	280
UST Contents:	Not reported
Other Content Info:	WASTE OIL
Reg Status:	REMOVED
Remove Close Date:	1990-12-03 00:00:00
Year Installed:	1984-01-01 00:00:00
Pipe Type:	Not reported
Delivery System:	SUCTION
Monitor Code:	10
UST Monitor Method:	SW TANK DW PRESSURE PIPE W/POS SHUTOFF LLD W/DAILY RECONCILE OR WEEKLY GAUGE: TNK TEST ANN, PIPE TEST ANN 0.1 GAL/HR OR MO 0.2 GAL/HR

UST Name:	UNDERGROUND TANK 102614 T002
Last Update:	2012-11-02 14:17:38
Permit Number:	102614
Tank Type:	SINGLE WALL
Additional Id:	J-106023
Capacity Gallons:	5000
UST Contents:	DIESEL
Other Content Info:	DIESEL
Reg Status:	REMOVED
Remove Close Date:	1990-12-03 00:00:00
Year Installed:	1984-01-01 00:00:00
Pipe Type:	Not reported
Delivery System:	SUCTION
Monitor Code:	10
UST Monitor Method:	SW TANK DW PRESSURE PIPE W/POS SHUTOFF LLD W/DAILY RECONCILE OR WEEKLY GAUGE: TNK TEST ANN, PIPE TEST ANN 0.1 GAL/HR OR MO 0.2 GAL/HR

UST Name:	UNDERGROUND TANK 102614 T003
Last Update:	2012-11-02 14:17:38
Permit Number:	102614
Tank Type:	SINGLE WALL
Additional Id:	#2
Capacity Gallons:	2000
UST Contents:	DIESEL
Other Content Info:	DIESEL
Reg Status:	REMOVED
Remove Close Date:	1990-12-03 00:00:00
Year Installed:	1984-01-01 00:00:00
Pipe Type:	Not reported
Delivery System:	SUCTION
Monitor Code:	10
UST Monitor Method:	SW TANK DW PRESSURE PIPE W/POS SHUTOFF LLD W/DAILY RECONCILE OR WEEKLY

AIRGAS USA LLC (Continued) **S104745513**

GAUGE: TNK TEST ANN, PIPE TEST ANN 0.1 GAL/HR OR MO 0.2 GAL/HR

HIST UST:

Name:	L AND V INDUSTRIAL SUPPLY INC
Address:	1415 GRAND AVE
City,State,Zip:	SAN MARCOS, CA 92069
File Number:	0002B615
URL:	http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0002B615.pdf
Region:	Not reported
Facility ID:	Not reported
Facility Type:	Not reported
Other Type:	Not reported
Contact Name:	Not reported
Telephone:	Not reported
Owner Name:	Not reported
Owner Address:	Not reported
Owner City,St,Zip:	Not reported
Total Tanks:	Not reported
Tank Num:	Not reported
Container Num:	Not reported
Year Installed:	Not reported
Tank Capacity:	Not reported
Tank Used for:	Not reported
Type of Fuel:	Not reported
Container Construction Thickness:	Not reported
Leak Detection:	Not reported

Click here for Geo Tracker PDF:

CORTESE:

Name:	AIR PRODUCTS & CHEMICALS INC
Address:	1415 GRAND AV
City,State,Zip:	SAN MARCOS, CA 920692405
Region:	CORTESE
Envirostor Id:	Not reported
Global ID:	T0607300476
Site/Facility Type:	LUST CLEANUP SITE
Cleanup Status:	COMPLETED - CASE CLOSED
Status Date:	Not reported
Site Code:	Not reported
Latitude:	Not reported
Longitude:	Not reported
Owner:	Not reported
Enf Type:	Not reported
Swat R:	Not reported
Flag:	active
Order No:	Not reported
Waste Discharge System No:	Not reported
Effective Date:	Not reported
Region 2:	Not reported
WID Id:	Not reported
Solid Waste Id No:	Not reported
Waste Management Uit Name:	Not reported
File Name:	Active Open

AIRGAS USA LLC (Continued) **S104745513**

HAZNET:

Name:	AIRGAS USA LLC
Address:	1415 GRAND AVE
Address 2:	Not reported
City,State,Zip:	SAN MARCOS, CA 900610000
Contact:	RUSSELL WESTMORELAND
Telephone:	5624809456
Mailing Name:	Not reported
Mailing Address:	352 W 133RD ST
Year:	2018
Gepaid:	CAL000401984
TSD EPA ID:	ARD981057870
CA Waste Code:	352 - Other organic solids
Disposal Method:	H061 - Fuel Blending Prior To Energy Recovery At Another Site
Tons:	0.04050
Year:	2018
Gepaid:	CAL000401984
TSD EPA ID:	INR000127621
CA Waste Code:	291 - Latex waste
Disposal Method:	H061 - Fuel Blending Prior To Energy Recovery At Another Site
Tons:	0.30008
Year:	2017
Gepaid:	CAL000401984
TSD EPA ID:	INR000127621
CA Waste Code:	291 - Latex waste
Disposal Method:	H061 - Fuel Blending Prior To Energy Recovery At Another Site
Tons:	0.0834
Year:	2017
Gepaid:	CAL000401984
TSD EPA ID:	ARD981057870
CA Waste Code:	352 - Other organic solids
Disposal Method:	H061 - Fuel Blending Prior To Energy Recovery At Another Site
Tons:	0.035
Year:	2016
Gepaid:	CAL000401984
TSD EPA ID:	ARD981057870
CA Waste Code:	352 - Other organic solids
Disposal Method:	H061 - Fuel Blending Prior To Energy Recovery At Another Site
Tons:	0.05
Year:	2015
Gepaid:	CAL000401984
TSD EPA ID:	ARD981057870
CA Waste Code:	352 - Other organic solids
Disposal Method:	H061 - Fuel Blending Prior To Energy Recovery At Another Site
Tons:	0.085
Year:	2015
Gepaid:	CAL000401984
TSD EPA ID:	TXD055135388
CA Waste Code:	-
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No

AIRGAS USA LLC (Continued) **S104745513**

	Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.1175

Additional Info:

Year:	2016
Gen EPA ID:	CAL000401984
Shipment Date:	20151103
Creation Date:	5/19/2016 18:30:27
Receipt Date:	20151124
Manifest ID:	013724971JJK
Trans EPA ID:	CAR000179747
Trans Name:	INGENIUM (ESCONDIDO)
Trans 2 EPA ID:	CAD982523433
Trans 2 Name:	DILLARD ENVIRONMENTAL SERVICES
TSDF EPA ID:	ARD981057870
Trans Name:	RINECO
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids
RCRA Code:	D035
Meth Code:	H061 - Fuel Blending Prior To Energy Recovery At Another Site
Quantity Tons:	0.04
Waste Quantity:	80
Quantity Unit:	P
Additional Code 1:	D001
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20150420
Creation Date:	11/3/2015 22:15:10
Receipt Date:	20150507
Manifest ID:	014133875JJK
Trans EPA ID:	CAR000179747
Trans Name:	INGENIUM (ESCONDIDO)
Trans 2 EPA ID:	CAD982523433
Trans 2 Name:	DILLARD ENVIRONMENTAL SERVICES
TSDF EPA ID:	ARD981057870
Trans Name:	RINECO
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids
RCRA Code:	D035
Meth Code:	H061 - Fuel Blending Prior To Energy Recovery At Another Site
Quantity Tons:	0.045
Waste Quantity:	90
Quantity Unit:	P
Additional Code 1:	D001
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20150408

AIRGAS USA LLC (Continued) **S104745513**

Creation Date:	9/22/2015 22:15:36
Receipt Date:	20150421
Manifest ID:	014166518JJK
Trans EPA ID:	ILD981957236
Trans Name:	SET ENVIRONMENTAL INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	TXD055135388
Trans Name:	SET ENVIRONMENTAL INC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.01
Waste Quantity:	20
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	20150408
Creation Date:	9/22/2015 22:15:36
Receipt Date:	20150421
Manifest ID:	014166518JJK
Trans EPA ID:	ILD981957236
Trans Name:	SET ENVIRONMENTAL INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	TXD055135388
Trans Name:	SET ENVIRONMENTAL INC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.025
Waste Quantity:	50
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	20150408
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	014166518JJK
Trans EPA ID:	ILD981957236
Trans Name:	SET ENVIRONMENTAL INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported

AIRGAS USA LLC (Continued) **S104745513**

TSDF EPA ID:	TXD055135388
Trans Name:	SET ENVIRONMENTAL INC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.195
Waste Quantity:	390
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20150408
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	014166518JJK
Trans EPA ID:	ILD981957236
Trans Name:	SET ENVIRONMENTAL INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	TXD055135388
Trans Name:	SET ENVIRONMENTAL INC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	D001
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.075
Waste Quantity:	150
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20150408
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	014166518JJK
Trans EPA ID:	ILD981957236
Trans Name:	SET ENVIRONMENTAL INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	TXD055135388
Trans Name:	SET ENVIRONMENTAL INC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	D001
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No

AIRGAS USA LLC (Continued) **S104745513**

	Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0375
Waste Quantity:	75
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20150408
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	014166518JJK
Trans EPA ID:	ILD981957236
Trans Name:	SET ENVIRONMENTAL INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	TXD055135388
Trans Name:	SET ENVIRONMENTAL INC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	D001
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.015
Waste Quantity:	30
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20150408
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	014166518JJK
Trans EPA ID:	ILD981957236
Trans Name:	SET ENVIRONMENTAL INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	TXD055135388
Trans Name:	SET ENVIRONMENTAL INC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	D001
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0075
Waste Quantity:	15
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported

AIRGAS USA LLC (Continued) **S104745513**

Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20150408
Creation Date:	9/22/2015 22:15:36
Receipt Date:	20150421
Manifest ID:	014166518JJK
Trans EPA ID:	ILD981957236
Trans Name:	SET ENVIRONMENTAL INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	TXD055135388
Trans Name:	SET ENVIRONMENTAL INC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.02
Waste Quantity:	40
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Additional Info:

Year:	2017
Gen EPA ID:	CAL000401984
Shipment Date:	20170405
Creation Date:	7/18/2018 18:30:10
Receipt Date:	20170417
Manifest ID:	017200229JJK
Trans EPA ID:	CAR000179747
Trans Name:	INGENIUM (ESCONDIDO)
Trans 2 EPA ID:	CAD982523433
Trans 2 Name:	DILLARD ENVIRONMENTAL SERVICES
TSDF EPA ID:	INR000127621
Trans Name:	ADVANCED WASTE SERVICES OF INDIANA LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	291 - Latex waste
RCRA Code:	Not reported
Meth Code:	H061 - Fuel Blending Prior To Energy Recovery At Another Site
Quantity Tons:	0.0834
Waste Quantity:	20
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20170405

AIRGAS USA LLC (Continued) **S104745513**

Creation Date:	5/12/2018 18:30:23
Receipt Date:	20170418
Manifest ID:	017200228JJK
Trans EPA ID:	CAR000179747
Trans Name:	INGENIUM (ESCONDIDO)
Trans 2 EPA ID:	CAD982523433
Trans 2 Name:	DILLARD ENVIRONMENTAL SERVICES
TSDF EPA ID:	ARD981057870
Trans Name:	RINECO
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids
RCRA Code:	D035
Meth Code:	H061 - Fuel Blending Prior To Energy Recovery At Another Site
Quantity Tons:	0.035
Waste Quantity:	70
Quantity Unit:	P
Additional Code 1:	D001
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Additional Info:

Year:	2015
Gen EPA ID:	CAL000401984

Shipment Date:	20151103
Creation Date:	5/19/2016 18:30:27
Receipt Date:	20151124
Manifest ID:	013724971JJK
Trans EPA ID:	CAR000179747
Trans Name:	INGENIUM (ESCONDIDO)
Trans 2 EPA ID:	CAD982523433
Trans 2 Name:	DILLARD ENVIRONMENTAL SERVICES
TSDF EPA ID:	ARD981057870
Trans Name:	RINECO
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids
RCRA Code:	D035
Meth Code:	H061 - Fuel Blending Prior To Energy Recovery At Another Site
Quantity Tons:	0.04
Waste Quantity:	80
Quantity Unit:	P
Additional Code 1:	D001
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	20150420
Creation Date:	11/3/2015 22:15:10
Receipt Date:	20150507
Manifest ID:	014133875JJK
Trans EPA ID:	CAR000179747
Trans Name:	INGENIUM (ESCONDIDO)

AIRGAS USA LLC (Continued) **S104745513**

Trans 2 EPA ID:	CAD982523433
Trans 2 Name:	DILLARD ENVIRONMENTAL SERVICES
TSDF EPA ID:	ARD981057870
Trans Name:	RINECO
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids
RCRA Code:	D035
Meth Code:	H061 - Fuel Blending Prior To Energy Recovery At Another Site
Quantity Tons:	0.045
Waste Quantity:	90
Quantity Unit:	P
Additional Code 1:	D001
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20150408
Creation Date:	9/22/2015 22:15:36
Receipt Date:	20150421
Manifest ID:	014166518JJK
Trans EPA ID:	ILD981957236
Trans Name:	SET ENVIRONMENTAL INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	TXD055135388
Trans Name:	SET ENVIRONMENTAL INC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.01
Waste Quantity:	20
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20150408
Creation Date:	9/22/2015 22:15:36
Receipt Date:	20150421
Manifest ID:	014166518JJK
Trans EPA ID:	ILD981957236
Trans Name:	SET ENVIRONMENTAL INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	TXD055135388
Trans Name:	SET ENVIRONMENTAL INC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	Not reported

AIRGAS USA LLC (Continued) **S104745513**

Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.025
Waste Quantity:	50
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20150408
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	014166518JJK
Trans EPA ID:	ILD981957236
Trans Name:	SET ENVIRONMENTAL INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	TXD055135388
Trans Name:	SET ENVIRONMENTAL INC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0425
Waste Quantity:	85
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20150408
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	014166518JJK
Trans EPA ID:	ILD981957236
Trans Name:	SET ENVIRONMENTAL INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	TXD055135388
Trans Name:	SET ENVIRONMENTAL INC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	D001
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.075
Waste Quantity:	150
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported

AIRGAS USA LLC (Continued) **S104745513**

Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20150408
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	014166518JJK
Trans EPA ID:	ILD981957236
Trans Name:	SET ENVIRONMENTAL INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	TXD055135388
Trans Name:	SET ENVIRONMENTAL INC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	D001
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0375
Waste Quantity:	75
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20150408
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	014166518JJK
Trans EPA ID:	ILD981957236
Trans Name:	SET ENVIRONMENTAL INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	TXD055135388
Trans Name:	SET ENVIRONMENTAL INC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	D001
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.015
Waste Quantity:	30
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20150408
Creation Date:	Not reported
Receipt Date:	Not reported

AIRGAS USA LLC (Continued) **S104745513**

Manifest ID:	014166518JJK
Trans EPA ID:	ILD981957236
Trans Name:	SET ENVIRONMENTAL INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	TXD055135388
Trans Name:	SET ENVIRONMENTAL INC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	D001
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0075
Waste Quantity:	15
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	20150408
Creation Date:	9/22/2015 22:15:36
Receipt Date:	20150421
Manifest ID:	014166518JJK
Trans EPA ID:	ILD981957236
Trans Name:	SET ENVIRONMENTAL INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	TXD055135388
Trans Name:	SET ENVIRONMENTAL INC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.02
Waste Quantity:	40
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

HIST CORTESE:

edr_fname:	AIR PRODUCTS AND CHEMICAL
edr_fadd1:	1415 GRAND
City,State,Zip:	SAN MARCOS, CA 92069
Region:	CORTESE
Facility County Code:	37
Reg By:	LTNKA
Reg Id:	9UT1661

AIRGAS USA LLC (Continued) **S104745513**

CERS:
- Name: AIR PRODUCTS & CHEMICALS INC
- Address: 1415 GRAND AV
- City,State,Zip: SAN MARCOS, CA 920692405
- Site ID: 214547
- CERS ID: T0607300476
- CERS Description: Leaking Underground Storage Tank Cleanup Site

HWTS:
- Name: AIRGAS USA LLC
- Address: 1415 GRAND AVE
- Address 2: Not reported
- City,State,Zip: SAN MARCOS, CA 92078
- EPA ID: CAL000401984
- Inactive Date: 06/30/2020
- Create Date: 11/05/2014
- Last Act Date: 01/04/2021
- Mailing Name: Not reported
- Mailing Address: 352 W 133RD ST
- Mailing Address 2: Not reported
- Mailing City,State,Zip: LOS ANGELES, CA 900610000
- Owner Name: AIRGAS USA, LLC
- Owner Address: 3737 WORSHAM AVE
- Owner Address 2: Not reported
- Owner City,State,Zip: LONG BEACH, CA 908080000
- Contact Name: RUSSELL WESTMORELAND
- Contact Address: 3737 WORSHAM AVENUE
- Contact Address 2: Not reported
- City,State,Zip: LONG BEACH, CA 90808

NAICS:
- EPA ID: CAL000401984
- Create Date: 2014-11-05 10:07:27.663
- NAICS Code: 42269
- NAICS Description: Other Chemical and Allied Products Wholesalers
- Issued EPA ID Date: 2014-11-05 10:07:27.66000
- Inactive Date: 2020-06-30 00:00:00
- Facility Name: AIRGAS USA LLC
- Facility Address: 1415 GRAND AVE
- Facility Address 2: Not reported
- Facility City: SAN MARCOS
- Facility County: Not reported
- Facility State: CA
- Facility Zip: 92078

82
SE
1/4-1/2
0.457 mi.
2413 ft.

Relative:
Lower

Actual:
560 ft.

PATIO GUYS INC **RCRA-SQG** **1000258796**
935 BAILEY CT STE D **SAN DIEGO CO. SAM** **CAD982488181**
SAN MARCOS, CA 92069 **CPS-SLIC**
San Diego Co. HMMD
FINDS
ECHO
CERS

RCRA-SQG:
- Date Form Received by Agency: 1996-09-01 00:00:00.0
- Handler Name: PATIO GUYS INC

PATIO GUYS INC (Continued) **1000258796**

Handler Address:	935 BAILEY CT STE D
Handler City,State,Zip:	SAN MARCOS, CA 92069
EPA ID:	CAD982488181
Contact Name:	Not reported
Contact Address:	Not reported
Contact City,State,Zip:	Not reported
Contact Telephone:	Not reported
Contact Fax:	Not reported
Contact Email:	Not reported
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Small Quantity Generator
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	CA
State District:	4
Mailing Address:	810 G LOS VALLECITOS
Mailing City,State,Zip:	SAN MARCOS, CA 92069
Owner Name:	Not reported
Owner Type:	Not reported
Operator Name:	NOT REQUIRED
Operator Type:	Private
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	NN
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No

PATIO GUYS INC (Continued) **1000258796**

Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2002-06-27 03:34:26.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	Not reported
Manifest Broker:	Not reported
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	JAMES MONTEMARANO
Legal Status:	Private
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	NOT REQUIRED
Owner/Operator City,State,Zip:	NOT REQUIRED, ME 99999
Owner/Operator Telephone:	415-555-1212
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name:	NOT REQUIRED
Legal Status:	Private
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	NOT REQUIRED
Owner/Operator City,State,Zip:	NOT REQUIRED, ME 99999
Owner/Operator Telephone:	415-555-1212
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	1996-09-01 00:00:00.0
Handler Name: PATIO GUYS INC	
Federal Waste Generator Description:	Small Quantity Generator
State District Owner:	CA
Large Quantity Handler of Universal Waste:	No

PATIO GUYS INC (Continued) **1000258796**

Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

Receive Date:	1990-04-20 00:00:00.0
Handler Name: PATIO GUYS INC	
Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	CA
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

List of NAICS Codes and Descriptions:

NAICS Code:	81142
NAICS Description:	REUPHOLSTERY AND FURNITURE REPAIR

Facility Has Received Notices of Violations:

Violations:	No Violations Found

Evaluation Action Summary:

Evaluations:	No Evaluations Found

SAN DIEGO CO. SAM:

Name:	PATIO GUYS INC
Address:	935 BAILEY CT
City,State,Zip:	SAN MARCOS, CA 920691417
Case Number:	H06559-001
Agency:	DEH Site Assessment & Mitigation
Funding:	**Private - VAP**
Facility Type:	Soils Only
Facility Status:	Closed Case
Date:	2/15/1991
Date Began:	1/11/1990

CPS-SLIC:

Name:	PATIO GUYS INC
Address:	935 BAILEY CT
City,State,Zip:	SAN MARCOS, CA 920691417
Region:	STATE
Facility Status:	**Completed - Case Closed**
Status Date:	02/15/1991
Global Id:	T0608199583
Lead Agency:	SAN DIEGO COUNTY LOP
Lead Agency Case Number:	H06559-001
Latitude:	33.1451319

PATIO GUYS INC (Continued) **1000258796**

Longitude:	-117.182774
Case Type:	Cleanup Program Site
Case Worker:	Not reported
Local Agency:	Not reported
RB Case Number:	Not reported
File Location:	Local Agency
Potential Media Affected:	Not reported
Potential Contaminants of Concern:	Not reported
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

HMMD SAN DIEGO:

Name:	PATIO GUYS INC
Address:	935 BAILEY CT
City,State,Zip:	SAN MARCOS, CA 92069
Permit Number:	106559
Business Type:	Not reported
EPA Id Number:	CAD982488181
APN:	219-171-11-00
Last HMMD Inspection:	02/14/1991
Facility Telephone:	619-471-0850
Permit Status:	INAC
Permit Expiration:	02/14/1991
Date Last Updated:	11/02/2012
Facility Owner:	STEVE COULTER/NICK MONTEMARANO
Facility Mailing Address:	810-G LOS VALLECITOS
Facility Mailing City:	SAN MARCOS
Facility Mailing State:	CA
Facility Mailing Zip:	92069-1448
UST Owner:	Not reported
Handle Regulated Hazmat:	Not reported
Own Or Operate UST:	Not reported
Subject To APSA:	Not reported
Generate Haz Waste:	Y
Treat Haz Waste:	Not reported
Generate Medical Waste:	Not reported

Name:	AMERICAN LITHIUM ENERGY
Address:	935 BAILEY CT
City,State,Zip:	SAN MARCOS, CA 92069
Permit Number:	208578
Business Type:	6HK50
EPA Id Number:	CAL000321697
APN:	219-171-11-00
Last HMMD Inspection:	06/15/2012
Facility Telephone:	760-591-0611
Permit Status:	OPEN
Permit Expiration:	01/31/2013
Date Last Updated:	11/02/2012
Facility Owner:	AMERICAN LITHIUM ENERGY
Facility Mailing Address:	935 BAILEY CT #106
Facility Mailing City:	San Marcos
Facility Mailing State:	CA
Facility Mailing Zip:	92069
UST Owner:	Not reported
Handle Regulated Hazmat:	Y

PATIO GUYS INC (Continued) **1000258796**

Own Or Operate UST: Not reported
Subject To APSA: Not reported
Generate Haz Waste: Y
Treat Haz Waste: Not reported
Generate Medical Waste: Not reported

Inventory Active Permits (not SQG Medical):
Permit Number: 208578
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 171 METAL SLUDGE
Other Information: NICKET COBALT MONGONESE
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Permit Number: 208578
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 181 INORGANIC SOLID WASTE (OTHER)
Other Information: GRAPHITE / COPPER
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Permit Number: 208578
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 213 HYDROCARBON SOLVENTS
Other Information: ORGANIC SOLVENT
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Violations Active Permits:
Permit Number: 208578
Update Date: 11/02/2012
Inspection Date: 06/15/2012
Violation Code: 6HV1015
Violation: EMPLOYEE TRAINING NOT ADEQUATE
Violation Citation: Did not have adequate employee training program 2732 &/or 25504(c)
Activity: ACTIVE

Permit Number: 208578
Update Date: 11/02/2012
Inspection Date: 06/15/2012
Violation Code: 6HV0407
Violation: EMPLOYEE TRAINING NOT ADEQUATE
Violation Citation: Employee training program for small quantity generator of hazardous waste is inadequate. CFR 262.34(d)(5)(iii)
Activity: ACTIVE

FINDS:
Registry ID: 110009546553

PATIO GUYS INC (Continued) **1000258796**

Click Here:

Environmental Interest/Information System:
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.
STATE MASTER

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid:	1000258796
Registry ID:	110009546553
DFR URL:	http://echo.epa.gov/detailed-facility-report?fid=110009546553
Name:	PATIO GUYS INC
Address:	935 BAILEY CT STE D
City,State,Zip:	SAN MARCOS, CA 92069

CERS:

Name:	PATIO GUYS INC
Address:	935 BAILEY CT
City,State,Zip:	SAN MARCOS, CA 920691417
Site ID:	256854
CERS ID:	T0608199583
CERS Description:	Cleanup Program Site

R83 **TEXACO** **LUST** **U001572231**
WSW **105 RANCHO SANTA FE** **CPS-SLIC** **N/A**
1/4-1/2 **SAN MARCOS, CA 92069** **HIST UST**
0.471 mi. **Cortese**
2487 ft. **Site 1 of 7 in cluster R** **HIST CORTESE**
SAN DIEGO CO LOP
Relative: Higher **CERS**

Actual: 582 ft.

LUST:

Name:	FIVE STAR TEXACO SERVICE CNTR
Address:	105 RANCHO SANTA FE RD
City,State,Zip:	SAN MARCOS, CA 920691217
Lead Agency:	SAN DIEGO COUNTY LOP
Case Type:	LUST Cleanup Site
Geo Track:	http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0607302827
Global Id:	T0607302827
Latitude:	33.1487137
Longitude:	-117.1988369
Status:	Completed - Case Closed
Status Date:	08/25/1988
Case Worker:	Not reported
RB Case Number:	9UT535
Local Agency:	Not reported
File Location:	Local Agency
Local Case Number:	H05804-001
Potential Media Affect:	Aquifer used for drinking water supply
Potential Contaminants of Concern:	Gasoline

TEXACO (Continued) **U001572231**

Site History: Not reported

LUST:
Global Id: T0607302827
Action Type: Other
Date: 01/14/1987
Action: Leak Began

Global Id: T0607302827
Action Type: Other
Date: 01/14/1987
Action: Leak Discovery

Global Id: T0607302827
Action Type: Other
Date: 01/14/1987
Action: Leak Stopped

Global Id: T0607302827
Action Type: Other
Date: 01/14/1987
Action: Leak Reported

LUST:
Global Id: T0607302827
Status: Open - Case Begin Date
Status Date: 01/14/1987

Global Id: T0607302827
Status: Completed - Case Closed
Status Date: 08/25/1988

Name: FIVE STAR TEXACO SERVICE CNTR
Address: 105 RANCHO SANTA FE RD
City,State,Zip: SAN MARCOS, CA 920691217
Lead Agency: SAN DIEGO RWQCB (REGION 9)
Case Type: LUST Cleanup Site
Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0607301309
Global Id: T0607301309
Latitude: 33.1487190896434
Longitude: -117.198789693105
Status: Completed - Case Closed
Status Date: 11/07/2019
Case Worker: LT
RB Case Number: 9UT2562
Local Agency: Not reported
File Location: Regional Board
Local Case Number: Not reported
Potential Media Affect: Aquifer used for drinking water supply
Potential Contaminants of Concern: Gasoline
Site History: An underground storage tank was damaged during well installation activities resulting in a subsurface release of approximately 3,200 gallons of unleaded gasoline. Contaminated soil was discovered during the removal of the waste oil tank in April 1991, and the gasoline underground storage tanks and dispensers in June 2003. Quarterly groundwater monitoring has been conducted at the site since August

TEXACO (Continued) **U001572231**

1989. The consultant overseeing this case is also overseeing the Former Chevron Station (H13261-002) and Former Shell Station (H03229-001) that are located on Rancho Santa Fe Road. Groundwater at the three sites is jointly monitored and sampled. See ESI for additional information.

LUST:
Global Id: T0607301309
Contact Type: Regional Board Caseworker
Contact Name: LALITHA THOTAKURA
Organization Name: SAN DIEGO RWQCB (REGION 9)
Address: 2375 NORTHSIDE DRIVE, SUITE 100
City: SAN DIEGO
Email: lalitha.thotakura@waterboards.ca.gov
Phone Number: 6195213002

LUST:
Global Id: T0607301309
Action Type: RESPONSE
Date: 11/04/2010
Action: Correspondence

Global Id: T0607301309
Action Type: RESPONSE
Date: 07/30/2011
Action: Monitoring Report - Semi-Annually

Global Id: T0607301309
Action Type: RESPONSE
Date: 09/02/2011
Action: Pilot Study/ Treatability Report

Global Id: T0607301309
Action Type: RESPONSE
Date: 12/30/2019
Action: Other Report / Document

Global Id: T0607301309
Action Type: RESPONSE
Date: 07/25/2016
Action: Monitoring Report - Semi-Annually

Global Id: T0607301309
Action Type: RESPONSE
Date: 12/21/2011
Action: Sensitive Receptor Survey Report

Global Id: T0607301309
Action Type: RESPONSE
Date: 01/30/2012
Action: Monitoring Report - Semi-Annually

Global Id: T0607301309
Action Type: RESPONSE
Date: 12/30/2019
Action: Other Report / Document

TEXACO (Continued) **U001572231**

Global Id: T0607301309
Action Type: RESPONSE
Date: 12/30/2019
Action: Other Report / Document

Global Id: T0607301309
Action Type: RESPONSE
Date: 12/30/2019
Action: Other Report / Document

Global Id: T0607301309
Action Type: RESPONSE
Date: 12/30/2019
Action: Other Report / Document

Global Id: T0607301309
Action Type: RESPONSE
Date: 12/30/2019
Action: Other Report / Document

Global Id: T0607301309
Action Type: RESPONSE
Date: 01/24/2018
Action: Monitoring Report - Semi-Annually

Global Id: T0607301309
Action Type: ENFORCEMENT
Date: 02/02/2010
Action: Technical Correspondence / Assistance / Other

Global Id: T0607301309
Action Type: ENFORCEMENT
Date: 03/09/2010
Action: Technical Correspondence / Assistance / Other

Global Id: T0607301309
Action Type: ENFORCEMENT
Date: 06/30/2015
Action: Referral to Regional Board

Global Id: T0607301309
Action Type: ENFORCEMENT
Date: 07/31/2015
Action: Email Correspondence

Global Id: T0607301309
Action Type: RESPONSE
Date: 06/04/2012
Action: Correspondence

Global Id: T0607301309
Action Type: RESPONSE
Date: 07/30/2012
Action: Monitoring Report - Semi-Annually

Global Id: T0607301309
Action Type: RESPONSE

TEXACO (Continued) **U001572231**

Date: 12/30/2019
Action: Other Report / Document

Global Id: T0607301309
Action Type: RESPONSE
Date: 12/30/2019
Action: Other Report / Document

Global Id: T0607301309
Action Type: RESPONSE
Date: 12/30/2019
Action: Other Report / Document

Global Id: T0607301309
Action Type: RESPONSE
Date: 07/26/2017
Action: Monitoring Report - Semi-Annually

Global Id: T0607301309
Action Type: RESPONSE
Date: 10/11/2017
Action: Correspondence

Global Id: T0607301309
Action Type: RESPONSE
Date: 12/30/2019
Action: Other Report / Document

Global Id: T0607301309
Action Type: RESPONSE
Date: 12/30/2019
Action: Other Report / Document

Global Id: T0607301309
Action Type: RESPONSE
Date: 12/06/2011
Action: Sensitive Receptor Survey Report - Regulator Responded

Global Id: T0607301309
Action Type: RESPONSE
Date: 04/19/2012
Action: Other Workplan - Regulator Responded

Global Id: T0607301309
Action Type: RESPONSE
Date: 05/30/2013
Action: Correspondence

Global Id: T0607301309
Action Type: RESPONSE
Date: 07/30/2013
Action: Monitoring Report - Semi-Annually

Global Id: T0607301309
Action Type: RESPONSE
Date: 06/18/2013
Action: Other Report / Document

TEXACO (Continued) **U001572231**

Global Id: T0607301309
Action Type: RESPONSE
Date: 12/30/2019
Action: Other Report / Document

Global Id: T0607301309
Action Type: RESPONSE
Date: 12/20/2012
Action: Other Workplan - Regulator Responded

Global Id: T0607301309
Action Type: RESPONSE
Date: 01/30/2013
Action: Monitoring Report - Semi-Annually - Regulator Responded

Global Id: T0607301309
Action Type: RESPONSE
Date: 03/10/2014
Action: Conceptual Site Model - Regulator Responded

Global Id: T0607301309
Action Type: RESPONSE
Date: 11/06/2013
Action: Conceptual Site Model - Regulator Responded

Global Id: T0607301309
Action Type: ENFORCEMENT
Date: 09/08/2011
Action: Technical Correspondence / Assistance / Other

Global Id: T0607301309
Action Type: ENFORCEMENT
Date: 02/16/2011
Action: Technical Correspondence / Assistance / Other

Global Id: T0607301309
Action Type: ENFORCEMENT
Date: 12/12/2011
Action: Technical Correspondence / Assistance / Other

Global Id: T0607301309
Action Type: ENFORCEMENT
Date: 01/16/2013
Action: Technical Correspondence / Assistance / Other

Global Id: T0607301309
Action Type: ENFORCEMENT
Date: 10/18/2016
Action: Technical Correspondence / Assistance / Other

Global Id: T0607301309
Action Type: ENFORCEMENT
Date: 01/19/2019
Action: Staff Letter

Global Id: T0607301309
Action Type: ENFORCEMENT

TEXACO (Continued) **U001572231**

Date: 11/05/2018
Action: Notification - Public Notice of Case Closure

Global Id: T0607301309
Action Type: ENFORCEMENT
Date: 11/07/2019
Action: Closure/No Further Action Letter

Global Id: T0607301309
Action Type: ENFORCEMENT
Date: 04/04/2019
Action: Email Correspondence

Global Id: T0607301309
Action Type: RESPONSE
Date: 01/31/2015
Action: Monitoring Report - Semi-Annually

Global Id: T0607301309
Action Type: RESPONSE
Date: 12/30/2019
Action: Other Report / Document

Global Id: T0607301309
Action Type: RESPONSE
Date: 12/30/2019
Action: Other Report / Document

Global Id: T0607301309
Action Type: RESPONSE
Date: 12/30/2019
Action: Other Report / Document

Global Id: T0607301309
Action Type: RESPONSE
Date: 12/30/2019
Action: Other Report / Document

Global Id: T0607301309
Action Type: RESPONSE
Date: 01/26/2017
Action: Monitoring Report - Semi-Annually

Global Id: T0607301309
Action Type: RESPONSE
Date: 07/30/2018
Action: Monitoring Report - Semi-Annually

Global Id: T0607301309
Action Type: RESPONSE
Date: 07/31/2014
Action: Monitoring Report - Semi-Annually - Regulator Responded

Global Id: T0607301309
Action Type: ENFORCEMENT
Date: 01/16/2013
Action: Technical Correspondence / Assistance / Other

TEXACO (Continued) **U001572231**

Global Id: T0607301309
Action Type: ENFORCEMENT
Date: 07/23/2012
Action: Technical Correspondence / Assistance / Other

Global Id: T0607301309
Action Type: ENFORCEMENT
Date: 08/18/2017
Action: Clean Up Fund - Case Closure Review Summary Report (RSR)

Global Id: T0607301309
Action Type: Other
Date: 07/14/1988
Action: Leak Began

Global Id: T0607301309
Action Type: Other
Date: 07/14/1988
Action: Leak Discovery

Global Id: T0607301309
Action Type: Other
Date: 07/14/1988
Action: Leak Stopped

Global Id: T0607301309
Action Type: Other
Date: 07/14/1988
Action: Leak Reported

Global Id: T0607301309
Action Type: RESPONSE
Date: 03/22/2010
Action: Correspondence

Global Id: T0607301309
Action Type: RESPONSE
Date: 02/17/2010
Action: Pilot Study / Treatability Workplan

Global Id: T0607301309
Action Type: RESPONSE
Date: 12/30/2019
Action: Other Report / Document

Global Id: T0607301309
Action Type: RESPONSE
Date: 12/30/2019
Action: Other Report / Document

Global Id: T0607301309
Action Type: ENFORCEMENT
Date: 07/14/1988
Action: Notice of Responsibility

Global Id: T0607301309
Action Type: RESPONSE

TEXACO (Continued) **U001572231**

Date: 07/30/2009
Action: Monitoring Report - Quarterly

Global Id: T0607301309
Action Type: RESPONSE
Date: 01/30/2010
Action: Monitoring Report - Semi-Annually

Global Id: T0607301309
Action Type: RESPONSE
Date: 04/30/2009
Action: Pilot Study/ Treatability Report

Global Id: T0607301309
Action Type: RESPONSE
Date: 07/30/2010
Action: Monitoring Report - Semi-Annually

Global Id: T0607301309
Action Type: RESPONSE
Date: 12/30/2019
Action: Other Report / Document

Global Id: T0607301309
Action Type: ENFORCEMENT
Date: 07/07/2008
Action: Technical Correspondence / Assistance / Other

Global Id: T0607301309
Action Type: ENFORCEMENT
Date: 02/07/2013
Action: Technical Correspondence / Assistance / Other

Global Id: T0607301309
Action Type: RESPONSE
Date: 01/22/2016
Action: Monitoring Report - Semi-Annually

Global Id: T0607301309
Action Type: RESPONSE
Date: 12/30/2019
Action: Other Report / Document

Global Id: T0607301309
Action Type: REMEDIATION
Date: 01/13/2006
Action: In Situ Physical/Chemical Treatment (other than SVE)

Global Id: T0607301309
Action Type: ENFORCEMENT
Date: 02/03/2009
Action: Technical Correspondence / Assistance / Other

Global Id: T0607301309
Action Type: ENFORCEMENT
Date: 01/16/2009
Action: Technical Correspondence / Assistance / Other

TEXACO (Continued) **U001572231**

Global Id: T0607301309
Action Type: ENFORCEMENT
Date: 05/03/2012
Action: Technical Correspondence / Assistance / Other

Global Id: T0607301309
Action Type: RESPONSE
Date: 01/30/2011
Action: Monitoring Report - Semi-Annually

Global Id: T0607301309
Action Type: RESPONSE
Date: 12/30/2019
Action: Other Report / Document

Global Id: T0607301309
Action Type: RESPONSE
Date: 06/28/2019
Action: Well Destruction Report

Global Id: T0607301309
Action Type: ENFORCEMENT
Date: 07/08/2009
Action: Letter - Notice

LUST:
Global Id: T0607301309
Status: Open - Case Begin Date
Status Date: 01/22/1987

Global Id: T0607301309
Status: Open - Remediation
Status Date: 07/14/1988

Global Id: T0607301309
Status: Completed - Case Closed
Status Date: 11/07/2019

CPS-SLIC:
Name: FIVE STAR TEXACO SERVICE CNTR
Address: 105 RANCHO SANTA FE RD
City,State,Zip: SAN MARCOS, CA 920691217
Region: STATE
Facility Status: **Completed - Case Closed**
Status Date: 11/04/1993
Global Id: T0608107669
Lead Agency: SAN DIEGO COUNTY LOP
Lead Agency Case Number: H05804-003
Latitude: 33.148884
Longitude: -117.198805
Case Type: Cleanup Program Site
Case Worker: Not reported
Local Agency: Not reported
RB Case Number: Not reported
File Location: Local Agency

TEXACO (Continued) **U001572231**

Potential Media Affected: Under Investigation
Potential Contaminants of Concern: Gasoline
Site History: Not reported

Click here to access the California GeoTracker records for this facility:

HIST UST:
Name: TEXACO
Address: 105 RANCHO SANTA FE
City,State,Zip: SAN MARCOS, CA 92069
File Number: 0002F3A1
URL: http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0002F3A1.pdf
Region: STATE
Facility ID: 00000019534
Facility Type: Gas Station
Other Type: Not reported
Contact Name: JOHN R.HARGROVE,JR.
Telephone: 6197442374
Owner Name: TEXACO U.S.A.
Owner Address: P.O. BOX 3756-3350 WILSHIRE BL
Owner City,St,Zip: LOS ANGELES, CA 90010
Total Tanks: 0006

Tank Num: 001
Container Num: 1
Year Installed: 1983
Tank Capacity: 00000550
Tank Used for: WASTE
Type of Fuel: WASTE OIL
Container Construction Thickness: Not reported
Leak Detection: None

Tank Num: 002
Container Num: 2
Year Installed: 1983
Tank Capacity: 00010000
Tank Used for: PRODUCT
Type of Fuel: UNLEADED
Container Construction Thickness: Not reported
Leak Detection: Stock Inventor, Vapor Sniff Well

Tank Num: 003
Container Num: 3
Year Installed: 1983
Tank Capacity: 00010000
Tank Used for: PRODUCT
Type of Fuel: REGULAR
Container Construction Thickness: Not reported
Leak Detection: Stock Inventor, Vapor Sniff Well

Tank Num: 004
Container Num: 4
Year Installed: 1983
Tank Capacity: 00010000
Tank Used for: PRODUCT
Type of Fuel: PREMIUM
Container Construction Thickness: Not reported

TEXACO (Continued) **U001572231**

Leak Detection: Stock Inventor

Tank Num: 005
Container Num: 5
Year Installed: 1983
Tank Capacity: 00010000
Tank Used for: PRODUCT
Type of Fuel: DIESEL
Container Construction Thickness: Not reported
Leak Detection: Stock Inventor, Vapor Sniff Well

Tank Num: 006
Container Num: 6
Year Installed: 1983
Tank Capacity: 00001000
Tank Used for: WASTE
Type of Fuel: Not reported
Container Construction Thickness: Not reported
Leak Detection: Stock Inventor, Vapor Sniff Well

Click here for Geo Tracker PDF:

CORTESE:
Name: FIVE STAR TEXACO SERVICE CNTR
Address: 105 RANCHO SANTA FE RD
City,State,Zip: SAN MARCOS, CA 920691217
Region: CORTESE
Envirostor Id: Not reported
Global ID: T0607302827
Site/Facility Type: LUST CLEANUP SITE
Cleanup Status: COMPLETED - CASE CLOSED
Status Date: Not reported
Site Code: Not reported
Latitude: Not reported
Longitude: Not reported
Owner: Not reported
Enf Type: Not reported
Swat R: Not reported
Flag: active
Order No: Not reported
Waste Discharge System No: Not reported
Effective Date: Not reported
Region 2: Not reported
WID Id: Not reported
Solid Waste Id No: Not reported
Waste Management Uit Name: Not reported
File Name: Active Open

Name: FIVE STAR TEXACO SERVICE CNTR
Address: 105 RANCHO SANTA FE RD
City,State,Zip: SAN MARCOS, CA 920691217
Region: CORTESE
Envirostor Id: Not reported
Global ID: T0607301309
Site/Facility Type: LUST CLEANUP SITE
Cleanup Status: COMPLETED - CASE CLOSED
Status Date: Not reported

TEXACO (Continued) **U001572231**

Site Code:	Not reported
Latitude:	Not reported
Longitude:	Not reported
Owner:	Not reported
Enf Type:	Not reported
Swat R:	Not reported
Flag:	active
Order No:	Not reported
Waste Discharge System No:	Not reported
Effective Date:	Not reported
Region 2:	Not reported
WID Id:	Not reported
Solid Waste Id No:	Not reported
Waste Management Uit Name:	Not reported
File Name:	Active Open

HIST CORTESE:

edr_fname:	TEXACO SERVICE STATION
edr_fadd1:	105 RANCHO SANTA FE
City,State,Zip:	SAN MARCOS, CA 92069
Region:	CORTESE
Facility County Code:	37
Reg By:	LTNKA
Reg Id:	9UT535

SAN DIEGO CO LOP:

Name:	FIVE STAR TEXACO SERVICE CNTR
Address:	105 RANCHO SANTA FE RD
City,State,Zip:	SAN MARCOS, CA 92069
Record ID:	DEH1988-LSAM-H05804-002
Record Status:	Completed
Opened Date:	07/14/1988
Parcel Number:	219-091-10-00
Case Type:	LOP - Local Oversight Program
Historical Name:	TEXACO/RANCHO SANTA FE 105
SWRCB Global ID:	T0607301309
Funding:	S - LOP State Fund
Lead Agency:	RWQCB
Lead Agency Date:	07/01/2015
Census Tract:	200.29
Community:	San Marcos
Jurisdiction:	SAN MARCOS
Watershed Basin Number:	904.52
Water Purveyor:	VALLECITOS WATER DISTRICT
Fire Agency:	SAN MARCOS FIRE PROT DIST
Latitude:	33.1485697
Longitude:	-117.1987238
X MapCoord:	6271290.677
Y MapCoord:	1999012.380

Name:	FIVE STAR TEXACO SERVICE CNTR
Address:	105 RANCHO SANTA FE RD
City,State,Zip:	SAN MARCOS, CA 92069
Record ID:	DEH1993-LSAM-H05804-003
Record Status:	Completed
Opened Date:	02/05/1993

TEXACO (Continued) **U001572231**

Parcel Number:	219-091-10-00
Case Type:	Not reported
Historical Name:	TEXACO MARKETING & REFINING
SWRCB Global ID:	T0608107669
Funding:	N - Non-Billable
Lead Agency:	DEH/SAM
Lead Agency Date:	02/05/1993
Census Tract:	200.29
Community:	San Marcos
Jurisdiction:	SAN MARCOS
Watershed Basin Number:	904.52
Water Purveyor:	VALLECITOS WATER DISTRICT
Fire Agency:	SAN MARCOS FIRE PROT DIST
Latitude:	33.1485697
Longitude:	-117.1987238
X MapCoord:	6271290.677
Y MapCoord:	1999012.380

Name:	FIVE STAR TEXACO SERVICE CNTR
Address:	105 RANCHO SANTA FE RD
City,State,Zip:	SAN MARCOS, CA 92069
Record ID:	DEH1987-LSAM-H05804-001
Record Status:	Completed
Opened Date:	01/14/1987
Parcel Number:	219-091-10-00
Case Type:	LOP - Local Oversight Program
Historical Name:	TEXACO/RANCHO SANTA FE 105
SWRCB Global ID:	T0607302827
Funding:	F - LOP Federal Fund
Lead Agency:	DEH/SAM
Lead Agency Date:	01/23/1987
Census Tract:	200.29
Community:	San Marcos
Jurisdiction:	SAN MARCOS
Watershed Basin Number:	904.52
Water Purveyor:	VALLECITOS WATER DISTRICT
Fire Agency:	SAN MARCOS FIRE PROT DIST
Latitude:	33.1485697
Longitude:	-117.1987238
X MapCoord:	6271290.677
Y MapCoord:	1999012.380

CERS:

Name:	FIVE STAR TEXACO SERVICE CNTR
Address:	105 RANCHO SANTA FE RD
City,State,Zip:	SAN MARCOS, CA 920691217
Site ID:	200611
CERS ID:	T0607301309
CERS Description:	Leaking Underground Storage Tank Cleanup Site

Affiliation:

Affiliation Type Desc:	Regional Board Caseworker
Entity Name:	LALITHA THOTAKURA - SAN DIEGO RWQCB (REGION 9)
Entity Title:	Not reported
Affiliation Address:	2375 NORTHSIDE DRIVE, SUITE 100
Affiliation City:	SAN DIEGO
Affiliation State:	CA

TEXACO (Continued) **U001572231**

Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: 6195213002

Name: FIVE STAR TEXACO SERVICE CNTR
Address: 105 RANCHO SANTA FE RD
City,State,Zip: SAN MARCOS, CA 920691217
Site ID: 200611
CERS ID: T0607302827
CERS Description: Leaking Underground Storage Tank Cleanup Site

Affiliation:
Affiliation Type Desc: Regional Board Caseworker
Entity Name: LALITHA THOTAKURA - SAN DIEGO RWQCB (REGION 9)
Entity Title: Not reported
Affiliation Address: 2375 NORTHSIDE DRIVE, SUITE 100
Affiliation City: SAN DIEGO
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: 6195213002

Name: FIVE STAR TEXACO SERVICE CNTR
Address: 105 RANCHO SANTA FE RD
City,State,Zip: SAN MARCOS, CA 920691217
Site ID: 200611
CERS ID: T0608107669
CERS Description: Cleanup Program Site

Affiliation:
Affiliation Type Desc: Regional Board Caseworker
Entity Name: LALITHA THOTAKURA - SAN DIEGO RWQCB (REGION 9)
Entity Title: Not reported
Affiliation Address: 2375 NORTHSIDE DRIVE, SUITE 100
Affiliation City: SAN DIEGO
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: 6195213002

R84 **TEXACO SERVICE STATION** **LUST** **S100946358**
WSW **105 RANCHO SANTA FE RD** **N/A**
1/4-1/2 **SAN MARCOS, CA 92069**
0.471 mi.
2487 ft. **Site 2 of 7 in cluster R**

Relative:
Higher

Actual:
582 ft.

LUST REG 9:
Region: 9
Status: Case Closed
Case Number: 9UT535
Local Case: H05804-001
Substance: Gasoline
Qty Leaked: 1700
Abate Method: Not reported
Local Agency: San Diego
How Found: Other Means

TEXACO SERVICE STATION (Continued) **S100946358**

How Stopped:	Repair Piping
Source:	Tank
Cause:	Corrosion
Lead Agency:	Local Agency
Case Type:	Other ground water affected
Date Found:	03/24/1982
Date Stopped:	03/24/1982
Confirm Date:	01/14/1987
Submit Workplan:	Not reported
Prelim Assess:	03/30/1987
Desc Pollution:	Not reported
Remed Plan:	/ /
Remed Action:	Not reported
Began Monitor:	Not reported
Release Date:	02/11/1987
Enforce Date:	Not reported
Closed Date:	8/25/88
Enforce Type:	Not reported
Pilot Program:	LOP
Basin Number:	904.52
GW Depth:	7’
Beneficial Use:	Municipal groundwater use
NPDES Number:	Not reported
Priority:	Medium priority
File Dispn:	File discarded, case closed
Interim Remedial Actions:	Yes
Cleanup and Abatement order Number:	Not reported
Waste Discharge Requirement Number:	Not reported

R85 **TEXACO** **LUST** **S105033893**
WSW **105 RANCHO SANTA FE RD** **SAN DIEGO CO. SAM** **N/A**
1/4-1/2 **SAN MARCOS, CA 92069** **San Diego Co. HMMD**
0.471 mi. **SWEEPS UST**
2487 ft. **Site 3 of 7 in cluster R** **EMI**
CERS

Relative:
Higher

Actual:
582 ft.

LUST:

No Details:	No Details

SAN DIEGO CO. SAM:

Name:	FIVE STAR TEXACO SERVICE CNTR
Address:	105 RANCHO SANTA FE RD
City,State,Zip:	SAN MARCOS, CA 920691217
Case Number:	H05804-001
Agency:	DEH Site Assessment & Mitigation
Funding:	**LOP - Federal Fund**
Facility Type:	Drinking Water Aquifer Impacted
Facility Status:	Closed Case
Date:	8/25/1988
Date Began:	1/14/1987

Name:	FIVE STAR TEXACO SERVICE CNTR
Address:	105 RANCHO SANTA FE RD
City,State,Zip:	SAN MARCOS, CA 920691217
Case Number:	H05804-002
Agency:	DEH Site Assessment & Mitigation
Funding:	**LOP - State Fund**
Facility Type:	Drinking Water Aquifer Impacted

TEXACO (Continued) **S105033893**

Facility Status: Remedial Investigation
Date: 7/14/1988
Date Began: 7/14/1988

Name: FIVE STAR TEXACO SERVICE CNTR
Address: 105 RANCHO SANTA FE RD
City,State,Zip: SAN MARCOS, CA 920691217
Case Number: H05804-003
Agency: DEH Site Assessment & Mitigation
Funding: **Non Billable**
Facility Type: Failed Integrity Test
Facility Status: Closed Case
Date: 11/4/1993
Date Began: 9/18/1992

HMMD SAN DIEGO:
Name: FIVE STAR TEXACO SERVICE CNTR
Address: 105 RANCHO SANTA FE RD
City,State,Zip: SAN MARCOS, CA 92069
Permit Number: 105804
Business Type: 6HK28
EPA Id Number: CAL000032882
APN: 219-091-10-00
Last HMMD Inspection: 01/30/2004
Facility Telephone: 760-471-5448
Permit Status: CHNG
Permit Expiration: 07/31/2003
Date Last Updated: 11/02/2012
Facility Owner: EQUILON ENTERPRISES LLC
Facility Mailing Address: 20945 S. WILMINGTON AVE
Facility Mailing City: CARSON
Facility Mailing State: CA
Facility Mailing Zip: 90810
UST Owner: EQUILON ENTERPRISES LLC
Handle Regulated Hazmat: Y
Own Or Operate UST: Y
Subject To APSA: Not reported
Generate Haz Waste: Y
Treat Haz Waste: Not reported
Generate Medical Waste: Not reported

UST:
UST Name: UNDERGROUND TANK 202180 T008
Last Update: 2012-11-02 14:17:38
Permit Number: 105804
Tank Type: DOUBLE WALL
Additional Id: NT2370
Capacity Gallons: 15000
UST Contents: PREMIUM UNLEADED
Other Content Info: PREMIUM UNLEADED
Reg Status: ACTIVE
Remove Close Date: Not reported
Year Installed: 2003-05-01 00:00:00
Pipe Type: DOUBLE WALL
Delivery System: PRESSURE
Monitor Code: 20
UST Monitor Method: DW TANK DW PRESSURE PIPE W/ SHUT OFF AND ALARM ON LINE LEAK

TEXACO (Continued) **S105033893**

DETECTOR: INTERSTITIAL

UST Name: UNDERGROUND TANK 202180 T009
Last Update: 2012-11-02 14:17:38
Permit Number: 105804
Tank Type: DOUBLE WALL
Additional Id: NT2370
Capacity Gallons: 5000
UST Contents: DIESEL
Other Content Info: DIESEL
Reg Status: ACTIVE
Remove Close Date: Not reported
Year Installed: 2003-05-01 00:00:00
Pipe Type: DOUBLE WALL
Delivery System: PRESSURE
Monitor Code: 20
UST Monitor Method: DW TANK DW PRESSURE PIPE W/ SHUT OFF AND ALARM ON LINE LEAK DETECTOR: INTERSTITIAL

UST Name: UNDERGROUND TANK 202180 T007
Last Update: 2012-11-02 14:17:38
Permit Number: 105804
Tank Type: DOUBLE WALL
Additional Id: NT2370
Capacity Gallons: 20000
UST Contents: REGULAR UNLEADED
Other Content Info: REGULAR UNLEADED
Reg Status: ACTIVE
Remove Close Date: Not reported
Year Installed: 2003-05-01 00:00:00
Pipe Type: DOUBLE WALL
Delivery System: PRESSURE
Monitor Code: 20
UST Monitor Method: DW TANK DW PRESSURE PIPE W/ SHUT OFF AND ALARM ON LINE LEAK DETECTOR: INTERSTITIAL

UST Name: UNDERGROUND TANK 105804 T001
Last Update: 2012-11-02 14:17:38
Permit Number: 105804
Tank Type: SINGLE WALL
Additional Id: 1
Capacity Gallons: 550
UST Contents: Not reported
Other Content Info: WASTE OIL
Reg Status: REMOVED
Remove Close Date: 1986-11-08 00:00:00
Year Installed: 1983-01-01 00:00:00
Pipe Type: Not reported
Delivery System: Not reported
Monitor Code: 90
UST Monitor Method: NO MONITORING ALTERNATIVE SELECTED. VERIFY AND ENTER MONITORING ALTERNATIVE DURING INSPECTION.

UST Name: UNDERGROUND TANK 105804 T002
Last Update: 2012-11-02 14:17:38
Permit Number: 105804
Tank Type: SINGLE WALL

TEXACO (Continued) **S105033893**

Additional Id:	RT1244 UNLEADED/AT4908
Capacity Gallons:	10000
UST Contents:	MIDGRADE UNLEADED
Other Content Info:	MIDGRADE UNLEADED
Reg Status:	REMOVED
Remove Close Date:	2003-06-11 00:00:00
Year Installed:	1983-01-01 00:00:00
Pipe Type:	DOUBLE WALL
Delivery System:	PRESSURE
Monitor Code:	15
UST Monitor Method:	SW TANK DW PRESSURE PIPE W/ SHUTOFF AND ALARM ON LLD AND CERTIFIED ATG: IN-TANK TEST MONTHLY

UST Name:	UNDERGROUND TANK 105804 T003
Last Update:	2012-11-02 14:17:38
Permit Number:	105804
Tank Type:	SINGLE WALL
Additional Id:	RT1244 REGULAR LEADED/AT4908
Capacity Gallons:	10000
UST Contents:	REGULAR UNLEADED
Other Content Info:	REGULAR UNLEADED
Reg Status:	REMOVED
Remove Close Date:	2003-06-11 00:00:00
Year Installed:	1983-01-01 00:00:00
Pipe Type:	DOUBLE WALL
Delivery System:	PRESSURE
Monitor Code:	15
UST Monitor Method:	SW TANK DW PRESSURE PIPE W/ SHUTOFF AND ALARM ON LLD AND CERTIFIED ATG: IN-TANK TEST MONTHLY

UST Name:	UNDERGROUND TANK 105804 T004
Last Update:	2012-11-02 14:17:38
Permit Number:	105804
Tank Type:	SINGLE WALL
Additional Id:	RT1244 SUPER UNLEADED/AT4908
Capacity Gallons:	10000
UST Contents:	PREMIUM UNLEADED
Other Content Info:	PREMIUM UNLEADED
Reg Status:	REMOVED
Remove Close Date:	2003-06-11 00:00:00
Year Installed:	1983-01-01 00:00:00
Pipe Type:	DOUBLE WALL
Delivery System:	PRESSURE
Monitor Code:	15
UST Monitor Method:	SW TANK DW PRESSURE PIPE W/ SHUTOFF AND ALARM ON LLD AND CERTIFIED ATG: IN-TANK TEST MONTHLY

UST Name:	UNDERGROUND TANK 105804 T005
Last Update:	2012-11-02 14:17:38
Permit Number:	105804
Tank Type:	SINGLE WALL
Additional Id:	RT1244 DIESEL/AT4908
Capacity Gallons:	10000
UST Contents:	DIESEL
Other Content Info:	DIESEL
Reg Status:	REMOVED
Remove Close Date:	2003-06-11 00:00:00

TEXACO (Continued) **S105033893**

Year Installed:	1983-01-01 00:00:00
Pipe Type:	DOUBLE WALL
Delivery System:	PRESSURE
Monitor Code:	15
UST Monitor Method:	SW TANK DW PRESSURE PIPE W/ SHUTOFF AND ALARM ON LLD AND CERTIFIED ATG: IN-TANK TEST MONTHLY
UST Name:	UNDERGROUND TANK 105804 T006
Last Update:	2012-11-02 14:17:38
Permit Number:	105804
Tank Type:	DOUBLE WALL
Additional Id:	001
Capacity Gallons:	550
UST Contents:	Not reported
Other Content Info:	WASTE OIL
Reg Status:	REMOVED
Remove Close Date:	1991-06-14 00:00:00
Year Installed:	1986-01-01 00:00:00
Pipe Type:	Not reported
Delivery System:	Not reported
Monitor Code:	26
UST Monitor Method:	EXTERNAL MONITORING: MONTHLY (MINIMUM) GROUND WATER MONITORING

SWEEPS UST:

Name:	TEXACO/SAN MARCOS
Address:	105 RANCHO SANTA FE RD
City:	SAN MARCOS
Status:	Active
Comp Number:	5804
Number:	9
Board Of Equalization:	44-000217
Referral Date:	Not reported
Action Date:	06-26-92
Created Date:	02-29-88
Owner Tank Id:	Not reported
SWRCB Tank Id:	37-000-005804-000002
Tank Status:	A
Capacity:	10000
Active Date:	Not reported
Tank Use:	M.V. FUEL
STG:	P
Content:	REG UNLEADED
Number Of Tanks:	5
Name:	TEXACO/SAN MARCOS
Address:	105 RANCHO SANTA FE RD
City:	SAN MARCOS
Status:	Active
Comp Number:	5804
Number:	9
Board Of Equalization:	44-000217
Referral Date:	Not reported
Action Date:	06-26-92
Created Date:	02-29-88
Owner Tank Id:	Not reported
SWRCB Tank Id:	37-000-005804-000003

TEXACO (Continued) **S105033893**

Tank Status: A
Capacity: 10000
Active Date: Not reported
Tank Use: M.V. FUEL
STG: P
Content: LEADED
Number Of Tanks: Not reported

Name: TEXACO/SAN MARCOS
Address: 105 RANCHO SANTA FE RD
City: SAN MARCOS
Status: Active
Comp Number: 5804
Number: 9
Board Of Equalization: 44-000217
Referral Date: Not reported
Action Date: 06-26-92
Created Date: 02-29-88
Owner Tank Id: Not reported
SWRCB Tank Id: 37-000-005804-000004
Tank Status: A
Capacity: 10000
Active Date: Not reported
Tank Use: M.V. FUEL
STG: P
Content: LEADED
Number Of Tanks: Not reported

Name: TEXACO/SAN MARCOS
Address: 105 RANCHO SANTA FE RD
City: SAN MARCOS
Status: Active
Comp Number: 5804
Number: 9
Board Of Equalization: 44-000217
Referral Date: Not reported
Action Date: 06-26-92
Created Date: 02-29-88
Owner Tank Id: Not reported
SWRCB Tank Id: 37-000-005804-000005
Tank Status: A
Capacity: 10000
Active Date: Not reported
Tank Use: M.V. FUEL
STG: P
Content: OTHER
Number Of Tanks: Not reported

Name: TEXACO/SAN MARCOS
Address: 105 RANCHO SANTA FE RD
City: SAN MARCOS
Status: Active
Comp Number: 5804
Number: 9
Board Of Equalization: 44-000217
Referral Date: Not reported
Action Date: 06-26-92

TEXACO (Continued) **S105033893**

Created Date: 02-29-88
Owner Tank Id: Not reported
SWRCB Tank Id: 37-000-005804-000006
Tank Status: A
Capacity: 550
Active Date: Not reported
Tank Use: PETROLEUM
STG: W
Content: Not reported
Number Of Tanks: Not reported

Name: TEXACO/SAN MARCOS
Address: 105 RANCHO SANTA FE RD
City: SAN MARCOS
Status: Not reported
Comp Number: 5804
Number: Not reported
Board Of Equalization: 44-000217
Referral Date: Not reported
Action Date: Not reported
Created Date: Not reported
Owner Tank Id: Not reported
SWRCB Tank Id: 37-000-005804-000001
Tank Status: Not reported
Capacity: 550
Active Date: Not reported
Tank Use: PETROLEUM
STG: WASTE
Content: Not reported
Number Of Tanks: 1

EMI:
Name: TEXACO / RANCHO SANTA FE RD
Address: 105 RANCHO SANTA FE RD
City,State,Zip: SAN MARCOS, CA 92069
Year: 1999
County Code: 37
Air Basin: SD
Facility ID: 4652
Air District Name: SD
SIC Code: 5541
Air District Name: SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 3
Reactive Organic Gases Tons/Yr: 3
Carbon Monoxide Emissions Tons/Yr: 0
NOX - Oxides of Nitrogen Tons/Yr: 0
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 0
Part. Matter 10 Micrometers and Smllr Tons/Yr: 0

Name: TEXACO / RANCHO SANTA FE RD
Address: 105 RANCHO SANTA FE RD
City,State,Zip: SAN MARCOS, CA 92069
Year: 2000
County Code: 37

TEXACO (Continued) **S105033893**

Air Basin:	SD
Facility ID:	4652
Air District Name:	SD
SIC Code:	5541
Air District Name:	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	2
Reactive Organic Gases Tons/Yr:	2
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Name:	TEXACO / RANCHO SANTA FE RD
Address:	105 RANCHO SANTA FE RD
City,State,Zip:	SAN MARCOS, CA 92069
Year:	2001
County Code:	37
Air Basin:	SD
Facility ID:	4652
Air District Name:	SD
SIC Code:	5541
Air District Name:	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	2
Reactive Organic Gases Tons/Yr:	2
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Name:	TEXACO / RANCHO SANTA FE RD
Address:	105 RANCHO SANTA FE RD
City,State,Zip:	SAN MARCOS, CA 92069
Year:	2002
County Code:	37
Air Basin:	SD
Facility ID:	4652
Air District Name:	SD
SIC Code:	5541
Air District Name:	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	2
Reactive Organic Gases Tons/Yr:	2
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Name:	TEXACO RANCHO SANTA FE RD
Address:	105 RANCHO SANTA FE RD

TEXACO (Continued) **S105033893**

City,State,Zip:	SAN MARCOS, CA 92069
Year:	2003
County Code:	37
Air Basin:	SD
Facility ID:	4652
Air District Name:	SD
SIC Code:	5541
Air District Name:	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	2
Reactive Organic Gases Tons/Yr:	2
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Name:	TEXACO RANCHO SANTA FE RD
Address:	105 RANCHO SANTA FE RD
City,State,Zip:	SAN MARCOS, CA 92069
Year:	2004
County Code:	37
Air Basin:	SD
Facility ID:	4652
Air District Name:	SD
SIC Code:	5541
Air District Name:	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	1.7299408
Reactive Organic Gases Tons/Yr:	1.7299408
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Name:	TEXACO RANCHO SANTA FE RD
Address:	105 RANCHO SANTA FE RD
City,State,Zip:	SAN MARCOS, CA 92069
Year:	2005
County Code:	37
Air Basin:	SD
Facility ID:	4652
Air District Name:	SD
SIC Code:	5541
Air District Name:	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	1.7299408
Reactive Organic Gases Tons/Yr:	1.7299408
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

TEXACO (Continued) **S105033893**

Name:	RANCHO SANTE FE GAS
Address:	105 RANCHO SANTA FE RD
City,State,Zip:	SAN MARCOS, CA 92069
Year:	2006
County Code:	37
Air Basin:	SD
Facility ID:	4652
Air District Name:	SD
SIC Code:	5541
Air District Name:	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	1.82
Reactive Organic Gases Tons/Yr:	1.82
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Name:	RANCHO SANTE FE GAS
Address:	105 RANCHO SANTA FE RD
City,State,Zip:	SAN MARCOS, CA 92069
Year:	2007
County Code:	37
Air Basin:	SD
Facility ID:	4652
Air District Name:	SD
SIC Code:	5541
Air District Name:	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	1.82
Reactive Organic Gases Tons/Yr:	1.82
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Name:	RANCHO SANTE FE GAS
Address:	105 RANCHO SANTA FE RD
City,State,Zip:	SAN MARCOS, CA 92078
Year:	2008
County Code:	37
Air Basin:	SD
Facility ID:	4652
Air District Name:	SD
SIC Code:	5541
Air District Name:	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	1.82
Reactive Organic Gases Tons/Yr:	1.82
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0

TEXACO (Continued) **S105033893**

Particulate Matter Tons/Yr: 0
Part. Matter 10 Micrometers and Smllr Tons/Yr: 0

Name: RANCHO SANTE FE GAS
Address: 105 RANCHO SANTA FE RD
City,State,Zip: SAN MARCOS, CA 92078
Year: 2009
County Code: 37
Air Basin: SD
Facility ID: 4652
Air District Name: SD
SIC Code: 5541
Air District Name: SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 1.8200000000000001
Reactive Organic Gases Tons/Yr: 1.8200000000000001
Carbon Monoxide Emissions Tons/Yr: 0
NOX - Oxides of Nitrogen Tons/Yr: 0
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 0
Part. Matter 10 Micrometers and Smllr Tons/Yr: 0

Name: RANCHO SANTE FE GAS
Address: 105 RANCHO SANTA FE RD
City,State,Zip: SAN MARCOS, CA 92078
Year: 2010
County Code: 37
Air Basin: SD
Facility ID: 4652
Air District Name: SD
SIC Code: 5541
Air District Name: SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 1.8200000000000001
Reactive Organic Gases Tons/Yr: 1.8200000000000001
Carbon Monoxide Emissions Tons/Yr: 0
NOX - Oxides of Nitrogen Tons/Yr: 0
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 0
Part. Matter 10 Micrometers and Smllr Tons/Yr: 0

CERS:
Name: FORMER TEXACO SERVICE STATION
Address: 105 RANCHO SANTA FE ROAD
City,State,Zip: SAN MARCOS, CA 92069
Site ID: 315047
CERS ID: 724681
CERS Description: Tanks & Ground Water Clean Up

R86 **SHELL SERVICE STATION** **HIST CORTESE** **S105126369**
West **112 RANCHO SANTA FE/HWY 78** **N/A**
1/4-1/2 **SAN MARCOS, CA**
0.478 mi.
2525 ft. **Site 4 of 7 in cluster R**

Relative: **Higher**
Actual: **581 ft.**

HIST CORTESE:

edr_fname:	SHELL SERVICE STATION
edr_fadd1:	112 RANCHO SANTA FE/HWY 78
City,State,Zip:	SAN MARCOS, CA
Region:	CORTESE
Facility County Code:	Not reported
Reg By:	Not reported
Reg Id:	Not reported

R87 **CHEVRON SERVICE STATION#9-3496** **LUST** **S100233170**
West **110 RANCHO SANTA FE RD** **EMI** **N/A**
1/4-1/2 **SAN MARCOS, CA 92069** **HIST CORTESE**
0.480 mi.
2537 ft. **Site 5 of 7 in cluster R**

Relative: **Higher**
Actual: **584 ft.**

LUST REG 9:

Region:	9
Status:	Remediation Plan
Case Number:	9UT878
Local Case:	H13261-001
Substance:	Gasoline
Qty Leaked:	Not reported
Abate Method:	Not reported
Local Agency:	San Diego
How Found:	Subsurface Monitoring
How Stopped:	Close Tank
Source:	Unknown
Cause:	Unknown
Lead Agency:	Local Agency
Case Type:	Other ground water affected
Date Found:	12/31/1987
Date Stopped:	01/08/1988
Confirm Date:	01/08/1988
Submit Workplan:	Not reported
Prelim Assess:	01/08/1988
Desc Pollution:	Not reported
Remed Plan:	03/29/1991
Remed Action:	Not reported
Began Monitor:	Not reported
Release Date:	01/08/1988
Enforce Date:	Not reported
Closed Date:	Not reported
Enforce Type:	Not reported
Pilot Program:	LOP
Basin Number:	904.52
GW Depth:	6.7’
Beneficial Use:	Municipal groundwater use
NPDES Number:	Not reported
Priority:	2A
File Dispn:	File discarded, case closed
Interim Remedial Actions:	Yes
Cleanup and Abatement order Number:	Not reported
Waste Discharge Requirement Number:	Not reported

CHEVRON SERVICE STATION#9-3496 (Continued) **S100233170**

EMI:

Name:	CHEVRON / RANCHO SANTA FE RD
Address:	110 RANCHO SANTA FE RD
City,State,Zip:	SAN MARCOS, CA 92069
Year:	2000
County Code:	37
Air Basin:	SD
Facility ID:	4496
Air District Name:	SD
SIC Code:	5541
Air District Name:	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	4
Reactive Organic Gases Tons/Yr:	4
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Name:	CHEVRON / RANCHO SANTA FE RD
Address:	110 RANCHO SANTA FE RD
City,State,Zip:	SAN MARCOS, CA 92069
Year:	2001
County Code:	37
Air Basin:	SD
Facility ID:	4496
Air District Name:	SD
SIC Code:	5541
Air District Name:	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	4
Reactive Organic Gases Tons/Yr:	4
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Name:	CHEVRON / RANCHO SANTA FE RD
Address:	110 RANCHO SANTA FE RD
City,State,Zip:	SAN MARCOS, CA 92069
Year:	2002
County Code:	37
Air Basin:	SD
Facility ID:	4496
Air District Name:	SD
SIC Code:	5541
Air District Name:	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	4
Reactive Organic Gases Tons/Yr:	4
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0

CHEVRON SERVICE STATION#9-3496 (Continued) **S100233170**

SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 0
Part. Matter 10 Micrometers and Smllr Tons/Yr: 0

Name: CHEVRON RANCHO SANTA FE RD
Address: 110 RANCHO SANTA FE RD
City,State,Zip: SAN MARCOS, CA 92069
Year: 2003
County Code: 37
Air Basin: SD
Facility ID: 4496
Air District Name: SD
SIC Code: 5541
Air District Name: SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 4
Reactive Organic Gases Tons/Yr: 4
Carbon Monoxide Emissions Tons/Yr: 0
NOX - Oxides of Nitrogen Tons/Yr: 0
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 0
Part. Matter 10 Micrometers and Smllr Tons/Yr: 0

Name: CHEVRON RANCHO SANTA FE RD
Address: 110 RANCHO SANTA FE RD
City,State,Zip: SAN MARCOS, CA 92069
Year: 2004
County Code: 37
Air Basin: SD
Facility ID: 4496
Air District Name: SD
SIC Code: 5541
Air District Name: SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 4.2
Reactive Organic Gases Tons/Yr: 4.2
Carbon Monoxide Emissions Tons/Yr: 0
NOX - Oxides of Nitrogen Tons/Yr: 0
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 0
Part. Matter 10 Micrometers and Smllr Tons/Yr: 0

Name: CHEVRON RANCHO SANTA FE RD
Address: 110 RANCHO SANTA FE RD
City,State,Zip: SAN MARCOS, CA 92069
Year: 2005
County Code: 37
Air Basin: SD
Facility ID: 4496
Air District Name: SD
SIC Code: 5541
Air District Name: SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 4.2

CHEVRON SERVICE STATION#9-3496 (Continued) **S100233170**

Reactive Organic Gases Tons/Yr:	4.2
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Name:	CHEVRON
Address:	110 RANCHO SANTA FE RD
City,State,Zip:	SAN MARCOS, CA 92069
Year:	2006
County Code:	37
Air Basin:	SD
Facility ID:	4496
Air District Name:	SD
SIC Code:	5541
Air District Name:	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	3.8
Reactive Organic Gases Tons/Yr:	3.8
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Name:	CHEVRON
Address:	110 RANCHO SANTA FE RD
City,State,Zip:	SAN MARCOS, CA 92069
Year:	2007
County Code:	37
Air Basin:	SD
Facility ID:	4496
Air District Name:	SD
SIC Code:	5541
Air District Name:	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	3.8
Reactive Organic Gases Tons/Yr:	3.8
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Name:	CHEVRON
Address:	110 RANCHO SANTA FE RD
City,State,Zip:	SAN MARCOS, CA 92069
Year:	2008
County Code:	37
Air Basin:	SD
Facility ID:	4496
Air District Name:	SD
SIC Code:	5541
Air District Name:	SAN DIEGO COUNTY APCD

CHEVRON SERVICE STATION#9-3496 (Continued) **S100233170**

Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	3.8
Reactive Organic Gases Tons/Yr:	3.8
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Name:	CHEVRON
Address:	110 RANCHO SANTA FE RD
City,State,Zip:	SAN MARCOS, CA 92069
Year:	2009
County Code:	37
Air Basin:	SD
Facility ID:	4496
Air District Name:	SD
SIC Code:	5541
Air District Name:	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	3.7999999999999998
Reactive Organic Gases Tons/Yr:	3.7999999999999998
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Name:	CHEVRON
Address:	110 RANCHO SANTA FE RD
City,State,Zip:	SAN MARCOS, CA 92069
Year:	2010
County Code:	37
Air Basin:	SD
Facility ID:	4496
Air District Name:	SD
SIC Code:	5541
Air District Name:	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	3.7999999999999998
Reactive Organic Gases Tons/Yr:	3.7999999999999998
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

HIST CORTESE:

edr_fname:	CHEVRON SERVICE STATION#9
edr_fadd1:	110 RANCHO SANTA FE
City,State,Zip:	SAN MARCOS, CA 92069
Region:	CORTESE
Facility County Code:	37
Reg By:	LTNKA

CHEVRON SERVICE STATION#9-3496 (Continued) **S100233170**

Reg Id: 9UT878

R88 **EXXON #1041** **LUST** **S103472136**
West **112 RANCHO SANTA FE RD** **EMI** **N/A**
1/4-1/2 **SAN MARCOS, CA 92069** **CERS**
0.482 mi.
2547 ft. **Site 6 of 7 in cluster R**

Relative:
Higher

Actual:
584 ft.

LUST REG 9:

Region:	9
Status:	Preliminary site assessment underway
Case Number:	9UT3709
Local Case:	H03229-001
Substance:	Unleaded Gasoline
Qty Leaked:	0
Abate Method:	Not reported
Local Agency:	San Diego
How Found:	Other Means
How Stopped:	Other Means
Source:	Unknown
Cause:	Unknown
Lead Agency:	Local Agency
Case Type:	Soil only
Date Found:	08/27/1998
Date Stopped:	08/27/1998
Confirm Date:	/ /
Submit Workplan:	2/3/98
Prelim Assess:	08/20/1998
Desc Pollution:	Not reported
Remed Plan:	/ /
Remed Action:	Not reported
Began Monitor:	Not reported
Release Date:	08/27/1998
Enforce Date:	8/27/98
Closed Date:	Not reported
Enforce Type:	SEL
Pilot Program:	LOP
Basin Number:	904.52
GW Depth:	Not reported
Beneficial Use:	MUNBU
NPDES Number:	Not reported
Priority:	2B
File Dispn:	Administratively opened on database, however no file physically exists
Interim Remedial Actions:	Not reported
Cleanup and Abatement order Number:	Not reported
Waste Discharge Requirement Number:	Not reported

EMI:

Name:	EXXON #1041 / SHELL OIL
Address:	112 RANCHO SANTA FE RD
City,State,Zip:	SAN MARCOS, CA 92069
Year:	1999
County Code:	37
Air Basin:	SD
Facility ID:	1304
Air District Name:	SD
SIC Code:	5541

EXXON #1041 (Continued) **S103472136**

Air District Name:	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	2
Reactive Organic Gases Tons/Yr:	2
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Name:	EXXON #1041
Address:	112 RANCHO SANTA FE RD
City,State,Zip:	SAN MARCOS, CA 92069
Year:	2000
County Code:	37
Air Basin:	SD
Facility ID:	1304
Air District Name:	SD
SIC Code:	5541
Air District Name:	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	2
Reactive Organic Gases Tons/Yr:	2
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Name:	EXXON #1041
Address:	112 RANCHO SANTA FE RD
City,State,Zip:	SAN MARCOS, CA 92069
Year:	2001
County Code:	37
Air Basin:	SD
Facility ID:	1304
Air District Name:	SD
SIC Code:	5541
Air District Name:	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	2
Reactive Organic Gases Tons/Yr:	2
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Name:	EXXON #1041
Address:	112 RANCHO SANTA FE RD
City,State,Zip:	SAN MARCOS, CA 92069
Year:	2002
County Code:	37
Air Basin:	SD

EXXON #1041 (Continued) **S103472136**

Facility ID:	1304
Air District Name:	SD
SIC Code:	5541
Air District Name:	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	2
Reactive Organic Gases Tons/Yr:	2
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Name:	EXXON #1041
Address:	112 RANCHO SANTA FE RD
City,State,Zip:	SAN MARCOS, CA 92069
Year:	2003
County Code:	37
Air Basin:	SD
Facility ID:	1304
Air District Name:	SD
SIC Code:	5541
Air District Name:	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	2
Reactive Organic Gases Tons/Yr:	2
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Name:	EXXON #1041
Address:	112 RANCHO SANTA FE RD
City,State,Zip:	SAN MARCOS, CA 92069
Year:	2004
County Code:	37
Air Basin:	SD
Facility ID:	1304
Air District Name:	SD
SIC Code:	5541
Air District Name:	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	2.0781838
Reactive Organic Gases Tons/Yr:	2.0781838
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Name:	EXXON #1041
Address:	112 RANCHO SANTA FE RD
City,State,Zip:	SAN MARCOS, CA 92069

EXXON #1041 (Continued) **S103472136**

Year:	2005
County Code:	37
Air Basin:	SD
Facility ID:	1304
Air District Name:	SD
SIC Code:	5541
Air District Name:	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	2.0781838
Reactive Organic Gases Tons/Yr:	2.0781838
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Name:	EXXON #1041
Address:	112 RANCHO SANTA FE RD
City,State,Zip:	SAN MARCOS, CA 92069
Year:	2006
County Code:	37
Air Basin:	SD
Facility ID:	1304
Air District Name:	SD
SIC Code:	5541
Air District Name:	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	1.72
Reactive Organic Gases Tons/Yr:	1.72
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Name:	EXXON #1041
Address:	112 RANCHO SANTA FE RD
City,State,Zip:	SAN MARCOS, CA 92069
Year:	2007
County Code:	37
Air Basin:	SD
Facility ID:	1304
Air District Name:	SD
SIC Code:	5541
Air District Name:	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	1.72
Reactive Organic Gases Tons/Yr:	1.72
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

EXXON #1041 (Continued) **S103472136**

Name:	EXXON #1041
Address:	112 RANCHO SANTA FE RD
City,State,Zip:	SAN MARCOS, CA 92069
Year:	2008
County Code:	37
Air Basin:	SD
Facility ID:	1304
Air District Name:	SD
SIC Code:	5541
Air District Name:	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	1.72
Reactive Organic Gases Tons/Yr:	1.72
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Name:	EXXON #1041
Address:	112 RANCHO SANTA FE RD
City,State,Zip:	SAN MARCOS, CA 92069
Year:	2009
County Code:	37
Air Basin:	SD
Facility ID:	1304
Air District Name:	SD
SIC Code:	5541
Air District Name:	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	1.72
Reactive Organic Gases Tons/Yr:	1.72
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Name:	EXXON #1041
Address:	112 RANCHO SANTA FE RD
City,State,Zip:	SAN MARCOS, CA 92069
Year:	2010
County Code:	37
Air Basin:	SD
Facility ID:	1304
Air District Name:	SD
SIC Code:	5541
Air District Name:	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	1.72
Reactive Organic Gases Tons/Yr:	1.72
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0

EXXON #1041 (Continued) **S103472136**

Particulate Matter Tons/Yr: 0
Part. Matter 10 Micrometers and Smllr Tons/Yr:0

CERS:
Name: EXXON #1041
Address: 112 RANCHO SANTA FE RD
City,State,Zip: SAN MARCOS, CA 92078-2502
Site ID: 467157
CERS ID: 110013853516
CERS Description: US EPA Air Emission Inventory System (EIS)

89
SSE
1/4-1/2
0.493 mi.
2602 ft.

SPANJIAN/ DUFOUR
1050 LOS VALLECITOS
SAN MARCOS, CA 92069

SAN DIEGO CO. SAM
CPS-SLIC
CERS

S105692328
N/A

Relative:
Lower

Actual:
547 ft.

SAN DIEGO CO. SAM:
Name: SPANJIAN BLDG
Address: 1050 LOS VALLECITOS BL
City,State,Zip: SAN MARCOS, CA 920691410
Case Number: H29237-001
Agency: CA Regional Water Quality Control Board
Funding: **Non Billable**
Facility Type: Soils Only
Facility Status: Remedial Action (Clean-Up)
Date: 7/10/1989
Date Began: 7/10/1989

SLIC REG 9:
Name: SPANJIAN/ DUFOUR
Address: 1050 LOS VALLECITOS
City: SAN MARCOS
Region: 9
Facilty Type: Cleanup And Abatement Order
Status: Dead
Sort Code: 20-0020.05
Waste Discharger Id: Not reported
Local Case Num: Not reported
Responsible Party: SPANJIAN
Category: ENFORCEMENT
Class: SLIC
Order Number: 92-82
File Number: 1
Date Entered: 09/1981
End Date: 11/1989
Archive Box #: 909
Archive Box Storage: 3-1-12R
Archive Box Storage Location: Not reported
Remarks: Not reported

Name: SPANJIAN/ DUFOUR
Address: 1050 LOS VALLECITOS
City: SAN MARCOS
Region: 9
Facilty Type: Cleanup And Abatement Order
Status: Dead

SPANJIAN/ DUFOUR (Continued) **S105692328**

Sort Code:	20-0020.05
Waste Discharger Id:	Not reported
Local Case Num:	Not reported
Responsible Party:	SPANJIAN
Category:	ENFORCEMENT
Class:	SLIC
Order Number:	92-82
File Number:	2
Date Entered:	12/1989
End Date:	03/1991
Archive Box #:	909
Archive Box Storage:	3-1-12R
Archive Box Storage Location:	Not reported
Remarks:	Not reported

Name:	SPANJIAN/ DUFOUR
Address:	1050 LOS VALLECITOS
City:	SAN MARCOS
Region:	9
Facilty Type:	Cleanup And Abatement Order
Status:	Dead
Sort Code:	20-0020.05
Waste Discharger Id:	Not reported
Local Case Num:	Not reported
Responsible Party:	SPANJIAN
Category:	ENFORCEMENT
Class:	SLIC
Order Number:	92-82
File Number:	3
Date Entered:	04/1991
End Date:	08/1992
Archive Box #:	909
Archive Box Storage:	3-1-12R
Archive Box Storage Location:	Not reported
Remarks:	Not reported

Name:	SPANJIAN/ DUFOUR
Address:	1050 LOS VALLECITOS
City:	SAN MARCOS
Region:	9
Facilty Type:	Cleanup And Abatement Order
Status:	Dead
Sort Code:	20-0020.05
Waste Discharger Id:	Not reported
Local Case Num:	Not reported
Responsible Party:	SPANJIAN
Category:	ENFORCEMENT
Class:	SLIC
Order Number:	92-82
File Number:	4
Date Entered:	08/1992
End Date:	10/1992
Archive Box #:	909
Archive Box Storage:	3-1-12R
Archive Box Storage Location:	Not reported
Remarks:	Not reported

SPANJIAN/ DUFOUR (Continued) **S105692328**

Name:	SPANJIAN/ DUFOUR
Address:	1050 LOS VALLECITOS
City:	SAN MARCOS
Region:	9
Facilty Type:	Cleanup And Abatement Order
Status:	Dead
Sort Code:	20-0020.05
Waste Discharger Id:	Not reported
Local Case Num:	Not reported
Responsible Party:	SPANJIAN
Category:	ENFORCEMENT
Class:	SLIC
Order Number:	93-22
File Number:	5
Date Entered:	11/1992
End Date:	02/1994
Archive Box #:	909
Archive Box Storage:	3-1-12R
Archive Box Storage Location:	Not reported
Remarks:	Not reported

Name:	SPANJIAN/ DUFOUR
Address:	1050 LOS VALLECITOS
City:	SAN MARCOS
Region:	9
Facilty Type:	Cleanup And Abatement Order
Status:	Open
Sort Code:	20-0020.05
Waste Discharger Id:	Not reported
Local Case Num:	Not reported
Responsible Party:	SPANJIAN
Category:	ENFORCEMENT
Class:	SLIC
Order Number:	93-22
File Number:	6
Date Entered:	03/1994
End Date:	Not reported
Archive Box #:	0
Archive Box Storage:	Not reported
Archive Box Storage Location:	Not reported
Remarks:	Not reported

Name:	SPANJIAN/ DUFOUR
Address:	1050 LOS VALLECITOS
City:	SAN MARCOS
Region:	9
Facilty Type:	Cleanup And Abatement Order
Status:	Dead
Sort Code:	20-0020.051
Waste Discharger Id:	Not reported
Local Case Num:	Not reported
Responsible Party:	SPANJIAN
Category:	ENF. REPORT
Class:	SLIC
Order Number:	92-82
File Number:	1
Date Entered:	06/1989

SPANJIAN/ DUFOUR (Continued) **S105692328**

End Date: 09/1991
Archive Box #: 909
Archive Box Storage: 3-1-12R
Archive Box Storage Location: Not reported
Remarks: Not reported

Name: SPANJIAN/ DUFOUR
Address: 1050 LOS VALLECITOS
City: SAN MARCOS
Region: 9
Facilty Type: Cleanup And Abatement Order
Status: Dead
Sort Code: 20-0020.051
Waste Discharger Id: Not reported
Local Case Num: Not reported
Responsible Party: SPANJIAN
Category: ENF. REPORT
Class: SLIC
Order Number: 93-22
File Number: 2
Date Entered: 10/1991
End Date: 03/1996
Archive Box #: 909
Archive Box Storage: 3-1-12R
Archive Box Storage Location: Not reported
Remarks: Not reported

Name: SPANJIAN/ DUFOUR
Address: 1050 LOS VALLECITOS
City: SAN MARCOS
Region: 9
Facilty Type: Cleanup And Abatement Order
Status: Open
Sort Code: 20-0020.051
Waste Discharger Id: Not reported
Local Case Num: Not reported
Responsible Party: SPANJIAN
Category: ENF. REPORT
Class: SLIC
Order Number: 92-82
File Number: 3
Date Entered: 04/1996
End Date: Not reported
Archive Box #: 0
Archive Box Storage: Not reported
Archive Box Storage Location: Not reported
Remarks: Not reported

CPS-SLIC:
Name: NORTH COUNTY FACTORY OUTLET (FORMERLY SPANJIAN/DUFOUR)
Address: 1050 LOS VALLECITOS BLVD.
City,State,Zip: SAN MARCOS, CA 92069
Region: STATE
Facility Status: **Completed - Case Closed**
Status Date: 06/30/2014
Global Id: SL0607396081
Lead Agency: SAN DIEGO RWQCB (REGION 9)

SPANJIAN/ DUFOUR (Continued) **S105692328**

Lead Agency Case Number:	H29237-001
Latitude:	33.1427302606866
Longitude:	-117.186827659607
Case Type:	Cleanup Program Site
Case Worker:	SM
Local Agency:	Not reported
RB Case Number:	2090027
File Location:	Regional Board
Potential Media Affected:	Other Groundwater (uses other than drinking water), Soil
Potential Contaminants of Concern:	1,1,1-Trichloroethane (TCA), Other Chlorinated Hydrocarbons, Other Solvent or Non-Petroleum Hydrocarbon, Tetrachloroethylene (PCE), Trichloroethylene (TCE), Stoddard solvent / Mineral Spriits / Distillates
Site History:	The North County Factory Outlet site is occupied by a single story, high-bay type, office-warehouse-shop building with 106,157 square feet (ft2) of area and an attached 2-story parking garage with associated asphalt parking areas and driveways and surrounding landscaped areas. The Site was undeveloped land until it was developed beginning in 1970 with the new Spanjian Sportswear, Inc. facility. They built the facility and operated there from 1971 to 1985.

Click here to access the California GeoTracker records for this facility:

CERS:

Name:	NORTH COUNTY FACTORY OUTLET (FORMERLY SPANJIAN/DUFOUR)
Address:	1050 LOS VALLECITOS BLVD.
City,State,Zip:	SAN MARCOS, CA 92069
Site ID:	200691
CERS ID:	SL0607396081
CERS Description:	Cleanup Program Site

Affiliation:

Affiliation Type Desc:	Regional Board Caseworker
Entity Name:	SEAN MCCLAIN - SAN DIEGO RWQCB (REGION 9)
Entity Title:	Not reported
Affiliation Address:	2375 NORTHSIDE DRIVE, SUITE 100
Affiliation City:	SAN DIEGO
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	6195213374

R90 **UNITED PACIFIC 0658** **LUST** **U003789436**
WSW **110 S RANCHO SANTA FE RD** **SAN DIEGO CO. SAM** **N/A**
1/4-1/2 **SAN MARCOS, CA 92078** **UST**
0.498 mi. **San Diego Co. HMMD**
2631 ft. **Site 7 of 7 in cluster R** **SWEEPS UST**
Cortese
Relative: Higher **HAZNET**
SAN DIEGO CO LOP
Actual: 586 ft. **CERS**
HWTS

LUST:

Name:	PALM SPRINGS OIL CO (CHEVRON)
Address:	110 S RANCHO SANTA FE RD

UNITED PACIFIC 0658 (Continued) **U003789436**

City,State,Zip:	SAN MARCOS, CA 920692502
Lead Agency:	SAN DIEGO RWQCB (REGION 9)
Case Type:	LUST Cleanup Site
Geo Track:	http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0607303122
Global Id:	T0607303122
Latitude:	33.1488114425885
Longitude:	-117.199372394021
Status:	Completed - Case Closed
Status Date:	11/07/2019
Case Worker:	LT
RB Case Number:	9UT878
Local Agency:	Not reported
File Location:	Regional Board
Local Case Number:	Not reported
Potential Media Affect:	Aquifer used for drinking water supply
Potential Contaminants of Concern:	Gasoline
Site History:	This case was opened after receiving the results of soil and groundwater data collected after the removal of the underground storage tanks on November 2, 1987. Petroleum hydrocarbons were detected in soil and groundwater samples collected from the tank excavation. Please see Environmental Data Tab for additional information.

LUST:

Global Id:	T0607303122
Contact Type:	Regional Board Caseworker
Contact Name:	LALITHA THOTAKURA
Organization Name:	SAN DIEGO RWQCB (REGION 9)
Address:	2375 NORTHSIDE DRIVE, SUITE 100
City:	SAN DIEGO
Email:	lalitha.thotakura@waterboards.ca.gov
Phone Number:	6195213002

LUST:

Global Id:	T0607303122
Action Type:	RESPONSE
Date:	03/02/2011
Action:	Correspondence
Global Id:	T0607303122
Action Type:	RESPONSE
Date:	07/13/2011
Action:	Other Report / Document
Global Id:	T0607303122
Action Type:	RESPONSE
Date:	07/30/2011
Action:	Monitoring Report - Semi-Annually
Global Id:	T0607303122
Action Type:	RESPONSE
Date:	01/30/2012
Action:	Monitoring Report - Semi-Annually
Global Id:	T0607303122
Action Type:	RESPONSE
Date:	12/21/2011

UNITED PACIFIC 0658 (Continued) **U003789436**

Action:	Sensitive Receptor Survey Report
Global Id:	T0607303122
Action Type:	RESPONSE
Date:	06/28/2019
Action:	Well Destruction Report
Global Id:	T0607303122
Action Type:	ENFORCEMENT
Date:	03/09/2010
Action:	Technical Correspondence / Assistance / Other
Global Id:	T0607303122
Action Type:	ENFORCEMENT
Date:	06/01/2010
Action:	Technical Correspondence / Assistance / Other
Global Id:	T0607303122
Action Type:	ENFORCEMENT
Date:	06/30/2015
Action:	Referral to Regional Board
Global Id:	T0607303122
Action Type:	RESPONSE
Date:	01/26/2017
Action:	Monitoring Report - Semi-Annually
Global Id:	T0607303122
Action Type:	ENFORCEMENT
Date:	12/23/2010
Action:	Technical Correspondence / Assistance / Other
Global Id:	T0607303122
Action Type:	ENFORCEMENT
Date:	07/31/2015
Action:	Email Correspondence
Global Id:	T0607303122
Action Type:	RESPONSE
Date:	03/02/2011
Action:	Risk Assessment Report - Regulator Responded
Global Id:	T0607303122
Action Type:	RESPONSE
Date:	04/22/2011
Action:	Other Workplan - Regulator Responded
Global Id:	T0607303122
Action Type:	RESPONSE
Date:	12/06/2011
Action:	Sensitive Receptor Survey Report - Regulator Responded
Global Id:	T0607303122
Action Type:	RESPONSE
Date:	07/30/2012
Action:	Monitoring Report - Semi-Annually - Regulator Responded

UNITED PACIFIC 0658 (Continued) **U003789436**

Global Id: T0607303122
Action Type: ENFORCEMENT
Date: 04/28/2011
Action: Technical Correspondence / Assistance / Other

Global Id: T0607303122
Action Type: ENFORCEMENT
Date: 05/16/2014
Action: Technical Correspondence / Assistance / Other

Global Id: T0607303122
Action Type: RESPONSE
Date: 07/30/2013
Action: Monitoring Report - Semi-Annually

Global Id: T0607303122
Action Type: RESPONSE
Date: 05/30/2013
Action: Correspondence

Global Id: T0607303122
Action Type: RESPONSE
Date: 07/30/2018
Action: Monitoring Report - Semi-Annually

Global Id: T0607303122
Action Type: RESPONSE
Date: 07/26/2017
Action: Monitoring Report - Semi-Annually

Global Id: T0607303122
Action Type: RESPONSE
Date: 08/03/2018
Action: Technical Memos

Global Id: T0607303122
Action Type: RESPONSE
Date: 07/31/2014
Action: Monitoring Report - Semi-Annually - Regulator Responded

Global Id: T0607303122
Action Type: RESPONSE
Date: 03/10/2014
Action: Conceptual Site Model - Regulator Responded

Global Id: T0607303122
Action Type: ENFORCEMENT
Date: 12/21/2016
Action: Technical Correspondence / Assistance / Other

Global Id: T0607303122
Action Type: ENFORCEMENT
Date: 01/18/2019
Action: Staff Letter

Global Id: T0607303122
Action Type: ENFORCEMENT

UNITED PACIFIC 0658 (Continued) **U003789436**

Date: 11/05/2018
Action: Notification - Public Notice of Case Closure

Global Id: T0607303122
Action Type: ENFORCEMENT
Date: 10/03/2018
Action: Notification - Preclosure

Global Id: T0607303122
Action Type: ENFORCEMENT
Date: 11/07/2019
Action: Closure/No Further Action Letter

Global Id: T0607303122
Action Type: RESPONSE
Date: 01/31/2014
Action: Monitoring Report - Semi-Annually

Global Id: T0607303122
Action Type: RESPONSE
Date: 07/25/2016
Action: Monitoring Report - Semi-Annually

Global Id: T0607303122
Action Type: RESPONSE
Date: 11/06/2013
Action: Conceptual Site Model - Regulator Responded

Global Id: T0607303122
Action Type: RESPONSE
Date: 10/21/2014
Action: Pilot Study / Treatability Workplan - Regulator Responded

Global Id: T0607303122
Action Type: ENFORCEMENT
Date: 01/08/1988
Action: Notice of Responsibility

Global Id: T0607303122
Action Type: ENFORCEMENT
Date: 12/12/2011
Action: Technical Correspondence / Assistance / Other

Global Id: T0607303122
Action Type: ENFORCEMENT
Date: 08/18/2017
Action: Clean Up Fund - Case Closure Review Summary Report (RSR)

Global Id: T0607303122
Action Type: Other
Date: 01/08/1988
Action: Leak Began

Global Id: T0607303122
Action Type: Other
Date: 01/08/1988
Action: Leak Discovery

UNITED PACIFIC 0658 (Continued) **U003789436**

Global Id: T0607303122
Action Type: Other
Date: 01/08/1988
Action: Leak Stopped

Global Id: T0607303122
Action Type: Other
Date: 01/08/1988
Action: Leak Reported

Global Id: T0607303122
Action Type: RESPONSE
Date: 03/19/2010
Action: Other Workplan

Global Id: T0607303122
Action Type: RESPONSE
Date: 02/17/2010
Action: Pilot Study / Treatability Workplan

Global Id: T0607303122
Action Type: RESPONSE
Date: 07/06/2015
Action: Monitoring Report - Semi-Annually

Global Id: T0607303122
Action Type: RESPONSE
Date: 01/30/2010
Action: Monitoring Report - Semi-Annually

Global Id: T0607303122
Action Type: RESPONSE
Date: 07/30/2009
Action: Monitoring Report - Quarterly

Global Id: T0607303122
Action Type: RESPONSE
Date: 07/30/2010
Action: Monitoring Report - Semi-Annually

Global Id: T0607303122
Action Type: RESPONSE
Date: 01/31/2015
Action: Monitoring Report - Semi-Annually

Global Id: T0607303122
Action Type: RESPONSE
Date: 10/11/2017
Action: Correspondence

Global Id: T0607303122
Action Type: RESPONSE
Date: 01/24/2018
Action: Monitoring Report - Semi-Annually

Global Id: T0607303122
Action Type: RESPONSE

UNITED PACIFIC 0658 (Continued) **U003789436**

Date: 07/29/2016
Action: Site Investigation Workplan - Regulator Responded

Global Id: T0607303122
Action Type: ENFORCEMENT
Date: 02/07/2013
Action: Technical Correspondence / Assistance / Other

Global Id: T0607303122
Action Type: ENFORCEMENT
Date: 02/03/2009
Action: Technical Correspondence / Assistance / Other

Global Id: T0607303122
Action Type: ENFORCEMENT
Date: 01/16/2009
Action: Technical Correspondence / Assistance / Other

Global Id: T0607303122
Action Type: RESPONSE
Date: 12/17/2010
Action: Risk Assessment Report

Global Id: T0607303122
Action Type: RESPONSE
Date: 01/30/2011
Action: Monitoring Report - Semi-Annually

Global Id: T0607303122
Action Type: RESPONSE
Date: 01/22/2016
Action: Monitoring Report - Semi-Annually

Global Id: T0607303122
Action Type: ENFORCEMENT
Date: 07/08/2009
Action: Letter - Notice

LUST:
Global Id: T0607303122
Status: Open - Case Begin Date
Status Date: 12/04/1987

Global Id: T0607303122
Status: Open - Remediation
Status Date: 12/04/1987

Global Id: T0607303122
Status: Completed - Case Closed
Status Date: 11/07/2019

SAN DIEGO CO. SAM:
Name: PALM SPRINGS OIL CO (CHEVRON)
Address: 110 S RANCHO SANTA FE RD
City,State,Zip: SAN MARCOS, CA 920692502

UNITED PACIFIC 0658 (Continued) **U003789436**

Case Number: H13261-001
Agency: DEH Site Assessment & Mitigation
Funding: **LOP - State Fund**
Facility Type: Drinking Water Aquifer Impacted
Facility Status: Remedial Investigation
Date: 3/29/1991
Date Began: 1/8/1988

UST:
Name: UNITED PACIFIC 0658
Address: 110 S RANCHO SANTA FE RD
City,State,Zip: SAN MARCOS, CA 92078
Facility ID: 37-000-113261
Permitting Agency: San Diego County Department of Environmental Health
Latitude: 33.14883
Longitude: -117.19946

Name: PALM SPRINGS OIL CO (CHEVRON)
Address: 110 S RANCHO SANTA FE RD
City,State,Zip: SAN MARCOS, CA 92069
Facility ID: H13261
Permitting Agency: SAN DIEGO COUNTY
Latitude: 33.15092
Longitude: -117.19798

HMMD SAN DIEGO:
Name: PALM SPRINGS OIL CO (CHEVRON)
Address: 110 S RANCHO SANTA FE RD
City,State,Zip: SAN MARCOS, CA 92078
Permit Number: 113261
Business Type: 6HK28
EPA Id Number: CAL000264707
APN: 219-410-19-00
Last HMMD Inspection: 03/15/2012
Facility Telephone: 760-727-3877
Permit Status: OPEN
Permit Expiration: 04/30/2013
Date Last Updated: 11/02/2012
Facility Owner: PALM SPRINGS OIL CO
Facility Mailing Address: 166 N SUNRISE WAY
Facility Mailing City: PALM SPRINGS
Facility Mailing State: CA
Facility Mailing Zip: 92262-
UST Owner: PALM SPRINGS OIL CO., INC.
Handle Regulated Hazmat: Y
Own Or Operate UST: Y
Subject To APSA: Not reported
Generate Haz Waste: Not reported
Treat Haz Waste: Not reported
Generate Medical Waste: Not reported

Inventory Active Permits (not SQG Medical):
Permit Number: 113261
Update Date: 11/02/2012
Case Number: 68476-34-6
Name: DIESEL
Other Information: UNDERGROUND TANK 113261 T011

UNITED PACIFIC 0658 (Continued) **U003789436**

Material Waste: Material
Hazardous Categories 1: FIRE
Hazardous Categories 2: Not reported

Permit Number: 113261
Update Date: 11/02/2012
Case Number: 8006-61-9
Name: PLUS UNLEADED
Other Information: UNDERGROUND TANK 113261 T009
Material Waste: Material
Hazardous Categories 1: FIRE
Hazardous Categories 2: Not reported

Permit Number: 113261
Update Date: 11/02/2012
Case Number: 8006-61-9
Name: REGULAR UNLEADED
Other Information: UNDERGROUND TANK 113261 T008
Material Waste: Material
Hazardous Categories 1: FIRE
Hazardous Categories 2: Not reported

Permit Number: 113261
Update Date: 11/02/2012
Case Number: 8006-61-9
Name: SUPER UNLEADED
Other Information: UNDERGROUND TANK 113261 T010
Material Waste: Material
Hazardous Categories 1: FIRE
Hazardous Categories 2: Not reported

Permit Number: 113261
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 134 AQUEOUS SOL'N W/LESS 10% ORG
Other Information: WATER & FUEL
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Permit Number: 113261
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 352 ORGANIC SOLIDS (OTHER)
Other Information: FUEL FILTERS & ABSORBENT
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Violations Active Permits:
Permit Number: 113261
Update Date: 11/02/2012
Inspection Date: 02/28/2008
Violation Code: 6HV3267
Violation: DISP. CONTAINMENT NOT ADEQ. MONITORED
Violation Citation: Dispenser containment not adequately monitored. 2636(f)(1) or (f)(5)(A)

UNITED PACIFIC 0658 (Continued) **U003789436**

Activity: ACTIVE

Permit Number: 113261
Update Date: 11/02/2012
Inspection Date: 02/15/2006
Violation Code: 6HV3411
Violation: LLD NOT INSTALLED/NOT FUNCTIONAL
Violation Citation: DOUBLE WALLED PRESSURIZED PIPING-Including Under Dispenser Containment (UDC):Line leak detector is not installed, not functional, or not tested. 2636(f)(2), 25284.1(a)(4)(C), 2641(j)
Activity: ACTIVE

Permit Number: 113261
Update Date: 11/02/2012
Inspection Date: 02/09/2010
Violation Code: 6HV3103
Violation: NO UST PLAN CHECK PERMIT OBTAINED
Violation Citation: UST repair/modify/closure permit not obtained .68.1004, 68.1005, 68.1009.5
Activity: ACTIVE

Permit Number: 113261
Update Date: 11/02/2012
Inspection Date: 02/28/2007
Violation Code: 6HV3255
Violation: SPILL CONTAIN. NOT DRY/IN GOOD CONDITION
Violation Citation: Spill container is not in good condition and/or liquid free. 2635(b)(1), 2636(a)(1)
Activity: ACTIVE

Permit Number: 113261
Update Date: 11/02/2012
Inspection Date: 02/28/2007
Violation Code: 6HV3411
Violation: LLD NOT INSTALLED/NOT FUNCTIONAL
Violation Citation: DOUBLE WALLED PRESSURIZED PIPING-Including Under Dispenser Containment (UDC):Line leak detector is not installed, not functional, or not tested. 2636(f)(2), 25284.1(a)(4)(C), 2641(j)
Activity: ACTIVE

Permit Number: 113261
Update Date: 11/02/2012
Inspection Date: 02/28/2007
Violation Code: 6HV3411
Violation: LLD NOT INSTALLED/NOT FUNCTIONAL
Violation Citation: DOUBLE WALLED PRESSURIZED PIPING-Including Under Dispenser Containment (UDC):Line leak detector is not installed, not functional, or not tested. 2636(f)(2), 25284.1(a)(4)(C), 2641(j)
Activity: ACTIVE

Permit Number: 113261
Update Date: 11/02/2012
Inspection Date: 02/28/2007
Violation Code: 6HV3411
Violation: LLD NOT INSTALLED/NOT FUNCTIONAL
Violation Citation: DOUBLE WALLED PRESSURIZED PIPING-Including Under Dispenser Containment (UDC):Line leak detector is not installed, not functional, or not

UNITED PACIFIC 0658 (Continued) **U003789436**

tested. 2636(f)(2), 25284.1(a)(4)(C), 2641(j)
Activity: ACTIVE

Permit Number: 113261
Update Date: 11/02/2012
Inspection Date: 02/28/2007
Violation Code: 6HV3411
Violation: LLD NOT INSTALLED/NOT FUNCTIONAL
Violation Citation: DOUBLE WALLED PRESSURIZED PIPING-Including Under Dispenser Containment (UDC):Line leak detector is not installed, not functional, or not tested. 2636(f)(2), 25284.1(a)(4)(C), 2641(j)
Activity: ACTIVE

Permit Number: 113261
Update Date: 11/02/2012
Inspection Date: 01/07/2003
Violation Code: 6HV0132
Violation: EPA ID NUMBER NOT OBTAINED/MAINTAINED
Violation Citation: Generator of hazardous waste has not obtained/maintained an EPA identification number. CCR 66262.12(a)
Activity: ACTIVE

Permit Number: 113261
Update Date: 11/02/2012
Inspection Date: 01/07/2003
Violation Code: 6HV0135
Violation: MANIFESTS/RECEIPTS FOR 3 YEARS NOT ONSIT
Violation Citation: Hazardous waste manifests/receipts for 3 years are not maintained onsite to document proper disposal of hazardous waste. CCR 66262.40(a) & 25160.2(b)(3)
Activity: ACTIVE

Permit Number: 113261
Update Date: 11/02/2012
Inspection Date: 01/07/2003
Violation Code: 6HV3151
Violation: ALL RELEASES NOT REPORTED/RECORDED
Violation Citation: All releases not recorded and/or reported. 25294, 25295, 2650, 2651, 2652
Activity: ACTIVE

Permit Number: 113261
Update Date: 11/02/2012
Inspection Date: 01/07/2003
Violation Code: 6HV3263
Violation: MONITOR SYSTEM NOT ALL FUNCTIONAL
Violation Citation: Monitoring system components &/or devices are not all functional. 2630, 2641(j), 2632
Activity: ACTIVE

Permit Number: 113261
Update Date: 11/02/2012
Inspection Date: 01/27/2004
Violation Code: 6HV3105
Violation: NO CURRENT FINANCIAL RESPONSIBILITY
Violation Citation: Current evidence of financial responsibility not available. 25292.2(a), 25299.33; 2809

UNITED PACIFIC 0658 (Continued) **U003789436**

Activity: ACTIVE

Permit Number: 113261
Update Date: 11/02/2012
Inspection Date: 01/27/2004
Violation Code: 6HV3107
Violation: MONITORING PROCEDURES NOT AVAIL/TO HMD
Violation Citation: Monitoring procedures not available/complete/submitted to HMD 2632(b)& (d), 2634(d), 2641(h), 2711(a)(9)
Activity: ACTIVE

Permit Number: 113261
Update Date: 11/02/2012
Inspection Date: 01/27/2004
Violation Code: 6HV3108
Violation: UST ER RESPONSE PLAN NOT COMPLETE/AVAIL
Violation Citation: Emergency Response Plan is not available/complete. 25289(b); 2632(b), 2634(e), 2641(h)
Activity: ACTIVE

Permit Number: 113261
Update Date: 11/02/2012
Inspection Date: 01/27/2004
Violation Code: 6HV3109
Violation: NO SCALED PLOT PLAN AVAIL/TO HMD
Violation Citation: Scaled Plot plan showing tank, piping & equipment location not available/complete/submitted to HMD. 2711(a)(8), 2632(d)(1) (C)
Activity: ACTIVE

UST:
UST Name: UNDERGROUND TANK 113261 T001
Last Update: 2012-11-02 14:17:38
Permit Number: 113261
Tank Type: SINGLE WALL
Additional Id: 1
Capacity Gallons: 10000
UST Contents: LEADED
Other Content Info: LEADED
Reg Status: REMOVED
Remove Close Date: 1987-10-29 00:00:00
Year Installed: 1979-01-01 00:00:00
Pipe Type: LINED TRENCH
Delivery System: PRESSURE
Monitor Code: 05
UST Monitor Method: SW TANK DW PIPE W/ POS SHUTOFF-ALARM ON LLD W/ SIRS:SIR ANALY MONTHLY, TANK TEST BIENNIALLY, PIPE TEST ANN 0.1 G/HR OR MO 0.2 G/HR

UST Name: UNDERGROUND TANK 113261 T002
Last Update: 2012-11-02 14:17:38
Permit Number: 113261
Tank Type: SINGLE WALL
Additional Id: 2
Capacity Gallons: 10000
UST Contents: REGULAR UNLEADED
Other Content Info: REGULAR UNLEADED
Reg Status: REMOVED
Remove Close Date: 1987-10-29 00:00:00

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Year Installed:	1979-01-01 00:00:00
Pipe Type:	LINED TRENCH
Delivery System:	PRESSURE
Monitor Code:	05
UST Monitor Method:	SW TANK DW PIPE W/ POS SHUTOFF-ALARM ON LLD W/ SIRS:SIR ANALY MONTHLY, TANK TEST BIENNIALLY, PIPE TEST ANN 0.1 G/HR OR MO 0.2 G/HR
UST Name:	UNDERGROUND TANK 113261 T003
Last Update:	2012-11-02 14:17:38
Permit Number:	113261
Tank Type:	SINGLE WALL
Additional Id:	3
Capacity Gallons:	6000
UST Contents:	PREMIUM UNLEADED
Other Content Info:	PREMIUM UNLEADED
Reg Status:	REMOVED
Remove Close Date:	1987-10-29 00:00:00
Year Installed:	1979-01-01 00:00:00
Pipe Type:	LINED TRENCH
Delivery System:	PRESSURE
Monitor Code:	05
UST Monitor Method:	SW TANK DW PIPE W/ POS SHUTOFF-ALARM ON LLD W/ SIRS:SIR ANALY MONTHLY, TANK TEST BIENNIALLY, PIPE TEST ANN 0.1 G/HR OR MO 0.2 G/HR
UST Name:	UNDERGROUND TANK 113261 T004
Last Update:	2012-11-02 14:17:38
Permit Number:	113261
Tank Type:	SINGLE WALL
Additional Id:	4
Capacity Gallons:	1000
UST Contents:	Not reported
Other Content Info:	WASTE OIL
Reg Status:	REMOVED
Remove Close Date:	1987-10-29 00:00:00
Year Installed:	1979-01-01 00:00:00
Pipe Type:	Not reported
Delivery System:	Not reported
Monitor Code:	07
UST Monitor Method:	SW TANK SW PRESSURE PIPE W/RESTRICTIVE LLD W/DAILY RECONCILIATION OR WEEKLY GAUGING: TANK AND PIPE TEST ANNUALLY
UST Name:	UNDERGROUND TANK 113261 T005
Last Update:	2012-11-02 14:17:38
Permit Number:	113261
Tank Type:	DOUBLE WALL
Additional Id:	5 UNLEADED
Capacity Gallons:	10000
UST Contents:	REGULAR UNLEADED
Other Content Info:	REGULAR UNLEADED
Reg Status:	REMOVED
Remove Close Date:	1998-04-27 00:00:00
Year Installed:	1987-01-01 00:00:00
Pipe Type:	SINGLE WALL
Delivery System:	PRESSURE
Monitor Code:	17
UST Monitor Method:	DW TANK SW PRESSURE PIPE W/ RESTICTIVE LLD: DAILY RECONCILIATION AND INTERSTITIAL, PIPE TEST ANNUALLY

UNITED PACIFIC 0658 (Continued) **U003789436**

UST Name:	UNDERGROUND TANK 113261 T006
Last Update:	2012-11-02 14:17:38
Permit Number:	113261
Tank Type:	DOUBLE WALL
Additional Id:	6 UNLEADED
Capacity Gallons:	10000
UST Contents:	REGULAR UNLEADED
Other Content Info:	REGULAR UNLEADED
Reg Status:	REMOVED
Remove Close Date:	1998-04-27 00:00:00
Year Installed:	1987-01-01 00:00:00
Pipe Type:	DOUBLE WALL
Delivery System:	PRESSURE
Monitor Code:	17
UST Monitor Method:	DW TANK SW PRESSURE PIPE W/ RESTICTIVE LLD: DAILY RECONCILIATION AND INTERSTITIAL, PIPE TEST ANNUALLY

UST Name:	UNDERGROUND TANK 113261 T007
Last Update:	2012-11-02 14:17:38
Permit Number:	113261
Tank Type:	DOUBLE WALL
Additional Id:	7 REGULAR LEADED
Capacity Gallons:	10000
UST Contents:	LEADED
Other Content Info:	LEADED
Reg Status:	REMOVED
Remove Close Date:	1998-04-27 00:00:00
Year Installed:	1987-01-01 00:00:00
Pipe Type:	SINGLE WALL
Delivery System:	PRESSURE
Monitor Code:	17
UST Monitor Method:	DW TANK SW PRESSURE PIPE W/ RESTICTIVE LLD: DAILY RECONCILIATION AND INTERSTITIAL, PIPE TEST ANNUALLY

UST Name:	UNDERGROUND TANK 113261 T008
Last Update:	2012-11-02 14:17:38
Permit Number:	113261
Tank Type:	DOUBLE WALL
Additional Id:	NT2039, RT3125, RT3714
Capacity Gallons:	20000
UST Contents:	REGULAR UNLEADED
Other Content Info:	REGULAR UNLEADED
Reg Status:	ACTIVE
Remove Close Date:	Not reported
Year Installed:	1998-01-01 00:00:00
Pipe Type:	DOUBLE WALL
Delivery System:	PRESSURE
Monitor Code:	31B
UST Monitor Method:	DW TANK, DW PRESSURIZED PIPE W/ DRY TANK ANNULAR; POSITIVE SHUT-OFF & FAILSAFE, 3.0LLD; UDC W/ MECHANICAL FLOAT

UST Name:	UNDERGROUND TANK 113261 T009
Last Update:	2012-11-02 14:17:38
Permit Number:	113261
Tank Type:	DOUBLE WALL
Additional Id:	NT2039, RT3125
Capacity Gallons:	20000

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UST Contents:	MIDGRADE UNLEADED
Other Content Info:	MIDGRADE UNLEADED
Reg Status:	ACTIVE
Remove Close Date:	Not reported
Year Installed:	1998-01-01 00:00:00
Pipe Type:	DOUBLE WALL
Delivery System:	PRESSURE
Monitor Code:	31B
UST Monitor Method:	DW TANK, DW PRESSURIZED PIPE W/ DRY TANK ANNULAR; POSITIVE SHUT-OFF & FAILSAFE, 3.0LLD; UDC W/ MECHANICAL FLOAT

UST Name:	UNDERGROUND TANK 113261 T010
Last Update:	2012-11-02 14:17:38
Permit Number:	113261
Tank Type:	DOUBLE WALL
Additional Id:	NT2039, RT3125, RT3714
Capacity Gallons:	20000
UST Contents:	PREMIUM UNLEADED
Other Content Info:	PREMIUM UNLEADED
Reg Status:	ACTIVE
Remove Close Date:	Not reported
Year Installed:	1998-01-01 00:00:00
Pipe Type:	DOUBLE WALL
Delivery System:	PRESSURE
Monitor Code:	31B
UST Monitor Method:	DW TANK, DW PRESSURIZED PIPE W/ DRY TANK ANNULAR; POSITIVE SHUT-OFF & FAILSAFE, 3.0LLD; UDC W/ MECHANICAL FLOAT

UST Name:	UNDERGROUND TANK 113261 T011
Last Update:	2012-11-02 14:17:38
Permit Number:	113261
Tank Type:	DOUBLE WALL
Additional Id:	NT2039, RT3125, RT3714
Capacity Gallons:	20000
UST Contents:	DIESEL
Other Content Info:	DIESEL
Reg Status:	ACTIVE
Remove Close Date:	Not reported
Year Installed:	1998-01-01 00:00:00
Pipe Type:	DOUBLE WALL
Delivery System:	PRESSURE
Monitor Code:	31B
UST Monitor Method:	DW TANK, DW PRESSURIZED PIPE W/ DRY TANK ANNULAR; POSITIVE SHUT-OFF & FAILSAFE, 3.0LLD; UDC W/ MECHANICAL FLOAT

Name:	PALM SPRINGS OIL CO (CHEVRON)
Address:	110 S RANCHO SANTA FE RD
City,State,Zip:	SAN MARCOS, CA 92078
Permit Number:	113261
Business Type:	6HK28
EPA Id Number:	CAL000264707
APN:	219-410-19-00
Last HMMD Inspection:	03/15/2012
Facility Telephone:	760-727-3877
Permit Status:	OPEN
Permit Expiration:	04/30/2013

UNITED PACIFIC 0658 (Continued) **U003789436**

Date Last Updated:	11/02/2012
Facility Owner:	PALM SPRINGS OIL CO
Facility Mailing Address:	166 N SUNRISE WAY
Facility Mailing City:	PALM SPRINGS
Facility Mailing State:	CA
Facility Mailing Zip:	92262-
UST Owner:	PALM SPRINGS OIL CO., INC.
Handle Regulated Hazmat:	Y
Own Or Operate UST:	Y
Subject To APSA:	Not reported
Generate Haz Waste:	Not reported
Treat Haz Waste:	Not reported
Generate Medical Waste:	Not reported

Inventory Active Permits (not SQG Medical):

Permit Number:	113261
Update Date:	11/02/2012
Case Number:	68476-34-6
Name:	DIESEL
Other Information:	UNDERGROUND TANK 113261 T011
Material Waste:	Material
Hazardous Categories 1:	FIRE
Hazardous Categories 2:	Not reported

Permit Number:	113261
Update Date:	11/02/2012
Case Number:	8006-61-9
Name:	PLUS UNLEADED
Other Information:	UNDERGROUND TANK 113261 T009
Material Waste:	Material
Hazardous Categories 1:	FIRE
Hazardous Categories 2:	Not reported

Permit Number:	113261
Update Date:	11/02/2012
Case Number:	8006-61-9
Name:	REGULAR UNLEADED
Other Information:	UNDERGROUND TANK 113261 T008
Material Waste:	Material
Hazardous Categories 1:	FIRE
Hazardous Categories 2:	Not reported

Permit Number:	113261
Update Date:	11/02/2012
Case Number:	8006-61-9
Name:	SUPER UNLEADED
Other Information:	UNDERGROUND TANK 113261 T010
Material Waste:	Material
Hazardous Categories 1:	FIRE
Hazardous Categories 2:	Not reported

Permit Number:	113261
Update Date:	11/02/2012
Case Number:	Not reported
Name:	WASTE 134 AQUEOUS SOL'N W/LESS 10% ORG
Other Information:	WATER & FUEL
Material Waste:	Waste
Hazardous Categories 1:	Not reported

UNITED PACIFIC 0658 (Continued) **U003789436**

Hazardous Categories 2: Not reported

Permit Number: 113261
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 352 ORGANIC SOLIDS (OTHER)
Other Information: FUEL FILTERS & ABSORBENT
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Violations Active Permits:
Permit Number: 113261
Update Date: 11/02/2012
Inspection Date: 02/28/2008
Violation Code: 6HV3267
Violation: DISP. CONTAINMENT NOT ADEQ. MONITORED
Violation Citation: Dispenser containment not adequately monitored. 2636(f)(1) or (f)(5)(A)
Activity: ACTIVE

Permit Number: 113261
Update Date: 11/02/2012
Inspection Date: 02/15/2006
Violation Code: 6HV3411
Violation: LLD NOT INSTALLED/NOT FUNCTIONAL
Violation Citation: DOUBLE WALLED PRESSURIZED PIPING-Including Under Dispenser Containment (UDC):Line leak detector is not installed, not functional, or not tested. 2636(f)(2), 25284.1(a)(4)(C), 2641(j)
Activity: ACTIVE

Permit Number: 113261
Update Date: 11/02/2012
Inspection Date: 02/09/2010
Violation Code: 6HV3103
Violation: NO UST PLAN CHECK PERMIT OBTAINED
Violation Citation: UST repair/modify/closure permit not obtained .68.1004, 68.1005, 68.1009.5
Activity: ACTIVE

Permit Number: 113261
Update Date: 11/02/2012
Inspection Date: 02/28/2007
Violation Code: 6HV3255
Violation: SPILL CONTAIN. NOT DRY/IN GOOD CONDITION
Violation Citation: Spill container is not in good condition and/or liquid free. 2635(b)(1), 2636(a)(1)
Activity: ACTIVE

Permit Number: 113261
Update Date: 11/02/2012
Inspection Date: 02/28/2007
Violation Code: 6HV3411
Violation: LLD NOT INSTALLED/NOT FUNCTIONAL
Violation Citation: DOUBLE WALLED PRESSURIZED PIPING-Including Under Dispenser Containment (UDC):Line leak detector is not installed, not functional, or not tested. 2636(f)(2), 25284.1(a)(4)(C), 2641(j)

UNITED PACIFIC 0658 (Continued) **U003789436**

Activity: ACTIVE

Permit Number: 113261
Update Date: 11/02/2012
Inspection Date: 02/28/2007
Violation Code: 6HV3411
Violation: LLD NOT INSTALLED/NOT FUNCTIONAL
Violation Citation: DOUBLE WALLED PRESSURIZED PIPING-Including Under Dispenser Containment (UDC):Line leak detector is not installed, not functional, or not tested. 2636(f)(2), 25284.1(a)(4)(C), 2641(j)
Activity: ACTIVE

Permit Number: 113261
Update Date: 11/02/2012
Inspection Date: 02/28/2007
Violation Code: 6HV3411
Violation: LLD NOT INSTALLED/NOT FUNCTIONAL
Violation Citation: DOUBLE WALLED PRESSURIZED PIPING-Including Under Dispenser Containment (UDC):Line leak detector is not installed, not functional, or not tested. 2636(f)(2), 25284.1(a)(4)(C), 2641(j)
Activity: ACTIVE

Permit Number: 113261
Update Date: 11/02/2012
Inspection Date: 02/28/2007
Violation Code: 6HV3411
Violation: LLD NOT INSTALLED/NOT FUNCTIONAL
Violation Citation: DOUBLE WALLED PRESSURIZED PIPING-Including Under Dispenser Containment (UDC):Line leak detector is not installed, not functional, or not tested. 2636(f)(2), 25284.1(a)(4)(C), 2641(j)
Activity: ACTIVE

Permit Number: 113261
Update Date: 11/02/2012
Inspection Date: 01/07/2003
Violation Code: 6HV0132
Violation: EPA ID NUMBER NOT OBTAINED/MAINTAINED
Violation Citation: Generator of hazardous waste has not obtained/maintained an EPA identification number. CCR 66262.12(a)
Activity: ACTIVE

Permit Number: 113261
Update Date: 11/02/2012
Inspection Date: 01/07/2003
Violation Code: 6HV0135
Violation: MANIFESTS/RECEIPTS FOR 3 YEARS NOT ONSIT
Violation Citation: Hazardous waste manifests/receipts for 3 years are not maintained onsite to document proper disposal of hazardous waste. CCR 66262.40(a) & 25160.2(b)(3)
Activity: ACTIVE

Permit Number: 113261
Update Date: 11/02/2012
Inspection Date: 01/07/2003
Violation Code: 6HV3151
Violation: ALL RELEASES NOT REPORTED/RECORDED
Violation Citation: All releases not recorded and/or reported. 25294, 25295, 2650, 2651,

UNITED PACIFIC 0658 (Continued) **U003789436**

2652
Activity: ACTIVE

Permit Number: 113261
Update Date: 11/02/2012
Inspection Date: 01/07/2003
Violation Code: 6HV3263
Violation: MONITOR SYSTEM NOT ALL FUNCTIONAL
Violation Citation: Monitoring system components &/or devices are not all functional. 2630, 2641(j), 2632
Activity: ACTIVE

Permit Number: 113261
Update Date: 11/02/2012
Inspection Date: 01/27/2004
Violation Code: 6HV3105
Violation: NO CURRENT FINANCIAL RESPONSIBILITY
Violation Citation: Current evidence of financial responsibility not available. 25292.2(a), 25299.33; 2809
Activity: ACTIVE

Permit Number: 113261
Update Date: 11/02/2012
Inspection Date: 01/27/2004
Violation Code: 6HV3107
Violation: MONITORING PROCEDURES NOT AVAIL/TO HMD
Violation Citation: Monitoring procedures not available/complete/submitted to HMD 2632(b)& (d), 2634(d), 2641(h), 2711(a)(9)
Activity: ACTIVE

Permit Number: 113261
Update Date: 11/02/2012
Inspection Date: 01/27/2004
Violation Code: 6HV3108
Violation: UST ER RESPONSE PLAN NOT COMPLETE/AVAIL
Violation Citation: Emergency Response Plan is not available/complete. 25289(b); 2632(b), 2634(e), 2641(h)
Activity: ACTIVE

Permit Number: 113261
Update Date: 11/02/2012
Inspection Date: 01/27/2004
Violation Code: 6HV3109
Violation: NO SCALED PLOT PLAN AVAIL/TO HMD
Violation Citation: Scaled Plot plan showing tank, piping & equipment location not available/complete/submitted to HMD. 2711(a)(8), 2632(d)(1) (C)
Activity: ACTIVE

UST:
UST Name: UNDERGROUND TANK 113261 T001
Last Update: 2012-11-02 14:17:38
Permit Number: 113261
Tank Type: SINGLE WALL
Additional Id: 1
Capacity Gallons: 10000
UST Contents: LEADED
Other Content Info: LEADED

UNITED PACIFIC 0658 (Continued) **U003789436**

Reg Status:	REMOVED
Remove Close Date:	1987-10-29 00:00:00
Year Installed:	1979-01-01 00:00:00
Pipe Type:	LINED TRENCH
Delivery System:	PRESSURE
Monitor Code:	05
UST Monitor Method:	SW TANK DW PIPE W/ POS SHUTOFF-ALARM ON LLD W/ SIRS:SIR ANALY MONTHLY, TANK TEST BIENNIALLY, PIPE TEST ANN 0.1 G/HR OR MO 0.2 G/HR
UST Name:	UNDERGROUND TANK 113261 T002
Last Update:	2012-11-02 14:17:38
Permit Number:	113261
Tank Type:	SINGLE WALL
Additional Id:	2
Capacity Gallons:	10000
UST Contents:	REGULAR UNLEADED
Other Content Info:	REGULAR UNLEADED
Reg Status:	REMOVED
Remove Close Date:	1987-10-29 00:00:00
Year Installed:	1979-01-01 00:00:00
Pipe Type:	LINED TRENCH
Delivery System:	PRESSURE
Monitor Code:	05
UST Monitor Method:	SW TANK DW PIPE W/ POS SHUTOFF-ALARM ON LLD W/ SIRS:SIR ANALY MONTHLY, TANK TEST BIENNIALLY, PIPE TEST ANN 0.1 G/HR OR MO 0.2 G/HR
UST Name:	UNDERGROUND TANK 113261 T003
Last Update:	2012-11-02 14:17:38
Permit Number:	113261
Tank Type:	SINGLE WALL
Additional Id:	3
Capacity Gallons:	6000
UST Contents:	PREMIUM UNLEADED
Other Content Info:	PREMIUM UNLEADED
Reg Status:	REMOVED
Remove Close Date:	1987-10-29 00:00:00
Year Installed:	1979-01-01 00:00:00
Pipe Type:	LINED TRENCH
Delivery System:	PRESSURE
Monitor Code:	05
UST Monitor Method:	SW TANK DW PIPE W/ POS SHUTOFF-ALARM ON LLD W/ SIRS:SIR ANALY MONTHLY, TANK TEST BIENNIALLY, PIPE TEST ANN 0.1 G/HR OR MO 0.2 G/HR
UST Name:	UNDERGROUND TANK 113261 T004
Last Update:	2012-11-02 14:17:38
Permit Number:	113261
Tank Type:	SINGLE WALL
Additional Id:	4
Capacity Gallons:	1000
UST Contents:	Not reported
Other Content Info:	WASTE OIL
Reg Status:	REMOVED
Remove Close Date:	1987-10-29 00:00:00
Year Installed:	1979-01-01 00:00:00
Pipe Type:	Not reported
Delivery System:	Not reported
Monitor Code:	07

UNITED PACIFIC 0658 (Continued) **U003789436**

UST Monitor Method:	SW TANK SW PRESSURE PIPE W/RESTRICTIVE LLD W/DAILY RECONCILIATION OR WEEKLY GAUGING: TANK AND PIPE TEST ANNUALLY
UST Name:	UNDERGROUND TANK 113261 T005
Last Update:	2012-11-02 14:17:38
Permit Number:	113261
Tank Type:	DOUBLE WALL
Additional Id:	5 UNLEADED
Capacity Gallons:	10000
UST Contents:	REGULAR UNLEADED
Other Content Info:	REGULAR UNLEADED
Reg Status:	REMOVED
Remove Close Date:	1998-04-27 00:00:00
Year Installed:	1987-01-01 00:00:00
Pipe Type:	SINGLE WALL
Delivery System:	PRESSURE
Monitor Code:	17
UST Monitor Method:	DW TANK SW PRESSURE PIPE W/ RESTICTIVE LLD: DAILY RECONCILIATION AND INTERSTITIAL, PIPE TEST ANNUALLY
UST Name:	UNDERGROUND TANK 113261 T006
Last Update:	2012-11-02 14:17:38
Permit Number:	113261
Tank Type:	DOUBLE WALL
Additional Id:	6 UNLEADED
Capacity Gallons:	10000
UST Contents:	REGULAR UNLEADED
Other Content Info:	REGULAR UNLEADED
Reg Status:	REMOVED
Remove Close Date:	1998-04-27 00:00:00
Year Installed:	1987-01-01 00:00:00
Pipe Type:	DOUBLE WALL
Delivery System:	PRESSURE
Monitor Code:	17
UST Monitor Method:	DW TANK SW PRESSURE PIPE W/ RESTICTIVE LLD: DAILY RECONCILIATION AND INTERSTITIAL, PIPE TEST ANNUALLY
UST Name:	UNDERGROUND TANK 113261 T007
Last Update:	2012-11-02 14:17:38
Permit Number:	113261
Tank Type:	DOUBLE WALL
Additional Id:	7 REGULAR LEADED
Capacity Gallons:	10000
UST Contents:	LEADED
Other Content Info:	LEADED
Reg Status:	REMOVED
Remove Close Date:	1998-04-27 00:00:00
Year Installed:	1987-01-01 00:00:00
Pipe Type:	SINGLE WALL
Delivery System:	PRESSURE
Monitor Code:	17
UST Monitor Method:	DW TANK SW PRESSURE PIPE W/ RESTICTIVE LLD: DAILY RECONCILIATION AND INTERSTITIAL, PIPE TEST ANNUALLY
UST Name:	UNDERGROUND TANK 113261 T008
Last Update:	2012-11-02 14:17:38
Permit Number:	113261

UNITED PACIFIC 0658 (Continued) **U003789436**

Tank Type:	DOUBLE WALL
Additional Id:	NT2039, RT3125, RT3714
Capacity Gallons:	20000
UST Contents:	REGULAR UNLEADED
Other Content Info:	REGULAR UNLEADED
Reg Status:	ACTIVE
Remove Close Date:	Not reported
Year Installed:	1998-01-01 00:00:00
Pipe Type:	DOUBLE WALL
Delivery System:	PRESSURE
Monitor Code:	31B
UST Monitor Method:	DW TANK, DW PRESSURIZED PIPE W/ DRY TANK ANNULAR; POSITIVE SHUT-OFF & FAILSAFE, 3.0LLD; UDC W/ MECHANICAL FLOAT

UST Name:	UNDERGROUND TANK 113261 T009
Last Update:	2012-11-02 14:17:38
Permit Number:	113261
Tank Type:	DOUBLE WALL
Additional Id:	NT2039, RT3125
Capacity Gallons:	20000
UST Contents:	MIDGRADE UNLEADED
Other Content Info:	MIDGRADE UNLEADED
Reg Status:	ACTIVE
Remove Close Date:	Not reported
Year Installed:	1998-01-01 00:00:00
Pipe Type:	DOUBLE WALL
Delivery System:	PRESSURE
Monitor Code:	31B
UST Monitor Method:	DW TANK, DW PRESSURIZED PIPE W/ DRY TANK ANNULAR; POSITIVE SHUT-OFF & FAILSAFE, 3.0LLD; UDC W/ MECHANICAL FLOAT

UST Name:	UNDERGROUND TANK 113261 T010
Last Update:	2012-11-02 14:17:38
Permit Number:	113261
Tank Type:	DOUBLE WALL
Additional Id:	NT2039, RT3125, RT3714
Capacity Gallons:	20000
UST Contents:	PREMIUM UNLEADED
Other Content Info:	PREMIUM UNLEADED
Reg Status:	ACTIVE
Remove Close Date:	Not reported
Year Installed:	1998-01-01 00:00:00
Pipe Type:	DOUBLE WALL
Delivery System:	PRESSURE
Monitor Code:	31B
UST Monitor Method:	DW TANK, DW PRESSURIZED PIPE W/ DRY TANK ANNULAR; POSITIVE SHUT-OFF & FAILSAFE, 3.0LLD; UDC W/ MECHANICAL FLOAT

UST Name:	UNDERGROUND TANK 113261 T011
Last Update:	2012-11-02 14:17:38
Permit Number:	113261
Tank Type:	DOUBLE WALL
Additional Id:	NT2039, RT3125, RT3714
Capacity Gallons:	20000
UST Contents:	DIESEL
Other Content Info:	DIESEL
Reg Status:	ACTIVE

UNITED PACIFIC 0658 (Continued) **U003789436**

Remove Close Date: Not reported
Year Installed: 1998-01-01 00:00:00
Pipe Type: DOUBLE WALL
Delivery System: PRESSURE
Monitor Code: 31B
UST Monitor Method: DW TANK, DW PRESSURIZED PIPE W/ DRY TANK ANNULAR; POSITIVE SHUT-OFF & FAILSAFE, 3.0LLD; UDC W/ MECHANICAL FLOAT

SWEEPS UST:
Name: BILL LOWE CHEVRON FOODMART
Address: 110 S RANCHO SANTA FE RD
City: SAN MARCOS
Status: Active
Comp Number: 13261
Number: 9
Board Of Equalization: 44-022741
Referral Date: Not reported
Action Date: 06-26-92
Created Date: 02-29-88
Owner Tank Id: Not reported
SWRCB Tank Id: 37-000-013261-000005
Tank Status: A
Capacity: 10000
Active Date: Not reported
Tank Use: M.V. FUEL
STG: P
Content: REG UNLEADED
Number Of Tanks: 3

Name: BILL LOWE CHEVRON FOODMART
Address: 110 S RANCHO SANTA FE RD
City: SAN MARCOS
Status: Active
Comp Number: 13261
Number: 9
Board Of Equalization: 44-022741
Referral Date: Not reported
Action Date: 06-26-92
Created Date: 02-29-88
Owner Tank Id: Not reported
SWRCB Tank Id: 37-000-013261-000006
Tank Status: A
Capacity: 10000
Active Date: Not reported
Tank Use: M.V. FUEL
STG: P
Content: REG UNLEADED
Number Of Tanks: Not reported

Name: BILL LOWE CHEVRON FOODMART
Address: 110 S RANCHO SANTA FE RD
City: SAN MARCOS
Status: Active
Comp Number: 13261
Number: 9
Board Of Equalization: 44-022741

UNITED PACIFIC 0658 (Continued) **U003789436**

Referral Date: Not reported
Action Date: 06-26-92
Created Date: 02-29-88
Owner Tank Id: Not reported
SWRCB Tank Id: 37-000-013261-000007
Tank Status: A
Capacity: 10000
Active Date: Not reported
Tank Use: M.V. FUEL
STG: P
Content: LEADED
Number Of Tanks: Not reported

Name: BILL LOWE CHEVRON FOODMART
Address: 110 S RANCHO SANTA FE RD
City: SAN MARCOS
Status: Not reported
Comp Number: 13261
Number: Not reported
Board Of Equalization: 44-022741
Referral Date: Not reported
Action Date: Not reported
Created Date: Not reported
Owner Tank Id: Not reported
SWRCB Tank Id: 37-000-013261-000001
Tank Status: Not reported
Capacity: 10000
Active Date: Not reported
Tank Use: M.V. FUEL
STG: PRODUCT
Content: LEADED
Number Of Tanks: 4

Name: BILL LOWE CHEVRON FOODMART
Address: 110 S RANCHO SANTA FE RD
City: SAN MARCOS
Status: Not reported
Comp Number: 13261
Number: Not reported
Board Of Equalization: 44-022741
Referral Date: Not reported
Action Date: Not reported
Created Date: Not reported
Owner Tank Id: Not reported
SWRCB Tank Id: 37-000-013261-000002
Tank Status: Not reported
Capacity: 10000
Active Date: Not reported
Tank Use: M.V. FUEL
STG: PRODUCT
Content: REG UNLEADED
Number Of Tanks: Not reported

Name: BILL LOWE CHEVRON FOODMART
Address: 110 S RANCHO SANTA FE RD
City: SAN MARCOS
Status: Not reported

UNITED PACIFIC 0658 (Continued) **U003789436**

Comp Number: 13261
Number: Not reported
Board Of Equalization: 44-022741
Referral Date: Not reported
Action Date: Not reported
Created Date: Not reported
Owner Tank Id: Not reported
SWRCB Tank Id: 37-000-013261-000003
Tank Status: Not reported
Capacity: 6000
Active Date: Not reported
Tank Use: M.V. FUEL
STG: PRODUCT
Content: LEADED
Number Of Tanks: Not reported

Name: BILL LOWE CHEVRON FOODMART
Address: 110 S RANCHO SANTA FE RD
City: SAN MARCOS
Status: Not reported
Comp Number: 13261
Number: Not reported
Board Of Equalization: 44-022741
Referral Date: Not reported
Action Date: Not reported
Created Date: Not reported
Owner Tank Id: Not reported
SWRCB Tank Id: 37-000-013261-000004
Tank Status: Not reported
Capacity: 1000
Active Date: Not reported
Tank Use: PETROLEUM
STG: PRODUCT
Content: Not reported
Number Of Tanks: Not reported

CORTESE:
Name: PALM SPRINGS OIL CO (CHEVRON)
Address: 110 S RANCHO SANTA FE RD
City,State,Zip: SAN MARCOS, CA 920692502
Region: CORTESE
Envirostor Id: Not reported
Global ID: T0607303122
Site/Facility Type: LUST CLEANUP SITE
Cleanup Status: COMPLETED - CASE CLOSED
Status Date: Not reported
Site Code: Not reported
Latitude: Not reported
Longitude: Not reported
Owner: Not reported
Enf Type: Not reported
Swat R: Not reported
Flag: active
Order No: Not reported
Waste Discharge System No: Not reported
Effective Date: Not reported
Region 2: Not reported

UNITED PACIFIC 0658 (Continued) **U003789436**

WID Id: Not reported
Solid Waste Id No: Not reported
Waste Management Uit Name: Not reported
File Name: Active Open

HAZNET:
Name: GOLDEN STATE ENTERPRISES SITE #2700043
Address: 110 S RANCHO SANTA FE RD
Address 2: Not reported
City,State,Zip: SAN MARCOS, CA 913011570
Contact: LISA THOMPSON
Telephone: 8183668984
Mailing Name: Not reported
Mailing Address: 29501 CANWOOD ST STE 200

Year: 2019
Gepaid: CAL000392835
TSD EPA ID: CAT080013352
CA Waste Code: 133 - Aqueous solution with total organic residues 10 percent or more
Disposal Method: H039 - Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Tons: 1.25100

Year: 2017
Gepaid: CAL000392835
TSD EPA ID: CAD044429835
CA Waste Code: 352 - Other organic solids
Disposal Method: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons: 0.3

Year: 2017
Gepaid: CAL000392835
TSD EPA ID: CAD044429835
CA Waste Code: 134 - Aqueous solution with total organic residues less than 10 percent
Disposal Method: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons: 0.11

Year: 2016
Gepaid: CAL000392835
TSD EPA ID: CAD044429835
CA Waste Code: 512 - Other empty containers 30 gallons or more
Disposal Method: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons: 0.22935

Year: 2016
Gepaid: CAL000392835
TSD EPA ID: CAD044429835
CA Waste Code: 134 - Aqueous solution with total organic residues less than 10 percent
Disposal Method: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons: 0.231

UNITED PACIFIC 0658 (Continued) **U003789436**

Year: 2016
Gepaid: CAL000392835
TSD EPA ID: CAD044429835
CA Waste Code: 352 - Other organic solids
Disposal Method: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons: 0.085

Year: 2015
Gepaid: CAL000392835
TSD EPA ID: CAD044429835
CA Waste Code: 352 - Other organic solids
Disposal Method: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons: 0.025

Year: 2015
Gepaid: CAL000392835
TSD EPA ID: CAD982444481
CA Waste Code: 352 - Other organic solids
Disposal Method: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons: 0.05

Additional Info:
Year: 2017
Gen EPA ID: CAL000392835

Shipment Date: 20170307
Creation Date: 5/4/2018 18:31:04
Receipt Date: 20170316
Manifest ID: 010008422FLE
Trans EPA ID: MAD039322250
Trans Name: CLEAN HARBORS ENVIRONMENTAL SERVICE INC
Trans 2 EPA ID: Not reported
Trans 2 Name: Not reported
TSDF EPA ID: CAD044429835
Trans Name: CLEAN HARBORS WILMINGTON LLC
TSDF Alt EPA ID: Not reported
TSDF Alt Name: Not reported
Waste Code Description: 352 - Other organic solids
RCRA Code: Not reported
Meth Code: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons: 0.075
Waste Quantity: 150
Quantity Unit: P
Additional Code 1: Not reported
Additional Code 2: Not reported
Additional Code 3: Not reported
Additional Code 4: Not reported
Additional Code 5: Not reported

Shipment Date: 20170307
Creation Date: 5/4/2018 18:31:04
Receipt Date: 20170316

UNITED PACIFIC 0658 (Continued) **U003789436**

Manifest ID:	010008422FLE
Trans EPA ID:	MAD039322250
Trans Name:	CLEAN HARBORS ENVIRONMENTAL SERVICE INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD044429835
Trans Name:	CLEAN HARBORS WILMINGTON LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	134 - Aqueous solution with <10% total organic residues
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.11
Waste Quantity:	220
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	20170221
Creation Date:	5/4/2018 18:31:04
Receipt Date:	20170303
Manifest ID:	009985001FLE
Trans EPA ID:	MAD039322250
Trans Name:	CLEAN HARBORS ENVIRONMENTAL SERVICE INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD044429835
Trans Name:	CLEAN HARBORS WILMINGTON LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.225
Waste Quantity:	450
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Additional Info:

Year:	2016
Gen EPA ID:	CAL000392835

Shipment Date:	20151027
Creation Date:	1/11/2016 22:16:49
Receipt Date:	20151112
Manifest ID:	008740440FLE
Trans EPA ID:	MAD039322250
Trans Name:	CLEAN HARBORS ENVIRONMENTAL SERVICE INC

UNITED PACIFIC 0658 (Continued) **U003789436**

Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD044429835
Trans Name:	CLEAN HARBORS WILMINGTON LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.025
Waste Quantity:	50
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	20150216
Creation Date:	5/7/2015 22:15:07
Receipt Date:	20150218
Manifest ID:	013864468JJK
Trans EPA ID:	CAR000172460
Trans Name:	ENVIRONMENTAL LOGISTICS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD982444481
Trans Name:	FILTER RECYCLING SERVICES INC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.05
Waste Quantity:	100
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Additional Info:

Year:	2015
Gen EPA ID:	CAL000392835

Shipment Date:	20151027
Creation Date:	1/11/2016 22:16:49
Receipt Date:	20151112
Manifest ID:	008740440FLE
Trans EPA ID:	MAD039322250
Trans Name:	CLEAN HARBORS ENVIRONMENTAL SERVICE INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD044429835

UNITED PACIFIC 0658 (Continued) **U003789436**

Trans Name:	CLEAN HARBORS WILMINGTON LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.025
Waste Quantity:	50
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20150216
Creation Date:	5/7/2015 22:15:07
Receipt Date:	20150218
Manifest ID:	013864468JJK
Trans EPA ID:	CAR000172460
Trans Name:	ENVIRONMENTAL LOGISTICS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD982444481
Trans Name:	FILTER RECYCLING SERVICES INC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.05
Waste Quantity:	100
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

SAN DIEGO CO LOP:

Name:	PALM SPRINGS OIL CO (CHEVRON)
Address:	110 S RANCHO SANTA FE RD
City,State,Zip:	SAN MARCOS, CA 92069
Record ID:	DEH1988-LSAM-H13261-001
Record Status:	Completed
Opened Date:	01/08/1988
Parcel Number:	219-410-19-00
Case Type:	LOP - Local Oversight Program
Historical Name:	CHEVRON #9-3496
SWRCB Global ID:	T0607303122
Funding:	S - LOP State Fund
Lead Agency:	RWQCB
Lead Agency Date:	07/01/2015
Census Tract:	200.18
Community:	San Marcos

UNITED PACIFIC 0658 (Continued) **U003789436**

Jurisdiction:	SAN MARCOS
Watershed Basin Number:	904.32
Water Purveyor:	VALLECITOS WATER DISTRICT
Fire Agency:	SAN MARCOS FIRE PROT DIST
Latitude:	33.1488309
Longitude:	-117.1994522
X MapCoord:	6271071.679
Y MapCoord:	1999115.386

CERS:

Name:	PALM SPRINGS OIL CO (CHEVRON)
Address:	110 S RANCHO SANTA FE RD
City,State,Zip:	SAN MARCOS, CA 920692502
Site ID:	247568
CERS ID:	T0607303122
CERS Description:	Leaking Underground Storage Tank Cleanup Site

Affiliation:

Affiliation Type Desc:	Regional Board Caseworker
Entity Name:	LALITHA THOTAKURA - SAN DIEGO RWQCB (REGION 9)
Entity Title:	Not reported
Affiliation Address:	2375 NORTHSIDE DRIVE, SUITE 100
Affiliation City:	SAN DIEGO
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	6195213002

HWTS:

Name:	GOLDEN STATE ENTERPRISES SITE #2700043
Address:	110 S RANCHO SANTA FE RD
Address 2:	Not reported
City,State,Zip:	SAN MARCOS, CA 920782502
EPA ID:	CAL000392835
Inactive Date:	06/30/2020
Create Date:	01/15/2014
Last Act Date:	07/23/2020
Mailing Name:	Not reported
Mailing Address:	29501 CANWOOD ST STE 200
Mailing Address 2:	Not reported
Mailing City,State,Zip:	AGOURA HILLS, CA 913011570
Owner Name:	GOLDEN STATE ENTERPRISES
Owner Address:	29501 CANWOOD ST STE 200
Owner Address 2:	Not reported
Owner City,State,Zip:	AGOURA HILLS, CA 913010000
Contact Name:	LISA THOMPSON
Contact Address:	29501 CANWOOD ST STE 200
Contact Address 2:	Not reported
City,State,Zip:	AGOURA HILLS, CA 91301

NAICS:

EPA ID:	CAL000392835
Create Date:	2014-01-15 10:22:21.677
NAICS Code:	44719
NAICS Description:	Other Gasoline Stations
Issued EPA ID Date:	2014-01-15 10:22:21.67700

UNITED PACIFIC 0658 (Continued) **U003789436**

Inactive Date:	2020-06-30 00:00:00
Facility Name:	GOLDEN STATE ENTERPRISES SITE #2700043
Facility Address:	110 S RANCHO SANTA FE RD
Facility Address 2:	Not reported
Facility City:	SAN MARCOS
Facility County:	Not reported
Facility State:	CA
Facility Zip:	920782502

91
SSW
1/2-1
0.581 mi.
3070 ft.

MASHBURN SANITATION CO. **SWF/LF** **S100233159**
224 LAS POSAS ROAD **Notify 65** **N/A**
SAN MARCOS, CA

Relative:
Lower

Actual:
544 ft.

SAN DIEGO CO. LF:

Name:	EDCO WASTE & RECYCLING
Address:	224 S. LAS POSAS ROAD
City,State,Zip:	SAN MARCOS, CA
Facility Status:	ACTIVE SITES
Operational Status:	ACTIVE
Region:	SAN DIEGO
SWIS Number:	37-AA-0969
Owner Name:	FEDERAL BOULEVARD PROPERTIES
Operator:	MR. STEVE SOUTH
Facility Type:	LIMITED VOLUME TRANSFER OPERATIONS/ ENGINEERED FILL
Facility Type2:	TRANSFER OPERATION
PERMTIER:	EA NOTIFICATION
Inspection Frequency:	QUARTERLY

NOTIFY 65:

Name:	MASHBURN SANITATION CO.
Address:	224 LAS POSAS ROAD
City,State,Zip:	SAN MARCOS, CA
Date Reported:	Not reported
Staff Initials:	Not reported
Board File Number:	Not reported
Facility Type:	Not reported
Discharge Date:	Not reported
Issue Date:	Not reported
Incident Description:	Not reported
Global ID:	Not reported
Status:	Not reported

92
NW
1/2-1
0.723 mi.
3817 ft.

RANCHO SANTA LUNA SCHOOL **ENVIROSTOR** **S118756845**
SANTA LUNA HILLS **SCH** **N/A**
SAN MARCOS, CA 92069

Relative:
Higher

Actual:
606 ft.

ENVIROSTOR:

Name:	RANCHO SANTA LUNA SCHOOL
Address:	SANTA LUNA HILLS
City,State,Zip:	SAN MARCOS, CA 92069
Facility ID:	37010030

RANCHO SANTA LUNA SCHOOL (Continued) **S118756845**

Status: No Action Required
Status Date: 05/25/2002
Site Code: 404349
Site Type: School Investigation
Site Type Detailed: School
Acres: 16
NPL: NO
Regulatory Agencies: DTSC
Lead Agency: DTSC
Program Manager: Angela Garcia
Supervisor: Shahir Haddad
Division Branch: Southern California Schools & Brownfields Outreach
Assembly: 75
Senate: 38
Special Program: Not reported
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: School District
Latitude: 33.1601
Longitude: -117.1977
APN: NONE SPECIFIED
Past Use: AGRICULTURAL - ROW CROPS
Potential COC: NONE SPECIFIED No Contaminants found
Confirmed COC: NONE SPECIFIED
Potential Description: NMA
Alias Name: RANCHO SANTA LUNA SCHOOL
Alias Type: Alternate Name
Alias Name: SAN MARCOS UNIFIED SCHOOL DISTRICT
Alias Type: Alternate Name
Alias Name: SAN MARCOS USD-RANCHO SANTALINA SCL SITE
Alias Type: Alternate Name
Alias Name: 404349
Alias Type: Project Code (Site Code)
Alias Name: 37010030
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Phase 1
Completed Date: 05/29/2002
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Cost Recovery Closeout Memo
Completed Date: 06/25/2002
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Inspections/Visit (Non LUR)
Completed Date: 05/23/2002
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported

RANCHO SANTA LUNA SCHOOL (Continued) **S118756845**

Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

SCH:

Name: RANCHO SANTA LUNA SCHOOL
Address: SANTA LUNA HILLS
City,State,Zip: SAN MARCOS, CA 92069
Facility ID: 37010030
Site Type: School Investigation
Site Type Detail: School
Site Mgmt. Req.: NONE SPECIFIED
Acres: 16
National Priorities List: NO
Cleanup Oversight Agencies: DTSC
Lead Agency: DTSC
Lead Agency Description: * DTSC
Project Manager: Angela Garcia
Supervisor: Shahir Haddad
Division Branch: Southern California Schools & Brownfields Outreach
Site Code: 404349
Assembly: 75
Senate: 38
Special Program Status: Not reported
Status: No Action Required
Status Date: 05/25/2002
Restricted Use: NO
Funding: School District
Latitude: 33.1601
Longitude: -117.1977
APN: NONE SPECIFIED
Past Use: AGRICULTURAL - ROW CROPS
Potential COC: NONE SPECIFIED, No Contaminants found
Confirmed COC: NONE SPECIFIED
Potential Description: NMA
Alias Name: RANCHO SANTA LUNA SCHOOL
Alias Type: Alternate Name
Alias Name: SAN MARCOS UNIFIED SCHOOL DISTRICT
Alias Type: Alternate Name
Alias Name: SAN MARCOS USD-RANCHO SANTALINA SCL SITE
Alias Type: Alternate Name
Alias Name: 404349
Alias Type: Project Code (Site Code)
Alias Name: 37010030
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Phase 1
Completed Date: 05/29/2002
Comments: Not reported

RANCHO SANTA LUNA SCHOOL (Continued) **S118756845**

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Cost Recovery Closeout Memo
Completed Date:	06/25/2002
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Site Inspections/Visit (Non LUR)
Completed Date:	05/23/2002
Comments:	Not reported
Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

93
SSE
1/2-1
0.724 mi.
3821 ft.

Relative:
Lower

Actual:
544 ft.

HUES METAL FINISHING INC
977 LINDA VISTA DR
SAN MARCOS, CA 92078

ENVIROSTOR **1001613135**
San Diego Co. HMMD **N/A**
CERS HAZ WASTE
EMI
CERS
HWTS

ENVIROSTOR:

Name:	HUES METAL FINISHING, INC.
Address:	977 LINDA VISTA DRIVE
City,State,Zip:	SAN MARCOS, CA 92069
Facility ID:	71002362
Status:	Inactive - Needs Evaluation
Status Date:	Not reported
Site Code:	Not reported
Site Type:	Tiered Permit
Site Type Detailed:	Tiered Permit
Acres:	Not reported
NPL:	NO
Regulatory Agencies:	NONE SPECIFIED
Lead Agency:	NONE SPECIFIED
Program Manager:	Not reported
Supervisor:	Not reported
Division Branch:	Cleanup Cypress
Assembly:	75
Senate:	38
Special Program:	Not reported
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	Not reported
Latitude:	33.13897
Longitude:	-117.1856
APN:	NONE SPECIFIED
Past Use:	NONE SPECIFIED
Potential COC:	NONE SPECIFIED
Confirmed COC:	NONE SPECIFIED

HUES METAL FINISHING INC (Continued) **1001613135**

Potential Description: NONE SPECIFIED
Alias Name: CAD039769583
Alias Type: EPA Identification Number
Alias Name: 71002362
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: Not reported
Completed Sub Area Name: Not reported
Completed Document Type: Not reported
Completed Date: Not reported
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

HMMD SAN DIEGO:
Name: HUES METAL FINISHING, INC
Address: 977 LINDA VISTA DR
City,State,Zip: SAN MARCOS, CA 92078
Permit Number: 108597
Business Type: 6HK50
EPA Id Number: CAD039769583
APN: 219-331-08-00
Last HMMD Inspection: 07/18/2012
Facility Telephone: 760-744-5566
Permit Status: OPEN
Permit Expiration: 04/30/2013
Date Last Updated: 11/02/2012
Facility Owner: HUES METAL FINISHING, INC.
Facility Mailing Address: 977 LINDA VISTA DR
Facility Mailing City: SAN MARCOS
Facility Mailing State: CA
Facility Mailing Zip: 92078
UST Owner: Not reported
Handle Regulated Hazmat: Y
Own Or Operate UST: Not reported
Subject To APSA: Not reported
Generate Haz Waste: Y
Treat Haz Waste: Y
Generate Medical Waste: Not reported

Inventory Active Permits (not SQG Medical):
Permit Number: 108597
Update Date: 11/02/2012
Case Number: 71-36-3
Name: ACRYLIC ENAMEL W/BUTYL ALCOHOL
Other Information: WATER BASED
Material Waste: Material
Hazardous Categories 1: ACUTE
Hazardous Categories 2: Not reported

HUES METAL FINISHING INC (Continued) **1001613135**

Permit Number:	108597
Update Date:	11/02/2012
Case Number:	7738-94-5
Name:	ALCHROME #2B CLEAR CHEM FILM-4LBS
Other Information:	IN 350GALS H20-PROCESS TNKESS TANK
Material Waste:	Material
Hazardous Categories 1:	ACUTE
Hazardous Categories 2:	CHRONIC

Permit Number:	108597
Update Date:	11/02/2012
Case Number:	1333-82-0
Name:	B W/5% SOLUBLE CHROMIUM ALCHROME
Other Information:	Not reported
Material Waste:	Material
Hazardous Categories 1:	ACUTE
Hazardous Categories 2:	CHRONIC

Permit Number:	108597
Update Date:	11/02/2012
Case Number:	Not reported
Name:	CARCINOGENS &/OR REPRODUCTIVE TOXINS
Other Information:	BELOW STATE DISCLOSURE AMTS ARE/MAY BE ON SITE
Material Waste:	Not reported
Hazardous Categories 1:	Not reported
Hazardous Categories 2:	Not reported

Permit Number:	108597
Update Date:	11/02/2012
Case Number:	78-93-3
Name:	HIGH SOLIDS POLYURETHANE
Other Information:	FLAMMABLE LIQUID, W/MEK E & POLYURETHAN
Material Waste:	Material
Hazardous Categories 1:	FIRE
Hazardous Categories 2:	ACUTE

Permit Number:	108597
Update Date:	11/02/2012
Case Number:	7664-38-2
Name:	PHOSPHORIC ACID 2%: ALUMA
Other Information:	PREP 3 AN ACID (ETHC)
Material Waste:	Material
Hazardous Categories 1:	ACUTE
Hazardous Categories 2:	EXTREMELY HAZARDOUS

Permit Number:	108597
Update Date:	11/02/2012
Case Number:	74-98-6
Name:	PROPANE (TWO 500 GAL TANKS)
Other Information:	Not reported
Material Waste:	Material
Hazardous Categories 1:	FIRE
Hazardous Categories 2:	Not reported

Permit Number:	108597
Update Date:	11/02/2012
Case Number:	Not reported

HUES METAL FINISHING INC (Continued) **1001613135**

Name: WASTE 132 AQUEOUS SOL'N WITH METALS
Other Information: HEXAVALENT CHROMIUM RINSATE
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Permit Number: 108597
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 171 METAL SLUDGE
Other Information: CHROME SLUDGE, HW DEBRIS
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Permit Number: 108597
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 252 STILL BOTTOM WASTE (OTHER)
Other Information: PAINT STILL BOTTOMS
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Violations Active Permits:
Permit Number: 108597
Update Date: 11/02/2012
Inspection Date: 08/09/2007
Violation Code: 6HV0226
Violation: HW NOT ACCUMULATED IN TANK/CONTAINER
Violation Citation: Did not accumulate waste in container or tank. 66262.34 (d)(2)
Activity: ACTIVE

Permit Number: 108597
Update Date: 11/02/2012
Inspection Date: 08/09/2007
Violation Code: 6HV0234
Violation: FACILITY NOT OPERATED TO MINIM. RELEASE
Violation Citation: Did not maintain &/or operate facility to prevent release or fire. CFR 265.31
Activity: ACTIVE

Permit Number: 108597
Update Date: 11/02/2012
Inspection Date: 08/09/2007
Violation Code: 6HV1711
Violation: INADEQ./NO ONSITE UNIT INSPECTION SCHED.
Violation Citation: Inadequate or no onsite written inspection schedule for containers, tanks, & equipment (must include inspections for safety equipment, emergency & security devices, specify problems checked for, and frequency of inspections). {For containers-CE: 25201.5(d)(4)&(5); CEL: 25201.14(c)(1); CA: 25200.3(c)(5); PBR: 67450.3(c)(8)(B) & 67450.3(c)(9)(A) & (D); 66265.15} (For tanks, also 66265.195)
Activity: ACTIVE

Permit Number: 108597
Update Date: 11/02/2012

HUES METAL FINISHING INC (Continued) **1001613135**

Inspection Date:	08/09/2007
Violation Code:	6HV1712
Violation:	INADEQ./NO RECORDS OF UNIT INSPECTIONS
Violation Citation:	Inadequate or no onsite records/logs of inspections conducted (must include dates, times, name of inspector, observations, and specifics of any needed repairs or corrective actions). (3 years for CE and PBR units, 5 years for CA). {CE: 25201.5(d)(4)&(5), 25201.14(c)(1); CA: 25200.3(c)(5)&(7); PBR: 67450.3(c)(8) & (9)(A) & (D), 66265.73(a)&(b)(1); 66265.15(b) & (d)}
Activity:	ACTIVE
Permit Number:	108597
Update Date:	11/02/2012
Inspection Date:	08/09/2007
Violation Code:	6HV1716
Violation:	INADEQ/NO WRITTEN UNIT OPERATING INSTR.
Violation Citation:	Inadequate or no written operating instructions for treatment unit (must include for every unit: how to operate unit, how to perform waste treatment, and how to manage residuals AND records of the dates, volumes, and types of wastes treated). Records must be kept 3 years for CE; 5 years for CA; or until closure for PBR unit. {CE: 25201.5(d)(3)&(5); CEL: 25201.14(c)(1); CA: 25200.3(c)(6) & (7); PBR: 67450.3(c)(9)(D) and 66265.73(a) & (b)(1)}
Activity:	ACTIVE
Permit Number:	108597
Update Date:	11/02/2012
Inspection Date:	08/09/2007
Violation Code:	6HV1744
Violation:	PHASE I ASSESSMENT NOT DONE/INADEQ.
Violation Citation:	Phase I site assessment checklist not completed & filed (with DTSC) within one year of being authorized to operate unit. {CA: 25200.3(c)(3); PBR: 67450.7(a)(3); 25200.14(b)(1)}
Activity:	ACTIVE
Permit Number:	108597
Update Date:	11/02/2012
Inspection Date:	08/09/2007
Violation Code:	6HV1751
Violation:	PBR NOTIFICATION NOT FILED/RENEWED
Violation Citation:	PBR notification not renewed/filed annually (due by January 1) or sooner {if significant change(s) occurred}. {67450.3(c)(1) & (c)(2)}
Activity:	ACTIVE
Permit Number:	108597
Update Date:	11/02/2012
Inspection Date:	08/09/2007
Violation Code:	6HV1756
Violation:	WRITTEN ANALYSIS PLAN INADEQUATE/ABSENT
Violation Citation:	Written waste analysis plan does not exist or is inadequate in specifying parameters of analysis, testing methods, frequency of analysis and sampling methods used to obtain representative samples. {66265.13(b) & 67450.3(c)(9)(A)}
Activity:	ACTIVE
Permit Number:	108597
Update Date:	11/02/2012

HUES METAL FINISHING INC (Continued) **1001613135**

Inspection Date:	07/18/2012
Violation Code:	6HV0225
Violation:	ACCUMULATED HW>180 OR >270 DAYS
Violation Citation:	Accumulated waste too long (>180 or 270 days). 66262.34(d), CFR 262.34(e)&(f), &/or 25201(a) [>90 days for AHW waste]
Activity:	ACTIVE
Permit Number:	108597
Update Date:	11/02/2012
Inspection Date:	07/18/2012
Violation Code:	6HV0227
Violation:	HAZWASTE TANK/CONTAINER W/O LABEL/DATE
Violation Citation:	Failed to properly label/date hazardous waste container &/or tank. 66262.34(f)
Activity:	ACTIVE
Permit Number:	108597
Update Date:	11/02/2012
Inspection Date:	07/18/2012
Violation Code:	6HV1008
Violation:	NO ANNUAL CARC/REPRO TOXIN LIST TO HMD
Violation Citation:	Annual carcinogen and reproductive toxin list not submitted to HMD. 68.1113(c)
Activity:	ACTIVE
Permit Number:	108597
Update Date:	11/02/2012
Inspection Date:	07/18/2012
Violation Code:	6HV1716
Violation:	INADEQ/NO WRITTEN UNIT OPERATING INSTR.
Violation Citation:	Inadequate or no written operating instructions for treatment unit (must include for every unit: how to operate unit, how to perform waste treatment, and how to manage residuals AND records of the dates, volumes, and types of wastes treated). Records must be kept 3 years for CE; 5 years for CA; or until closure for PBR unit. {CE: 25201.5(d)(3)&(5); CEL: 25201.14(c)(1); CA: 25200.3(c)(6) & (7); PBR: 67450.3(c)(9)(D) and 66265.73(a) & (b)(1)}
Activity:	ACTIVE
Permit Number:	108597
Update Date:	11/02/2012
Inspection Date:	07/18/2012
Violation Code:	6HV1746
Violation:	NO FIN. ASSUR OR NOT UPDATED/ADEQUATE
Violation Citation:	Financial assurance not obtained, not updated annually or inadequate for sum of closure cost estimates using appropriate mechanism (i.e. trust fund, surety bond, insurance, self-certification) showing each unit's estimated closure costs. {67450.13; 66265.143} Requires submittal of UPC form, "Certification of Financial Assurance per 67450.13(b)"
Activity:	ACTIVE
Permit Number:	108597
Update Date:	11/02/2012
Inspection Date:	07/13/2010
Violation Code:	6HV0224
Violation:	MISMANAGED EMPTY CONTAINERS >5GALS.

HUES METAL FINISHING INC (Continued) **1001613135**

Violation Citation:	Failed to mark date on empty container larger than 5 gallons and/or manage it within one year. 66261.7(e) & (f).
Activity:	ACTIVE
Permit Number:	108597
Update Date:	11/02/2012
Inspection Date:	07/13/2010
Violation Code:	6HV0227
Violation:	HAZWASTE TANK/CONTAINER W/O LABEL/DATE
Violation Citation:	Failed to properly label/date hazardous waste container &/or tank. 66262.34(f)
Activity:	ACTIVE
Permit Number:	108597
Update Date:	11/02/2012
Inspection Date:	07/13/2010
Violation Code:	6HV0222
Violation:	DID NOT PROPERLY LABEL ERM
Violation Citation:	Failed to properly label ERM. 25143.9(a)
Activity:	ACTIVE
Permit Number:	108597
Update Date:	11/02/2012
Inspection Date:	07/13/2010
Violation Code:	6HV0407
Violation:	EMPLOYEE TRAINING NOT ADEQUATE
Violation Citation:	Employee training program for small quantity generator of hazardous waste is inadequate. CFR 262.34(d)(5)(iii)
Activity:	ACTIVE
Permit Number:	108597
Update Date:	11/02/2012
Inspection Date:	07/13/2010
Violation Code:	6HV1008
Violation:	NO ANNUAL CARC/REPRO TOXIN LIST TO HMD
Violation Citation:	Annual carcinogen and reproductive toxin list not submitted to HMD. 68.1113(c)
Activity:	ACTIVE
Permit Number:	108597
Update Date:	11/02/2012
Inspection Date:	07/13/2010
Violation Code:	6HV0234
Violation:	FACILITY NOT OPERATED TO MINIM. RELEASE
Violation Citation:	Did not maintain &/or operate facility to prevent release or fire. CFR 265.31
Activity:	ACTIVE
Permit Number:	108597
Update Date:	11/02/2012
Inspection Date:	07/13/2010
Violation Code:	6HV1712
Violation:	INADEQ./NO RECORDS OF UNIT INSPECTIONS
Violation Citation:	Inadequate or no onsite records/logs of inspections conducted (must include dates, times, name of inspector, observations, and specifics of any needed repairs or corrective actions). (3 years for CE and PBR units, 5 years for CA). {CE: 25201.5(d)(4)&(5), 25201.14(c)(1); CA:

HUES METAL FINISHING INC (Continued) **1001613135**

25200.3(c)(5)&(7); PBR: 67450.3(c)(8) & (9)(A) & (D), 66265.73(a)&(b)(1); 66265.15(b) & (d)}
Activity: ACTIVE

Permit Number: 108597
Update Date: 11/02/2012
Inspection Date: 07/13/2010
Violation Code: 6HV1741
Violation: SECONDARY CONTAINMENT INADEQ/ABSENT
Violation Citation: Proper secondary containment is not provided or is not: compatible with stored waste, free of cracks & leaks, protecting containers from contact with accumulated liquid, capable of containing a 24 hour/25 year storm precipitation plus 10% volume of all containers, or 100% largest container volume, whichever is greater. {Containers: 66264.175(a)&(b) for CA: 25200.3(c)(4) for PBR: 67450.3(c)(9)} {Tank systems: 66265.193 and .194}
Activity: ACTIVE

Permit Number: 108597
Update Date: 11/02/2012
Inspection Date: 07/13/2010
Violation Code: 6HV1756
Violation: WRITTEN ANALYSIS PLAN INADEQUATE/ABSENT
Violation Citation: Written waste analysis plan does not exist or is inadequate in specifying parameters of analysis, testing methods, frequency of analysis and sampling methods used to obtain representative samples. {66265.13(b) & 67450.3(c)(9)(A)}
Activity: ACTIVE

Permit Number: 108597
Update Date: 11/02/2012
Inspection Date: 10/27/2008
Violation Code: 6HV0227
Violation: HAZWASTE TANK/CONTAINER W/O LABEL/DATE
Violation Citation: Failed to properly label/date hazardous waste container &/or tank. 66262.34(f)
Activity: ACTIVE

Permit Number: 108597
Update Date: 11/02/2012
Inspection Date: 10/27/2008
Violation Code: 6HV0224
Violation: MISMANAGED EMPTY CONTAINERS >5GALS.
Violation Citation: Failed to mark date on empty container larger than 5 gallons and/or manage it within one year. 66261.7(e) & (f).
Activity: ACTIVE

Permit Number: 108597
Update Date: 11/02/2012
Inspection Date: 10/27/2008
Violation Code: 6HV1005
Violation: HMBP: NO ER CONTACTS LISTED OR CURRENT
Violation Citation: Business Plan does not list the name and 24 hour phone numbers of Emergency Contact persons or contact is not current. HSC 25509(a)(7)
Activity: ACTIVE

Permit Number: 108597

HUES METAL FINISHING INC (Continued) **1001613135**

Update Date:	11/02/2012
Inspection Date:	04/14/2003
Violation Code:	6HV1501
Violation:	NOT ALL UNITS IN TP NOTIFICATION
Violation Citation:	TIERED PERMITTING: FACILITY WIDE-Not all units under PBR, CA, and CE are properly indicated on Form DTSC 1772. (Add any new units with unit sheets or correct tier on the unit sheet.)
Activity:	ACTIVE
Permit Number:	108597
Update Date:	11/02/2012
Inspection Date:	04/14/2003
Violation Code:	6HV1552
Violation:	TP UNIT:WRONG # TANKS/CONTAINERS
Violation Citation:	TIERED PERMITTING-ALL UNITS:The unit notification information is not accurate as to the number of tank(s) or container(s).
Activity:	ACTIVE
Permit Number:	108597
Update Date:	11/02/2012
Inspection Date:	04/17/2003
Violation Code:	6HV0402
Violation:	TRAINING PROGRAM NOT ADEQUATE
Violation Citation:	Personnel training is not adequate to ensure compliance with hazardous waste regulations. CCR 66265.16(a)&(b)
Activity:	ACTIVE
Permit Number:	108597
Update Date:	11/02/2012
Inspection Date:	04/17/2003
Violation Code:	6HV0143
Violation:	TP NOTIFICATION INCOMPLETE/INCORRECT
Violation Citation:	TIERED PERMITTING: TP Notification has incomplete or incorrect information. 25201
Activity:	ACTIVE
Permit Number:	108597
Update Date:	11/02/2012
Inspection Date:	06/10/2004
Violation Code:	6HV0402
Violation:	TRAINING PROGRAM NOT ADEQUATE
Violation Citation:	Personnel training is not adequate to ensure compliance with hazardous waste regulations. CCR 66265.16(a)&(b)
Activity:	ACTIVE

Name:	HUES METAL FINISHING, INC
Address:	977 LINDA VISTA DR
City,State,Zip:	SAN MARCOS, CA 92078
Permit Number:	108597
Business Type:	6HK50
EPA Id Number:	CAD039769583
APN:	219-331-08-00
Last HMMD Inspection:	07/18/2012
Facility Telephone:	760-744-5566
Permit Status:	OPEN
Permit Expiration:	04/30/2013

HUES METAL FINISHING INC (Continued) **1001613135**

Date Last Updated:	11/02/2012
Facility Owner:	HUES METAL FINISHING, INC.
Facility Mailing Address:	977 LINDA VISTA DR
Facility Mailing City:	SAN MARCOS
Facility Mailing State:	CA
Facility Mailing Zip:	92078
UST Owner:	Not reported
Handle Regulated Hazmat:	Y
Own Or Operate UST:	Not reported
Subject To APSA:	Not reported
Generate Haz Waste:	Y
Treat Haz Waste:	Y
Generate Medical Waste:	Not reported

Inventory Active Permits (not SQG Medical):

Permit Number:	108597
Update Date:	11/02/2012
Case Number:	71-36-3
Name:	ACRYLIC ENAMEL W/BUTYL ALCOHOL
Other Information:	WATER BASED
Material Waste:	Material
Hazardous Categories 1:	ACUTE
Hazardous Categories 2:	Not reported

Permit Number:	108597
Update Date:	11/02/2012
Case Number:	7738-94-5
Name:	ALCHROME #2B CLEAR CHEM FILM-4LBS
Other Information:	IN 350GALS H20-PROCESS TNKESS TANK
Material Waste:	Material
Hazardous Categories 1:	ACUTE
Hazardous Categories 2:	CHRONIC

Permit Number:	108597
Update Date:	11/02/2012
Case Number:	1333-82-0
Name:	B W/5% SOLUBLE CHROMIUM ALCHROME
Other Information:	Not reported
Material Waste:	Material
Hazardous Categories 1:	ACUTE
Hazardous Categories 2:	CHRONIC

Permit Number:	108597
Update Date:	11/02/2012
Case Number:	Not reported
Name:	CARCINOGENS &/OR REPRODUCTIVE TOXINS
Other Information:	BELOW STATE DISCLOSURE AMTS ARE/MAY BE ON SITE
Material Waste:	Not reported
Hazardous Categories 1:	Not reported
Hazardous Categories 2:	Not reported

Permit Number:	108597
Update Date:	11/02/2012
Case Number:	78-93-3
Name:	HIGH SOLIDS POLYURETHANE
Other Information:	FLAMMABLE LIQUID, W/MEK E & POLYURETHAN
Material Waste:	Material
Hazardous Categories 1:	FIRE

HUES METAL FINISHING INC (Continued) **1001613135**

Hazardous Categories 2: ACUTE

Permit Number: 108597
Update Date: 11/02/2012
Case Number: 7664-38-2
Name: PHOSPHORIC ACID 2%: ALUMA
Other Information: PREP 3 AN ACID (ETHC)
Material Waste: Material
Hazardous Categories 1: ACUTE
Hazardous Categories 2: EXTREMELY HAZARDOUS

Permit Number: 108597
Update Date: 11/02/2012
Case Number: 74-98-6
Name: PROPANE (TWO 500 GAL TANKS)
Other Information: Not reported
Material Waste: Material
Hazardous Categories 1: FIRE
Hazardous Categories 2: Not reported

Permit Number: 108597
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 132 AQUEOUS SOL'N WITH METALS
Other Information: HEXAVALENT CHROMIUM RINSATE
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Permit Number: 108597
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 171 METAL SLUDGE
Other Information: CHROME SLUDGE, HW DEBRIS
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Permit Number: 108597
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 252 STILL BOTTOM WASTE (OTHER)
Other Information: PAINT STILL BOTTOMS
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Violations Active Permits:
Permit Number: 108597
Update Date: 11/02/2012
Inspection Date: 08/09/2007
Violation Code: 6HV0226
Violation: HW NOT ACCUMULATED IN TANK/CONTAINER
Violation Citation: Did not accumulate waste in container or tank. 66262.34 (d)(2)
Activity: ACTIVE

Permit Number: 108597

HUES METAL FINISHING INC (Continued) **1001613135**

Update Date:	11/02/2012
Inspection Date:	08/09/2007
Violation Code:	6HV0234
Violation:	FACILITY NOT OPERATED TO MINIM. RELEASE
Violation Citation:	Did not maintain &/or operate facility to prevent release or fire. CFR 265.31
Activity:	ACTIVE
Permit Number:	108597
Update Date:	11/02/2012
Inspection Date:	08/09/2007
Violation Code:	6HV1711
Violation:	INADEQ./NO ONSITE UNIT INSPECTION SCHED.
Violation Citation:	Inadequate or no onsite written inspection schedule for containers, tanks, & equipment (must include inspections for safety equipment, emergency & security devices, specify problems checked for, and frequency of inspections). {For containers-CE: 25201.5(d)(4)&(5); CEL: 25201.14(c)(1); CA: 25200.3(c)(5); PBR: 67450.3(c)(8)(B) & 67450.3(c)(9)(A) & (D); 66265.15} (For tanks, also 66265.195)
Activity:	ACTIVE
Permit Number:	108597
Update Date:	11/02/2012
Inspection Date:	08/09/2007
Violation Code:	6HV1712
Violation:	INADEQ./NO RECORDS OF UNIT INSPECTIONS
Violation Citation:	Inadequate or no onsite records/logs of inspections conducted (must include dates, times, name of inspector, observations, and specifics of any needed repairs or corrective actions). (3 years for CE and PBR units, 5 years for CA). {CE: 25201.5(d)(4)&(5), 25201.14(c)(1); CA: 25200.3(c)(5)&(7); PBR: 67450.3(c)(8) & (9)(A) & (D), 66265.73(a)&(b)(1); 66265.15(b) & (d)}
Activity:	ACTIVE
Permit Number:	108597
Update Date:	11/02/2012
Inspection Date:	08/09/2007
Violation Code:	6HV1716
Violation:	INADEQ/NO WRITTEN UNIT OPERATING INSTR.
Violation Citation:	Inadequate or no written operating instructions for treatment unit (must include for every unit: how to operate unit, how to perform waste treatment, and how to manage residuals AND records of the dates, volumes, and types of wastes treated). Records must be kept 3 years for CE; 5 years for CA; or until closure for PBR unit. {CE: 25201.5(d)(3)&(5); CEL: 25201.14(c)(1); CA: 25200.3(c)(6) & (7); PBR: 67450.3(c)(9)(D) and 66265.73(a) & (b)(1)}
Activity:	ACTIVE
Permit Number:	108597
Update Date:	11/02/2012
Inspection Date:	08/09/2007
Violation Code:	6HV1744
Violation:	PHASE I ASSESSMENT NOT DONE/INADEQ.
Violation Citation:	Phase I site assessment checklist not completed & filed (with DTSC) within one year of being authorized to operate unit. {CA: 25200.3(c)(3); PBR: 67450.7(a)(3); 25200.14(b)(1)}
Activity:	ACTIVE

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Permit Number:	108597
Update Date:	11/02/2012
Inspection Date:	08/09/2007
Violation Code:	6HV1751
Violation:	PBR NOTIFICATION NOT FILED/RENEWED
Violation Citation:	PBR notification not renewed/filed annually (due by January 1) or sooner {if significant change(s) occurred}. {67450.3(c)(1) & (c)(2)}
Activity:	ACTIVE
Permit Number:	108597
Update Date:	11/02/2012
Inspection Date:	08/09/2007
Violation Code:	6HV1756
Violation:	WRITTEN ANALYSIS PLAN INADEQUATE/ABSENT
Violation Citation:	Written waste analysis plan does not exist or is inadequate in specifying parameters of analysis, testing methods, frequency of analysis and sampling methods used to obtain representative samples. {66265.13(b) & 67450.3(c)(9)(A)}
Activity:	ACTIVE
Permit Number:	108597
Update Date:	11/02/2012
Inspection Date:	07/18/2012
Violation Code:	6HV0225
Violation:	ACCUMULATED HW>180 OR >270 DAYS
Violation Citation:	Accumulated waste too long (>180 or 270 days). 66262.34(d), CFR 262.34(e)&(f), &/or 25201(a) [>90 days for AHW waste]
Activity:	ACTIVE
Permit Number:	108597
Update Date:	11/02/2012
Inspection Date:	07/18/2012
Violation Code:	6HV0227
Violation:	HAZWASTE TANK/CONTAINER W/O LABEL/DATE
Violation Citation:	Failed to properly label/date hazardous waste container &/or tank. 66262.34(f)
Activity:	ACTIVE
Permit Number:	108597
Update Date:	11/02/2012
Inspection Date:	07/18/2012
Violation Code:	6HV1008
Violation:	NO ANNUAL CARC/REPRO TOXIN LIST TO HMD
Violation Citation:	Annual carcinogen and reproductive toxin list not submitted to HMD. 68.1113(c)
Activity:	ACTIVE
Permit Number:	108597
Update Date:	11/02/2012
Inspection Date:	07/18/2012
Violation Code:	6HV1716
Violation:	INADEQ/NO WRITTEN UNIT OPERATING INSTR.
Violation Citation:	Inadequate or no written operating instructions for treatment unit (must include for every unit: how to operate unit, how to perform waste treatment, and how to manage residuals AND records of the dates, volumes, and types of wastes treated). Records must be kept 3 years for CE; 5 years for CA; or until closure for PBR unit. {CE:

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25201.5(d)(3)&(5); CEL: 25201.14(c)(1); CA: 25200.3(c)(6) & (7); PBR: 67450.3(c)(9)(D) and 66265.73(a) & (b)(1)}
Activity: ACTIVE

Permit Number: 108597
Update Date: 11/02/2012
Inspection Date: 07/18/2012
Violation Code: 6HV1746
Violation: NO FIN. ASSUR OR NOT UPDATED/ADEQUATE
Violation Citation: Financial assurance not obtained, not updated annually or inadequate for sum of closure cost estimates using appropriate mechanism (i.e. trust fund, surety bond, insurance, self-certification) showing each unit's estimated closure costs. {67450.13; 66265.143} Requires submittal of UPC form, "Certification of Financial Assurance per 67450.13(b)"
Activity: ACTIVE

Permit Number: 108597
Update Date: 11/02/2012
Inspection Date: 07/13/2010
Violation Code: 6HV0224
Violation: MISMANAGED EMPTY CONTAINERS >5GALS.
Violation Citation: Failed to mark date on empty container larger than 5 gallons and/or manage it within one year. 66261.7(e) & (f).
Activity: ACTIVE

Permit Number: 108597
Update Date: 11/02/2012
Inspection Date: 07/13/2010
Violation Code: 6HV0227
Violation: HAZWASTE TANK/CONTAINER W/O LABEL/DATE
Violation Citation: Failed to properly label/date hazardous waste container &/or tank. 66262.34(f)
Activity: ACTIVE

Permit Number: 108597
Update Date: 11/02/2012
Inspection Date: 07/13/2010
Violation Code: 6HV0222
Violation: DID NOT PROPERLY LABEL ERM
Violation Citation: Failed to properly label ERM. 25143.9(a)
Activity: ACTIVE

Permit Number: 108597
Update Date: 11/02/2012
Inspection Date: 07/13/2010
Violation Code: 6HV0407
Violation: EMPLOYEE TRAINING NOT ADEQUATE
Violation Citation: Employee training program for small quantity generator of hazardous waste is inadequate. CFR 262.34(d)(5)(iii)
Activity: ACTIVE

Permit Number: 108597
Update Date: 11/02/2012
Inspection Date: 07/13/2010
Violation Code: 6HV1008
Violation: NO ANNUAL CARC/REPRO TOXIN LIST TO HMD

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Violation Citation:	Annual carcinogen and reproductive toxin list not submitted to HMD. 68.1113(c)
Activity:	ACTIVE
Permit Number:	108597
Update Date:	11/02/2012
Inspection Date:	07/13/2010
Violation Code:	6HV0234
Violation:	FACILITY NOT OPERATED TO MINIM. RELEASE
Violation Citation:	Did not maintain &/or operate facility to prevent release or fire. CFR 265.31
Activity:	ACTIVE
Permit Number:	108597
Update Date:	11/02/2012
Inspection Date:	07/13/2010
Violation Code:	6HV1712
Violation:	INADEQ./NO RECORDS OF UNIT INSPECTIONS
Violation Citation:	Inadequate or no onsite records/logs of inspections conducted (must include dates, times, name of inspector, observations, and specifics of any needed repairs or corrective actions). (3 years for CE and PBR units, 5 years for CA). {CE: 25201.5(d)(4)&(5), 25201.14(c)(1); CA: 25200.3(c)(5)&(7); PBR: 67450.3(c)(8) & (9)(A) & (D), 66265.73(a)&(b)(1); 66265.15(b) & (d)}
Activity:	ACTIVE
Permit Number:	108597
Update Date:	11/02/2012
Inspection Date:	07/13/2010
Violation Code:	6HV1741
Violation:	SECONDARY CONTAINMENT INADEQ/ABSENT
Violation Citation:	Proper secondary containment is not provided or is not: compatible with stored waste, free of cracks & leaks, protecting containers from contact with accumulated liquid, capable of containing a 24 hour/25 year storm precipitation plus 10% volume of all containers, or 100% largest container volume, whichever is greater. {Containers: 66264.175(a)&(b) for CA: 25200.3(c)(4) for PBR: 67450.3(c)(9)} {Tank systems: 66265.193 and .194}
Activity:	ACTIVE
Permit Number:	108597
Update Date:	11/02/2012
Inspection Date:	07/13/2010
Violation Code:	6HV1756
Violation:	WRITTEN ANALYSIS PLAN INADEQUATE/ABSENT
Violation Citation:	Written waste analysis plan does not exist or is inadequate in specifying parameters of analysis, testing methods, frequency of analysis and sampling methods used to obtain representative samples. {66265.13(b) & 67450.3(c)(9)(A)}
Activity:	ACTIVE
Permit Number:	108597
Update Date:	11/02/2012
Inspection Date:	10/27/2008
Violation Code:	6HV0227
Violation:	HAZWASTE TANK/CONTAINER W/O LABEL/DATE
Violation Citation:	Failed to properly label/date hazardous waste container &/or tank.

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66262.34(f)
Activity: ACTIVE

Permit Number: 108597
Update Date: 11/02/2012
Inspection Date: 10/27/2008
Violation Code: 6HV0224
Violation: MISMANAGED EMPTY CONTAINERS >5GALS.
Violation Citation: Failed to mark date on empty container larger than 5 gallons and/or manage it within one year. 66261.7(e) & (f).
Activity: ACTIVE

Permit Number: 108597
Update Date: 11/02/2012
Inspection Date: 10/27/2008
Violation Code: 6HV1005
Violation: HMBP: NO ER CONTACTS LISTED OR CURRENT
Violation Citation: Business Plan does not list the name and 24 hour phone numbers of Emergency Contact persons or contact is not current. HSC 25509(a)(7)
Activity: ACTIVE

Permit Number: 108597
Update Date: 11/02/2012
Inspection Date: 04/14/2003
Violation Code: 6HV1501
Violation: NOT ALL UNITS IN TP NOTIFICATION
Violation Citation: TIERED PERMITTING: FACILITY WIDE-Not all units under PBR, CA, and CE are properly indicated on Form DTSC 1772. (Add any new units with unit sheets or correct tier on the unit sheet.)
Activity: ACTIVE

Permit Number: 108597
Update Date: 11/02/2012
Inspection Date: 04/14/2003
Violation Code: 6HV1552
Violation: TP UNIT:WRONG # TANKS/CONTAINERS
Violation Citation: TIERED PERMITTING-ALL UNITS:The unit notification information is not accurate as to the number of tank(s) or container(s).
Activity: ACTIVE

Permit Number: 108597
Update Date: 11/02/2012
Inspection Date: 04/17/2003
Violation Code: 6HV0402
Violation: TRAINING PROGRAM NOT ADEQUATE
Violation Citation: Personnel training is not adequate to ensure compliance with hazardous waste regulations. CCR 66265.16(a)&(b)
Activity: ACTIVE

Permit Number: 108597
Update Date: 11/02/2012
Inspection Date: 04/17/2003
Violation Code: 6HV0143
Violation: TP NOTIFICATION INCOMPLETE/INCORRECT
Violation Citation: TIERED PERMITTING: TP Notification has incomplete or incorrect information. 25201
Activity: ACTIVE

HUES METAL FINISHING INC (Continued) **1001613135**

Permit Number:	108597
Update Date:	11/02/2012
Inspection Date:	06/10/2004
Violation Code:	6HV0402
Violation:	TRAINING PROGRAM NOT ADEQUATE
Violation Citation:	Personnel training is not adequate to ensure compliance with hazardous waste regulations. CCR 66265.16(a)&(b)
Activity:	ACTIVE

Name:	HUES METAL FINISHING, INC
Address:	977 LINDA VISTA DR
City,State,Zip:	SAN MARCOS, CA 92078
Permit Number:	108597
Business Type:	6HK50
EPA Id Number:	CAD039769583
APN:	219-331-08-00
Last HMMD Inspection:	07/18/2012
Facility Telephone:	760-744-5566
Permit Status:	OPEN
Permit Expiration:	04/30/2013
Date Last Updated:	11/02/2012
Facility Owner:	HUES METAL FINISHING, INC.
Facility Mailing Address:	977 LINDA VISTA DR
Facility Mailing City:	SAN MARCOS
Facility Mailing State:	CA
Facility Mailing Zip:	92078
UST Owner:	Not reported
Handle Regulated Hazmat:	Y
Own Or Operate UST:	Not reported
Subject To APSA:	Not reported
Generate Haz Waste:	Y
Treat Haz Waste:	Y
Generate Medical Waste:	Not reported

Inventory Active Permits (not SQG Medical):

Permit Number:	108597
Update Date:	11/02/2012
Case Number:	71-36-3
Name:	ACRYLIC ENAMEL W/BUTYL ALCOHOL
Other Information:	WATER BASED
Material Waste:	Material
Hazardous Categories 1:	ACUTE
Hazardous Categories 2:	Not reported

Permit Number:	108597
Update Date:	11/02/2012
Case Number:	7738-94-5
Name:	ALCHROME #2B CLEAR CHEM FILM-4LBS
Other Information:	IN 350GALS H20-PROCESS TNKESS TANK
Material Waste:	Material
Hazardous Categories 1:	ACUTE
Hazardous Categories 2:	CHRONIC

Permit Number:	108597
Update Date:	11/02/2012
Case Number:	1333-82-0
Name:	B W/5% SOLUBLE CHROMIUM ALCHROME

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Other Information: Not reported
Material Waste: Material
Hazardous Categories 1: ACUTE
Hazardous Categories 2: CHRONIC

Permit Number: 108597
Update Date: 11/02/2012
Case Number: Not reported
Name: CARCINOGENS &/OR REPRODUCTIVE TOXINS
Other Information: BELOW STATE DISCLOSURE AMTS ARE/MAY BE ON SITE
Material Waste: Not reported
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Permit Number: 108597
Update Date: 11/02/2012
Case Number: 78-93-3
Name: HIGH SOLIDS POLYURETHANE
Other Information: FLAMMABLE LIQUID, W/MEK E & POLYURETHAN
Material Waste: Material
Hazardous Categories 1: FIRE
Hazardous Categories 2: ACUTE

Permit Number: 108597
Update Date: 11/02/2012
Case Number: 7664-38-2
Name: PHOSPHORIC ACID 2%: ALUMA
Other Information: PREP 3 AN ACID (ETHC)
Material Waste: Material
Hazardous Categories 1: ACUTE
Hazardous Categories 2: EXTREMELY HAZARDOUS

Permit Number: 108597
Update Date: 11/02/2012
Case Number: 74-98-6
Name: PROPANE (TWO 500 GAL TANKS)
Other Information: Not reported
Material Waste: Material
Hazardous Categories 1: FIRE
Hazardous Categories 2: Not reported

Permit Number: 108597
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 132 AQUEOUS SOL'N WITH METALS
Other Information: HEXAVALENT CHROMIUM RINSATE
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Permit Number: 108597
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 171 METAL SLUDGE
Other Information: CHROME SLUDGE, HW DEBRIS
Material Waste: Waste
Hazardous Categories 1: Not reported

HUES METAL FINISHING INC (Continued) **1001613135**

Hazardous Categories 2: Not reported

Permit Number: 108597
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 252 STILL BOTTOM WASTE (OTHER)
Other Information: PAINT STILL BOTTOMS
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Violations Active Permits:
Permit Number: 108597
Update Date: 11/02/2012
Inspection Date: 08/09/2007
Violation Code: 6HV0226
Violation: HW NOT ACCUMULATED IN TANK/CONTAINER
Violation Citation: Did not accumulate waste in container or tank. 66262.34 (d)(2)
Activity: ACTIVE

Permit Number: 108597
Update Date: 11/02/2012
Inspection Date: 08/09/2007
Violation Code: 6HV0234
Violation: FACILITY NOT OPERATED TO MINIM. RELEASE
Violation Citation: Did not maintain &/or operate facility to prevent release or fire. CFR 265.31
Activity: ACTIVE

Permit Number: 108597
Update Date: 11/02/2012
Inspection Date: 08/09/2007
Violation Code: 6HV1711
Violation: INADEQ./NO ONSITE UNIT INSPECTION SCHED.
Violation Citation: Inadequate or no onsite written inspection schedule for containers, tanks, & equipment (must include inspections for safety equipment, emergency & security devices, specify problems checked for, and frequency of inspections). {For containers-CE: 25201.5(d)(4)&(5); CEL: 25201.14(c)(1); CA: 25200.3(c)(5); PBR: 67450.3(c)(8)(B) & 67450.3(c)(9)(A) & (D); 66265.15} (For tanks, also 66265.195)
Activity: ACTIVE

Permit Number: 108597
Update Date: 11/02/2012
Inspection Date: 08/09/2007
Violation Code: 6HV1712
Violation: INADEQ./NO RECORDS OF UNIT INSPECTIONS
Violation Citation: Inadequate or no onsite records/logs of inspections conducted (must include dates, times, name of inspector, observations, and specifics of any needed repairs or corrective actions). (3 years for CE and PBR units, 5 years for CA). {CE: 25201.5(d)(4)&(5), 25201.14(c)(1); CA: 25200.3(c)(5)&(7); PBR: 67450.3(c)(8) & (9)(A) & (D), 66265.73(a)&(b)(1); 66265.15(b) & (d)}
Activity: ACTIVE

Permit Number: 108597
Update Date: 11/02/2012

HUES METAL FINISHING INC (Continued) **1001613135**

Inspection Date:	08/09/2007
Violation Code:	6HV1716
Violation:	INADEQ/NO WRITTEN UNIT OPERATING INSTR.
Violation Citation:	Inadequate or no written operating instructions for treatment unit (must include for every unit: how to operate unit, how to perform waste treatment, and how to manage residuals AND records of the dates, volumes, and types of wastes treated). Records must be kept 3 years for CE; 5 years for CA; or until closure for PBR unit. {CE: 25201.5(d)(3)&(5); CEL: 25201.14(c)(1); CA: 25200.3(c)(6) & (7); PBR: 67450.3(c)(9)(D) and 66265.73(a) & (b)(1)}
Activity:	ACTIVE
Permit Number:	108597
Update Date:	11/02/2012
Inspection Date:	08/09/2007
Violation Code:	6HV1744
Violation:	PHASE I ASSESSMENT NOT DONE/INADEQ.
Violation Citation:	Phase I site assessment checklist not completed & filed (with DTSC) within one year of being authorized to operate unit. {CA: 25200.3(c)(3); PBR: 67450.7(a)(3); 25200.14(b)(1)}
Activity:	ACTIVE
Permit Number:	108597
Update Date:	11/02/2012
Inspection Date:	08/09/2007
Violation Code:	6HV1751
Violation:	PBR NOTIFICATION NOT FILED/RENEWED
Violation Citation:	PBR notification not renewed/filed annually (due by January 1) or sooner {if significant change(s) occurred}. {67450.3(c)(1) & (c)(2)}
Activity:	ACTIVE
Permit Number:	108597
Update Date:	11/02/2012
Inspection Date:	08/09/2007
Violation Code:	6HV1756
Violation:	WRITTEN ANALYSIS PLAN INADEQUATE/ABSENT
Violation Citation:	Written waste analysis plan does not exist or is inadequate in specifying parameters of analysis, testing methods, frequency of analysis and sampling methods used to obtain representative samples. {66265.13(b) & 67450.3(c)(9)(A)}
Activity:	ACTIVE
Permit Number:	108597
Update Date:	11/02/2012
Inspection Date:	07/18/2012
Violation Code:	6HV0225
Violation:	ACCUMULATED HW>180 OR >270 DAYS
Violation Citation:	Accumulated waste too long (>180 or 270 days). 66262.34(d), CFR 262.34(e)&(f), &/or 25201(a) [>90 days for AHW waste]
Activity:	ACTIVE
Permit Number:	108597
Update Date:	11/02/2012
Inspection Date:	07/18/2012
Violation Code:	6HV0227
Violation:	HAZWASTE TANK/CONTAINER W/O LABEL/DATE
Violation Citation:	Failed to properly label/date hazardous waste container &/or tank.

HUES METAL FINISHING INC (Continued) **1001613135**

66262.34(f)
Activity: ACTIVE

Permit Number: 108597
Update Date: 11/02/2012
Inspection Date: 07/18/2012
Violation Code: 6HV1008
Violation: NO ANNUAL CARC/REPRO TOXIN LIST TO HMD
Violation Citation: Annual carcinogen and reproductive toxin list not submitted to HMD. 68.1113(c)
Activity: ACTIVE

Permit Number: 108597
Update Date: 11/02/2012
Inspection Date: 07/18/2012
Violation Code: 6HV1716
Violation: INADEQ/NO WRITTEN UNIT OPERATING INSTR.
Violation Citation: Inadequate or no written operating instructions for treatment unit (must include for every unit: how to operate unit, how to perform waste treatment, and how to manage residuals AND records of the dates, volumes, and types of wastes treated). Records must be kept 3 years for CE; 5 years for CA; or until closure for PBR unit. {CE: 25201.5(d)(3)&(5); CEL: 25201.14(c)(1); CA: 25200.3(c)(6) & (7); PBR: 67450.3(c)(9)(D) and 66265.73(a) & (b)(1)}
Activity: ACTIVE

Permit Number: 108597
Update Date: 11/02/2012
Inspection Date: 07/18/2012
Violation Code: 6HV1746
Violation: NO FIN. ASSUR OR NOT UPDATED/ADEQUATE
Violation Citation: Financial assurance not obtained, not updated annually or inadequate for sum of closure cost estimates using appropriate mechanism (i.e. trust fund, surety bond, insurance, self-certification) showing each unit's estimated closure costs. {67450.13; 66265.143} Requires submittal of UPC form, "Certification of Financial Assurance per 67450.13(b)"
Activity: ACTIVE

Permit Number: 108597
Update Date: 11/02/2012
Inspection Date: 07/13/2010
Violation Code: 6HV0224
Violation: MISMANAGED EMPTY CONTAINERS >5GALS.
Violation Citation: Failed to mark date on empty container larger than 5 gallons and/or manage it within one year. 66261.7(e) & (f).
Activity: ACTIVE

Permit Number: 108597
Update Date: 11/02/2012
Inspection Date: 07/13/2010
Violation Code: 6HV0227
Violation: HAZWASTE TANK/CONTAINER W/O LABEL/DATE
Violation Citation: Failed to properly label/date hazardous waste container &/or tank. 66262.34(f)
Activity: ACTIVE

HUES METAL FINISHING INC (Continued) **1001613135**

Permit Number:	108597
Update Date:	11/02/2012
Inspection Date:	07/13/2010
Violation Code:	6HV0222
Violation:	DID NOT PROPERLY LABEL ERM
Violation Citation:	Failed to properly label ERM. 25143.9(a)
Activity:	ACTIVE
Permit Number:	108597
Update Date:	11/02/2012
Inspection Date:	07/13/2010
Violation Code:	6HV0407
Violation:	EMPLOYEE TRAINING NOT ADEQUATE
Violation Citation:	Employee training program for small quantity generator of hazardous waste is inadequate. CFR 262.34(d)(5)(iii)
Activity:	ACTIVE
Permit Number:	108597
Update Date:	11/02/2012
Inspection Date:	07/13/2010
Violation Code:	6HV1008
Violation:	NO ANNUAL CARC/REPRO TOXIN LIST TO HMD
Violation Citation:	Annual carcinogen and reproductive toxin list not submitted to HMD. 68.1113(c)
Activity:	ACTIVE
Permit Number:	108597
Update Date:	11/02/2012
Inspection Date:	07/13/2010
Violation Code:	6HV0234
Violation:	FACILITY NOT OPERATED TO MINIM. RELEASE
Violation Citation:	Did not maintain &/or operate facility to prevent release or fire. CFR 265.31
Activity:	ACTIVE
Permit Number:	108597
Update Date:	11/02/2012
Inspection Date:	07/13/2010
Violation Code:	6HV1712
Violation:	INADEQ./NO RECORDS OF UNIT INSPECTIONS
Violation Citation:	Inadequate or no onsite records/logs of inspections conducted (must include dates, times, name of inspector, observations, and specifics of any needed repairs or corrective actions). (3 years for CE and PBR units, 5 years for CA). {CE: 25201.5(d)(4)&(5), 25201.14(c)(1); CA: 25200.3(c)(5)&(7); PBR: 67450.3(c)(8) & (9)(A) & (D), 66265.73(a)&(b)(1); 66265.15(b) & (d)}
Activity:	ACTIVE
Permit Number:	108597
Update Date:	11/02/2012
Inspection Date:	07/13/2010
Violation Code:	6HV1741
Violation:	SECONDARY CONTAINMENT INADEQ/ABSENT
Violation Citation:	Proper secondary containment is not provided or is not: compatible with stored waste, free of cracks & leaks, protecting containers from contact with accumulated liquid, capable of containing a 24 hour/25 year storm precipitation plus 10% volume of all containers, or

HUES METAL FINISHING INC (Continued) **1001613135**

	100% largest container volume, whichever is greater. {Containers: 66264.175(a)&(b) for CA: 25200.3(c)(4) for PBR: 67450.3(c)(9)} {Tank systems: 66265.193 and .194}
Activity:	ACTIVE
Permit Number:	108597
Update Date:	11/02/2012
Inspection Date:	07/13/2010
Violation Code:	6HV1756
Violation:	WRITTEN ANALYSIS PLAN INADEQUATE/ABSENT
Violation Citation:	Written waste analysis plan does not exist or is inadequate in specifying parameters of analysis, testing methods, frequency of analysis and sampling methods used to obtain representative samples. {66265.13(b) & 67450.3(c)(9)(A)}
Activity:	ACTIVE
Permit Number:	108597
Update Date:	11/02/2012
Inspection Date:	10/27/2008
Violation Code:	6HV0227
Violation:	HAZWASTE TANK/CONTAINER W/O LABEL/DATE
Violation Citation:	Failed to properly label/date hazardous waste container &/or tank. 66262.34(f)
Activity:	ACTIVE
Permit Number:	108597
Update Date:	11/02/2012
Inspection Date:	10/27/2008
Violation Code:	6HV0224
Violation:	MISMANAGED EMPTY CONTAINERS >5GALS.
Violation Citation:	Failed to mark date on empty container larger than 5 gallons and/or manage it within one year. 66261.7(e) & (f).
Activity:	ACTIVE
Permit Number:	108597
Update Date:	11/02/2012
Inspection Date:	10/27/2008
Violation Code:	6HV1005
Violation:	HMBP: NO ER CONTACTS LISTED OR CURRENT
Violation Citation:	Business Plan does not list the name and 24 hour phone numbers of Emergency Contact persons or contact is not current. HSC 25509(a)(7)
Activity:	ACTIVE
Permit Number:	108597
Update Date:	11/02/2012
Inspection Date:	04/14/2003
Violation Code:	6HV1501
Violation:	NOT ALL UNITS IN TP NOTIFICATION
Violation Citation:	TIERED PERMITTING: FACILITY WIDE-Not all units under PBR, CA, and CE are properly indicated on Form DTSC 1772. (Add any new units with unit sheets or correct tier on the unit sheet.)
Activity:	ACTIVE
Permit Number:	108597
Update Date:	11/02/2012
Inspection Date:	04/14/2003
Violation Code:	6HV1552

HUES METAL FINISHING INC (Continued) **1001613135**

Violation: TP UNIT:WRONG # TANKS/CONTAINERS
Violation Citation: TIERED PERMITTING-ALL UNITS:The unit notification information is not accurate as to the number of tank(s) or container(s).
Activity: ACTIVE

Permit Number: 108597
Update Date: 11/02/2012
Inspection Date: 04/17/2003
Violation Code: 6HV0402
Violation: TRAINING PROGRAM NOT ADEQUATE
Violation Citation: Personnel training is not adequate to ensure compliance with hazardous waste regulations. CCR 66265.16(a)&(b)
Activity: ACTIVE

Permit Number: 108597
Update Date: 11/02/2012
Inspection Date: 04/17/2003
Violation Code: 6HV0143
Violation: TP NOTIFICATION INCOMPLETE/INCORRECT
Violation Citation: TIERED PERMITTING: TP Notification has incomplete or incorrect information. 25201
Activity: ACTIVE

Permit Number: 108597
Update Date: 11/02/2012
Inspection Date: 06/10/2004
Violation Code: 6HV0402
Violation: TRAINING PROGRAM NOT ADEQUATE
Violation Citation: Personnel training is not adequate to ensure compliance with hazardous waste regulations. CCR 66265.16(a)&(b)
Activity: ACTIVE

CERS HAZ WASTE:
Name: RMP METAL FINISHING
Address: 977 LINDA VISTA DR
City,State,Zip: SAN MARCOS, CA 92069
Site ID: 400796
CERS ID: 10375831
CERS Description: Hazardous Waste Generator

EMI:
Name: HUES METAL FINISHING INC
Address: 977 LINDA VISTA DR
City,State,Zip: SAN MARCOS, CA 92069
Year: 1990
County Code: 37
Air Basin: SD
Facility ID: 6138
Air District Name: SD
SIC Code: 3479
Air District Name: SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 12
Reactive Organic Gases Tons/Yr: 8

HUES METAL FINISHING INC (Continued) **1001613135**

Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Name:	HUES METAL FINISHING INC
Address:	977 LINDA VISTA DR
City,State,Zip:	SAN MARCOS, CA 92069
Year:	1993
County Code:	37
Air Basin:	SD
Facility ID:	6138
Air District Name:	SD
SIC Code:	3479
Air District Name:	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	11
Reactive Organic Gases Tons/Yr:	6
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Name:	HUES METAL FINISHING INC
Address:	977 LINDA VISTA DR
City,State,Zip:	SAN MARCOS, CA 92069
Year:	1995
County Code:	37
Air Basin:	SD
Facility ID:	6138
Air District Name:	SD
SIC Code:	3479
Air District Name:	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	11
Reactive Organic Gases Tons/Yr:	6
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Name:	HUES METAL FINISHING INC
Address:	977 LINDA VISTA DR
City,State,Zip:	SAN MARCOS, CA 92069
Year:	1996
County Code:	37
Air Basin:	SD
Facility ID:	6138
Air District Name:	SD
SIC Code:	3479
Air District Name:	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System:	Not reported

HUES METAL FINISHING INC (Continued) **1001613135**

Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	11
Reactive Organic Gases Tons/Yr:	6
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Name:	HUES METAL FINISHING INC
Address:	977 LINDA VISTA DR
City,State,Zip:	SAN MARCOS, CA 92069
Year:	1997
County Code:	37
Air Basin:	SD
Facility ID:	6138
Air District Name:	SD
SIC Code:	3479
Air District Name:	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	11
Reactive Organic Gases Tons/Yr:	6
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Name:	HUES METAL FINISHING INC.
Address:	977 LINDA VISTA DR
City,State,Zip:	SAN MARCOS, CA 92069
Year:	1998
County Code:	37
Air Basin:	SD
Facility ID:	6138
Air District Name:	SD
SIC Code:	3479
Air District Name:	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	1
Reactive Organic Gases Tons/Yr:	1
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Name:	HUES METAL FINISHING INC.
Address:	977 LINDA VISTA DR
City,State,Zip:	SAN MARCOS, CA 92069
Year:	1999
County Code:	37
Air Basin:	SD
Facility ID:	6138
Air District Name:	SD

HUES METAL FINISHING INC (Continued) **1001613135**

SIC Code:	3479
Air District Name:	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	1
Reactive Organic Gases Tons/Yr:	1
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Name:	HUES METAL FINISHING INC.
Address:	977 LINDA VISTA DR
City,State,Zip:	SAN MARCOS, CA 92069
Year:	2000
County Code:	37
Air Basin:	SD
Facility ID:	6138
Air District Name:	SD
SIC Code:	3479
Air District Name:	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	1
Reactive Organic Gases Tons/Yr:	1
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Name:	HUES METAL FINISHING INC.
Address:	977 LINDA VISTA DR
City,State,Zip:	SAN MARCOS, CA 92069
Year:	2001
County Code:	37
Air Basin:	SD
Facility ID:	6138
Air District Name:	SD
SIC Code:	3479
Air District Name:	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System:	Y
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	1
Reactive Organic Gases Tons/Yr:	1
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Name:	HUES METAL FINISHING INC.
Address:	977 LINDA VISTA DR
City,State,Zip:	SAN MARCOS, CA 92069
Year:	2002
County Code:	37

HUES METAL FINISHING INC (Continued) **1001613135**

Air Basin:	SD
Facility ID:	6138
Air District Name:	SD
SIC Code:	3479
Air District Name:	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	5
Reactive Organic Gases Tons/Yr:	2
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Name:	HUES METAL FINISHING INC.
Address:	977 LINDA VISTA DR
City,State,Zip:	SAN MARCOS, CA 92069
Year:	2003
County Code:	37
Air Basin:	SD
Facility ID:	6138
Air District Name:	SD
SIC Code:	3479
Air District Name:	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	5
Reactive Organic Gases Tons/Yr:	3
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Name:	HUES METAL FINISHING INC.
Address:	977 LINDA VISTA DR
City,State,Zip:	SAN MARCOS, CA 92069
Year:	2004
County Code:	37
Air Basin:	SD
Facility ID:	6138
Air District Name:	SD
SIC Code:	3479
Air District Name:	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System:	Y
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	4.876003848
Reactive Organic Gases Tons/Yr:	3.1947814
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Name:	HUES METAL FINISHING INC
Address:	977 LINDA VISTA DR

HUES METAL FINISHING INC (Continued) **1001613135**

City,State,Zip:	SAN MARCOS, CA 92069
Year:	2005
County Code:	37
Air Basin:	SD
Facility ID:	6138
Air District Name:	SD
SIC Code:	3479
Air District Name:	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	4.85
Reactive Organic Gases Tons/Yr:	3.158
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Name:	HUES METAL FINISHING INC
Address:	977 LINDA VISTA DR
City,State,Zip:	SAN MARCOS, CA 92069
Year:	2006
County Code:	37
Air Basin:	SD
Facility ID:	6138
Air District Name:	SD
SIC Code:	3479
Air District Name:	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	6.6
Reactive Organic Gases Tons/Yr:	3.33
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Name:	HUES METAL FINISHING INC
Address:	977 LINDA VISTA DR
City,State,Zip:	SAN MARCOS, CA 92069
Year:	2007
County Code:	37
Air Basin:	SD
Facility ID:	6138
Air District Name:	SD
SIC Code:	3479
Air District Name:	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	6.6
Reactive Organic Gases Tons/Yr:	3.33
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

HUES METAL FINISHING INC (Continued) **1001613135**

Name:	HUES METAL FINISHING INC
Address:	977 LINDA VISTA DR
City,State,Zip:	SAN MARCOS, CA 92069
Year:	2008
County Code:	37
Air Basin:	SD
Facility ID:	6138
Air District Name:	SD
SIC Code:	3479
Air District Name:	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	6.6
Reactive Organic Gases Tons/Yr:	3.33
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Name:	HUES METAL FINISHING INC
Address:	977 LINDA VISTA DR
City,State,Zip:	SAN MARCOS, CA 92069
Year:	2009
County Code:	37
Air Basin:	SD
Facility ID:	6138
Air District Name:	SD
SIC Code:	3479
Air District Name:	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	6.6100000000000003
Reactive Organic Gases Tons/Yr:	3.3639999999999999
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Name:	HUES METAL FINISHING INC
Address:	977 LINDA VISTA DR
City,State,Zip:	SAN MARCOS, CA 92078
Year:	2010
County Code:	37
Air Basin:	SD
Facility ID:	6138
Air District Name:	SD
SIC Code:	3479
Air District Name:	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	7.0499999999999998
Reactive Organic Gases Tons/Yr:	2.9119999999999999
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0

HUES METAL FINISHING INC (Continued) **1001613135**

Particulate Matter Tons/Yr: 0
Part. Matter 10 Micrometers and Smllr Tons/Yr: 0

Name: HUES METAL FINISHING INC
Address: 977 LINDA VISTA DR
City,State,Zip: SAN MARCOS, CA 92078
Year: 2013
County Code: 37
Air Basin: SD
Facility ID: 6138
Air District Name: SD
SIC Code: 3479
Air District Name: SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 7.06
Reactive Organic Gases Tons/Yr: 2.922
Carbon Monoxide Emissions Tons/Yr: 0
NOX - Oxides of Nitrogen Tons/Yr: 0
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 0
Part. Matter 10 Micrometers and Smllr Tons/Yr: 0

Name: HUES METAL FINISHING INC
Address: 977 LINDA VISTA DR
City,State,Zip: SAN MARCOS, CA 92078
Year: 2014
County Code: 37
Air Basin: SD
Facility ID: 6138
Air District Name: SD
SIC Code: 3479
Air District Name: SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 1.73
Reactive Organic Gases Tons/Yr: 0.908
Carbon Monoxide Emissions Tons/Yr: 0
NOX - Oxides of Nitrogen Tons/Yr: 0
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 0
Part. Matter 10 Micrometers and Smllr Tons/Yr: 0

Name: HUES METAL FINISHING INC
Address: 977 LINDA VISTA DR
City,State,Zip: SAN MARCOS, CA 92078
Year: 2015
County Code: 37
Air Basin: SD
Facility ID: 6138
Air District Name: SD
SIC Code: 3479
Air District Name: SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 1.73
Reactive Organic Gases Tons/Yr: 0.908

HUES METAL FINISHING INC (Continued) **1001613135**

Carbon Monoxide Emissions Tons/Yr: 0
NOX - Oxides of Nitrogen Tons/Yr: 0
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 0
Part. Matter 10 Micrometers and Smllr Tons/Yr: 0

Name: HUES METAL FINISHING INC
Address: 977 LINDA VISTA DR
City,State,Zip: SAN MARCOS, CA 92078
Year: 2016
County Code: 37
Air Basin: SD
Facility ID: 6138
Air District Name: SD
SIC Code: 3479
Air District Name: SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 1.73
Reactive Organic Gases Tons/Yr: 0.908
Carbon Monoxide Emissions Tons/Yr: Not reported
NOX - Oxides of Nitrogen Tons/Yr: Not reported
SOX - Oxides of Sulphur Tons/Yr: Not reported
Particulate Matter Tons/Yr: Not reported
Part. Matter 10 Micrometers and Smllr Tons/Yr: Not reported

Name: HUES METAL FINISHING INC
Address: 977 LINDA VISTA DR
City,State,Zip: SAN MARCOS, CA 92078
Year: 2017
County Code: 37
Air Basin: SD
Facility ID: 6138
Air District Name: SD
SIC Code: 3479
Air District Name: SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 1.73
Reactive Organic Gases Tons/Yr: 0.908
Carbon Monoxide Emissions Tons/Yr: Not reported
NOX - Oxides of Nitrogen Tons/Yr: Not reported
SOX - Oxides of Sulphur Tons/Yr: Not reported
Particulate Matter Tons/Yr: Not reported
Part. Matter 10 Micrometers and Smllr Tons/Yr: Not reported

Name: HUES METAL FINISHING INC
Address: 977 LINDA VISTA DR
City,State,Zip: SAN MARCOS, CA 92078
Year: 2018
County Code: 37
Air Basin: SD
Facility ID: 6138
Air District Name: SD
SIC Code: 3479
Air District Name: SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System: Not reported

HUES METAL FINISHING INC (Continued) **1001613135**

Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	1.73
Reactive Organic Gases Tons/Yr:	0.908
Carbon Monoxide Emissions Tons/Yr:	Not reported
NOX - Oxides of Nitrogen Tons/Yr:	Not reported
SOX - Oxides of Sulphur Tons/Yr:	Not reported
Particulate Matter Tons/Yr:	Not reported
Part. Matter 10 Micrometers and Smllr Tons/Yr:	Not reported

CERS:

Name:	HUES METAL FINISHING INC
Address:	977 LINDA VISTA DR
City,State,Zip:	SAN MARCOS, CA 92078-2611
Site ID:	473019
CERS ID:	110001187509
CERS Description:	US EPA Air Emission Inventory System (EIS)
Name:	RMP METAL FINISHING
Address:	977 LINDA VISTA DR
City,State,Zip:	SAN MARCOS, CA 92069
Site ID:	400796
CERS ID:	10375831
CERS Description:	Chemical Storage Facilities

Violations:

Site ID:	400796
Site Name:	RMP METAL FINISHING
Violation Date:	04-14-2017
Citation:	HSC 6.5 25201(a) - California Health and Safety Code, Chapter 6.5, Section(s) 25201(a)
Violation Description:	Failure of a storage facility, treatment facility, transfer facility, resource recovery facility, or disposal site to accept, treat, store, or dispose of a hazardous waste at the facility, area, or site, without a hazardous waste facilities permit or other grant of authorization from the department, or a permit-by-rule, conditional authorization, or conditional exemption permit from the CUPA.
Violation Notes:	Returned to compliance on 09/26/2017.
Violation Division:	San Diego County Department of Env Health
Violation Program:	HW
Violation Source:	CERS
Site ID:	400796
Site Name:	RMP METAL FINISHING
Violation Date:	04-14-2017
Citation:	HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description:	Failure to annually review and electronically certify that the business plan is complete and accurate on or before the annual due date.
Violation Notes:	Returned to compliance on 09/26/2017.
Violation Division:	San Diego County Department of Env Health
Violation Program:	HMRRP
Violation Source:	CERS
Site ID:	400796
Site Name:	RMP METAL FINISHING
Violation Date:	05-24-2019

HUES METAL FINISHING INC (Continued) **1001613135**

Citation: 22 CCR 12 66262.12 - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.12
Violation Description: Failure to obtain an Identification Number prior to treating, storing, disposing of, transporting or offering for transportation any hazardous waste.
Violation Notes: Returned to compliance on 10/11/2019. Inspection Sequence ID:6146000
Violation Division: San Diego County Department of Env Health
Violation Program: HW
Violation Source: CERS

Site ID: 400796
Site Name: RMP METAL FINISHING
Violation Date: 05-24-2019
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description: Failure to annually review and electronically certify that the business plan is complete and accurate on or before the annual due date.
Violation Notes: Returned to compliance on 05/24/2019. Inspection Sequence ID:6146000
Violation Division: San Diego County Department of Env Health
Violation Program: HMRRP
Violation Source: CERS

Evaluation:
Eval General Type: Compliance Evaluation Inspection
Eval Date: 04-08-2015
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Inspector: Griffith Gary Inspection ID:4092023
Eval Division: San Diego County Department of Env Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 04-08-2015
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Inspector: Griffith Gary Inspection ID:4092023
Eval Division: San Diego County Department of Env Health
Eval Program: HW
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 04-14-2017
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Inspector: Griffith Gary Inspection ID:5699598
Eval Division: San Diego County Department of Env Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 04-14-2017
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Inspector: Griffith Gary Inspection ID:5699598
Eval Division: San Diego County Department of Env Health

HUES METAL FINISHING INC (Continued) **1001613135**

Eval Program: HW
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 05-24-2019
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Inspector: Thai Darren Inspection ID:6146000
Eval Division: San Diego County Department of Env Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 05-24-2019
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Inspector: Thai Darren Inspection ID:6146000
Eval Division: San Diego County Department of Env Health
Eval Program: HW
Eval Source: CERS

Affiliation:
Affiliation Type Desc: CUPA District
Entity Name: San Diego County Env Health
Entity Title: Not reported
Affiliation Address: PO Box 129261
Affiliation City: San Diego
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 92112-9261
Affiliation Phone: (858) 505-6880

Affiliation Type Desc: Document Preparer
Entity Name: Enrique Perez
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: Identification Signer
Entity Name: Enrique Perez
Entity Title: Owner
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: Legal Owner
Entity Name: RMP Metal Finishing LLC
Entity Title: Not reported
Affiliation Address: 977 LINDA VISTA DR
Affiliation City: SAN MARCOS

HUES METAL FINISHING INC (Continued) **1001613135**

Affiliation State: CA
Affiliation Country: United States
Affiliation Zip: 92069
Affiliation Phone: (760) 744-5566

Affiliation Type Desc: Parent Corporation
Entity Name: RMP Metal Finishing
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: Environmental Contact
Entity Name: Enrique Perez
Entity Title: Not reported
Affiliation Address: 977 LINDA VISTA DR
Affiliation City: SAN MARCOS
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 92069
Affiliation Phone: Not reported

Affiliation Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title: Not reported
Affiliation Address: 977 LINDA VISTA DR
Affiliation City: SAN MARCOS
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 92069
Affiliation Phone: Not reported

Affiliation Type Desc: Operator
Entity Name: Enrique Perez
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: (760) 744-5566

HWTS:
Name: RMP METAL FINISHING
Address: 977 LINDA VISTA DR
Address 2: Not reported
City,State,Zip: SAN MARCOS, CA 92078
EPA ID: CAL000408875
Inactive Date: 06/30/2016
Create Date: 07/31/2015
Last Act Date: 10/11/2019
Mailing Name: Not reported
Mailing Address: 977 LINDA VISTA DR

HUES METAL FINISHING INC (Continued) **1001613135**

Mailing Address 2:	Not reported
Mailing City,State,Zip:	SAN MARCOS, CA 92078
Owner Name:	ENRIQUE PEREZ
Owner Address:	977 LINDA VISTA DR
Owner Address 2:	Not reported
Owner City,State,Zip:	SAN MARCOS, CA 92078
Contact Name:	ENRIQUE PEREZ
Contact Address:	977 LINDA VISTA DR
Contact Address 2:	Not reported
City,State,Zip:	SAN MARCOS, CA 92078

NAICS:

EPA ID:	CAL000408875
Create Date:	2015-07-31 08:41:40.130
NAICS Code:	339914
NAICS Description:	Costume Jewelry and Novelty Manufacturing
Issued EPA ID Date:	2015-07-31 08:41:40.12300
Inactive Date:	2016-06-30 00:00:00
Facility Name:	RMP METAL FINISHING
Facility Address:	977 LINDA VISTA DR
Facility Address 2:	Not reported
Facility City:	SAN MARCOS
Facility County:	Not reported
Facility State:	CA
Facility Zip:	92078

94
SW
1/2-1
0.802 mi.
4236 ft.

Relative:
Lower

Actual:
547 ft.

MACDERMID PRINTING SOLUTIONS **RCRA-LQG** **1000344725**
260 SOUTH PACIFIC STREET **ENVIROSTOR** **CAD063237341**
SAN MARCOS, CA 92078 **LUST**
SWEEPS UST
HIST UST
Cortese
ENF
HIST CORTESE
WDS
CERS

RCRA-LQG:

Date Form Received by Agency:	2016-02-29 00:00:00.0
Handler Name:	MACDERMID PRINTING SOLUTIONS
Handler Address:	260 SOUTH PACIFIC STREET
Handler City,State,Zip:	SAN MARCOS, CA 92078
EPA ID:	CAD063237341
Contact Name:	RICHARD NAVE
Contact Address:	FREIGHT STREET
Contact City,State,Zip:	WATERBURY, CT 06702
Contact Telephone:	203-575-5747
Contact Fax:	Not reported
Contact Email:	RICHARD.NAVE@MACDERMID.COM
Contact Title:	CORPORATE DIRECTOR EH&S
EPA Region:	09
Land Type:	Private
Federal Waste Generator Description:	Large Quantity Generator
Non-Notifier:	Not reported
Biennial Report Cycle:	2015
Accessibility:	Not reported
Active Site Indicator:	Handler Activities

MACDERMID PRINTING SOLUTIONS (Continued) **1000344725**

State District Owner:	Not reported
State District:	Not reported
Mailing Address:	SOUTH PACIFIC STREET
Mailing City,State,Zip:	SAN MARCOS, CA 92078
Owner Name:	MACDERMID, INC.
Owner Type:	Private
Operator Name:	MACDERMID, INC.
Operator Type:	Private
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	NN
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2016-11-04 19:42:33.0
Recognized Trader-Importer:	No

MACDERMID PRINTING SOLUTIONS (Continued) **1000344725**

Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	Not reported
Manifest Broker:	Not reported
Sub-Part P Indicator:	No

Biennial: List of Years
Year: 2015

Click Here for Biennial Reporting System Data:
Year: 2011

Click Here for Biennial Reporting System Data:

Hazardous Waste Summary:

Waste Code:	D000
Waste Description:	Not Defined
Waste Code:	D001
Waste Description:	IGNITABLE WASTE
Waste Code:	D002
Waste Description:	CORROSIVE WASTE
Waste Code:	D003
Waste Description:	REACTIVE WASTE
Waste Code:	D004
Waste Description:	ARSENIC
Waste Code:	D005
Waste Description:	BARIUM
Waste Code:	D007
Waste Description:	CHROMIUM
Waste Code:	D008
Waste Description:	LEAD
Waste Code:	D009
Waste Description:	MERCURY
Waste Code:	D010
Waste Description:	SELENIUM
Waste Code:	D011
Waste Description:	SILVER
Waste Code:	D022
Waste Description:	CHLOROFORM
Waste Code:	D036
Waste Description:	NITROBENZENE
Waste Code:	F002

MACDERMID PRINTING SOLUTIONS (Continued) **1000344725**

Waste Description: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste Code: F003
Waste Description: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste Code: F005
Waste Description: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste Code: F008
Waste Description: PLATING BATH RESIDUES FROM THE BOTTOM OF PLATING BATHS FROM ELECTROPLATING OPERATIONS IN WHICH CYANIDES ARE USED IN THE PROCESS.

Waste Code: P022
Waste Description: CARBON DISULFIDE

Waste Code: P105
Waste Description: SODIUM AZIDE

Waste Code: U002
Waste Description: 2-PROPANONE (I) (OR) ACETONE (I)

Waste Code: U008
Waste Description: 2-PROPENOIC ACID (I) (OR) ACRYLIC ACID (I)

Waste Code: U037
Waste Description: BENZENE, CHLORO- (OR) CHLOROBENZENE

Waste Code: U044
Waste Description: CHLOROFORM (OR) METHANE, TRICHLORO-

Waste Code: U052
Waste Description: CRESOL (CRESYLIC ACID) (OR) PHENOL, METHYL-

Waste Code: U080

MACDERMID PRINTING SOLUTIONS (Continued) **1000344725**

Waste Description: METHANE, DICHLORO- (OR) METHYLENE CHLORIDE

Waste Code: U138
Waste Description: METHANE, IODO- (OR) METHYL IODIDE

Waste Code: U147
Waste Description: 2,5-FURANDIONE (OR) MALEIC ANHYDRIDE

Waste Code: U151
Waste Description: MERCURY

Waste Code: U154
Waste Description: METHANOL (I) (OR) METHYL ALCOHOL (I)

Waste Code: U162
Waste Description: 2-PROPENOIC ACID, 2-METHYL-, METHYL ESTER (I,T) (OR) METHYL METHACRYLATE (I,T)

Waste Code: U196
Waste Description: PYRIDINE

Waste Code: U201
Waste Description: 1,3-BENZENEDIOL (OR) RESORCINOL

Waste Code: U209
Waste Description: 1,1,2,2-TETRACHLOROETHANE (OR) ETHANE, 1,1,2,2-TETRACHLORO-

Waste Code: U213
Waste Description: FURAN, TETRAHYDRO-(I) (OR) TETRAHYDROFURAN (I)

Waste Code: U227
Waste Description: 1,1,2-TRICHLOROETHANE (OR) ETHANE, 1,1,2-TRICHLORO-

Handler - Owner Operator:
Owner/Operator Indicator: Operator
Owner/Operator Name: MACDERMID INC.
Legal Status: Private
Date Became Current: 1999-02-01 00:00:00.
Date Ended Current: Not reported
Owner/Operator Address: 245 FREIGHT ST.
Owner/Operator City,State,Zip: WATERBURY, CT 06702
Owner/Operator Telephone: 203-575-5700
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Operator
Owner/Operator Name: MACDERMID, INC.
Legal Status: Private
Date Became Current: 1999-12-01 00:00:00.
Date Ended Current: Not reported
Owner/Operator Address: Not reported
Owner/Operator City,State,Zip: Not reported
Owner/Operator Telephone: Not reported
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

MACDERMID PRINTING SOLUTIONS (Continued) **1000344725**

Owner/Operator Indicator:	Owner
Owner/Operator Name:	MACDERMID INC.
Legal Status:	Private
Date Became Current:	1999-02-01 00:00:00.
Date Ended Current:	Not reported
Owner/Operator Address:	245 FREIGHT ST.
Owner/Operator City,State,Zip:	WATERBURY, CT 06702
Owner/Operator Telephone:	203-575-5700
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name:	MACDERMID, INC.
Legal Status:	Private
Date Became Current:	1999-12-01 00:00:00.
Date Ended Current:	Not reported
Owner/Operator Address:	245 FREIGHT STREET
Owner/Operator City,State,Zip:	WATERBURY, CT 06702
Owner/Operator Telephone:	203-575-5700
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name:	NOT REQUIRED
Legal Status:	Private
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	NOT REQUIRED
Owner/Operator City,State,Zip:	NOT REQUIRED, ME 99999
Owner/Operator Telephone:	415-555-1212
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name:	MACDERMID INC
Legal Status:	Private
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	245 FREIGHT ST
Owner/Operator City,State,Zip:	WATERBURY, CT 06702
Owner/Operator Telephone:	203-575-5661
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	2012-02-27 00:00:00.0
Handler Name:	MACDERMID PRINTING SOLUTIONS
Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No

MACDERMID PRINTING SOLUTIONS (Continued) **1000344725**

Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 2016-02-29 00:00:00.0
Handler Name: MACDERMID PRINTING SOLUTIONS
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 1996-09-01 00:00:00.0
Handler Name: MACDERMID PRINTING SOLUTIONS
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 2002-07-25 00:00:00.0
Handler Name: MACDERMID PRINTING SOLUTIONS
Federal Waste Generator Description: Small Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 1990-04-09 00:00:00.0
Handler Name: NAPP SYSTEMS USA INC
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

MACDERMID PRINTING SOLUTIONS (Continued) **1000344725**

Receive Date:	1992-02-28 00:00:00.0
Handler Name: NAPP SYSTEMS, INC	
Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

Receive Date:	1996-02-26 00:00:00.0
Handler Name: NAPP SYSTEMS, INC.	
Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

Receive Date:	1999-03-04 00:00:00.0
Handler Name: NAPP SYSTEMS INC	
Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

Receive Date:	2000-10-12 00:00:00.0
Handler Name: NAPP SYSTEMS INC.	
Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

List of NAICS Codes and Descriptions:

NAICS Code:	323122
NAICS Description:	PREPRESS SERVICES

NAICS Code:	325992

MACDERMID PRINTING SOLUTIONS (Continued) **1000344725**

NAICS Description: PHOTOGRAPHIC FILM, PAPER, PLATE, AND CHEMICAL MANUFACTURING

NAICS Code: 333293
NAICS Description: PRINTING MACHINERY AND EQUIPMENT MANUFACTURING

NAICS Code: 33991
NAICS Description: JEWELRY AND SILVERWARE MANUFACTURING

NAICS Code: 541712
NAICS Description: RESEARCH AND DEVELOPMENT IN THE PHYSICAL, ENGINEERING, AND LIFE SCIENCES (EXCEPT BIOTECHNOLOGY)

Facility Has Received Notices of Violation:

Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	Generators - General
Date Violation was Determined:	1990-12-07 00:00:00.0
Actual Return to Compliance Date:	1991-12-17 00:00:00.0
Return to Compliance Qualifier:	Unverifiable
Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported

Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	Generators - General
Date Violation was Determined:	1993-02-23 00:00:00.0
Actual Return to Compliance Date:	1998-02-23 00:00:00.0
Return to Compliance Qualifier:	Not Resolved

MACDERMID PRINTING SOLUTIONS (Continued) **1000344725**

Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported

Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	Generators - General
Date Violation was Determined:	1991-12-17 00:00:00.0
Actual Return to Compliance Date:	1993-02-23 00:00:00.0
Return to Compliance Qualifier:	Unverifiable
Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported

MACDERMID PRINTING SOLUTIONS (Continued) **1000344725**

SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Evaluation Action Summary:
Evaluation Date: 1990-12-07 00:00:00.0
Evaluation Responsible Agency: State Contractor/Grantee
Found Violation: Yes
Evaluation Type Description: COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier: R9STA
Evaluation Responsible Sub-Organization: Not reported
Actual Return to Compliance Date: 1991-12-17 00:00:00.0
Scheduled Compliance Date: Not reported
Date of Request: Not reported
Date Response Received: Not reported
Request Agency: Not reported
Former Citation: Not reported

Evaluation Date: 1993-02-23 00:00:00.0
Evaluation Responsible Agency: State Contractor/Grantee
Found Violation: Yes
Evaluation Type Description: COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier: R9STA
Evaluation Responsible Sub-Organization: Not reported
Actual Return to Compliance Date: 1998-02-23 00:00:00.0
Scheduled Compliance Date: Not reported
Date of Request: Not reported
Date Response Received: Not reported
Request Agency: Not reported
Former Citation: Not reported

Evaluation Date: 1991-12-17 00:00:00.0
Evaluation Responsible Agency: State Contractor/Grantee
Found Violation: Yes
Evaluation Type Description: COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier: R9STA
Evaluation Responsible Sub-Organization: Not reported
Actual Return to Compliance Date: 1993-02-23 00:00:00.0
Scheduled Compliance Date: Not reported
Date of Request: Not reported
Date Response Received: Not reported
Request Agency: Not reported
Former Citation: Not reported

ENVIROSTOR:
Name: NAPP SYSTEMS, INC.

MACDERMID PRINTING SOLUTIONS (Continued) **1000344725**

Address: 360 S. PACIFIC STREET
City,State,Zip: SAN MARCOS, CA 92069
Facility ID: 71002510
Status: Inactive - Needs Evaluation
Status Date: Not reported
Site Code: Not reported
Site Type: Tiered Permit
Site Type Detailed: Tiered Permit
Acres: Not reported
NPL: NO
Regulatory Agencies: NONE SPECIFIED
Lead Agency: NONE SPECIFIED
Program Manager: Not reported
Supervisor: Not reported
Division Branch: Cleanup Cypress
Assembly: 75
Senate: 38
Special Program: Not reported
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: Not reported
Latitude: 33.13984
Longitude: -117.1983
APN: NONE SPECIFIED
Past Use: NONE SPECIFIED
Potential COC: NONE SPECIFIED
Confirmed COC: NONE SPECIFIED
Potential Description: NONE SPECIFIED
Alias Name: CAD063237341
Alias Type: EPA Identification Number
Alias Name: 71002510
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: Not reported
Completed Sub Area Name: Not reported
Completed Document Type: Not reported
Completed Date: Not reported
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

LUST:
Name: NAPP SYSTEMS *
Address: 360 PACIFIC ST S
City,State,Zip: SAN MARCOS, CA 92069
Lead Agency: SAN DIEGO RWQCB (REGION 9)
Case Type: LUST Cleanup Site
Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0607302457

MACDERMID PRINTING SOLUTIONS (Continued) **1000344725**

Global Id: T0607302457
Latitude: 33.1398442
Longitude: -117.1983676
Status: Completed - Case Closed
Status Date: 02/29/1996
Case Worker: VRR
RB Case Number: 9UT369
Local Agency: Not reported
File Location: Not reported
Local Case Number: H06217-001
Potential Media Affect: Aquifer used for drinking water supply
Potential Contaminants of Concern: * Solvents
Site History: Not reported

LUST:
Global Id: T0607302457
Contact Type: Regional Board Caseworker
Contact Name: VICENTE R. RODRIGUEZ
Organization Name: SAN DIEGO RWQCB (REGION 9)
Address: 2375 NORTHSIDE DRIVE, SUITE 100
City: SAN DIEGO
Email: vicente.rodriguez@waterboards.ca.gov
Phone Number: 6195213966

LUST:
Global Id: T0607302457
Action Type: Other
Date: 01/22/1985
Action: Leak Discovery

Global Id: T0607302457
Action Type: Other
Date: 01/18/1985
Action: Leak Stopped

Global Id: T0607302457
Action Type: Other
Date: 01/22/1985
Action: Leak Reported

Global Id: T0607302457
Action Type: ENFORCEMENT
Date: 07/19/1985
Action: * Historical Enforcement

LUST:
Global Id: T0607302457
Status: Open - Case Begin Date
Status Date: 01/18/1985

Global Id: T0607302457
Status: Open - Remediation
Status Date: 11/16/1987

Global Id: T0607302457
Status: Completed - Case Closed
Status Date: 02/29/1996

MACDERMID PRINTING SOLUTIONS (Continued) **1000344725**

LUST REG 9:

Region:	9
Status:	Case Closed
Case Number:	9UT369
Local Case:	H06217-001
Substance:	Solvents
Qty Leaked:	Not reported
Abate Method:	ETFP
Local Agency:	San Diego
How Found:	Other Means
How Stopped:	Remove Contents
Source:	Tank
Cause:	Structure Failure
Lead Agency:	Regional Board
Case Type:	Aquifer affected
Date Found:	01/22/1985
Date Stopped:	01/18/1985
Confirm Date:	/ /
Submit Workplan:	Not reported
Prelim Assess:	/ /
Desc Pollution:	Not reported
Remed Plan:	/ /
Remed Action:	11/16/87
Began Monitor:	Not reported
Release Date:	01/22/1985
Enforce Date:	7/19/85
Closed Date:	2/29/96
Enforce Type:	Cleanup and Abatement Orders
Pilot Program:	UST
Basin Number:	904.52
GW Depth:	5’
Beneficial Use:	Municipal groundwater use
NPDES Number:	Not reported
Priority:	1A
File Dispn:	Not reported
Interim Remedial Actions:	Yes
Cleanup and Abatement order Number:	85-70
Waste Discharge Requirement Number:	Not reported

SWEEPS UST:

Name:	NAPP SYSTEMS INC
Address:	360 PACIFIC ST
City:	SAN MARCOS
Status:	Active
Comp Number:	6217
Number:	9
Board Of Equalization:	44-022350
Referral Date:	Not reported
Action Date:	06-26-92
Created Date:	02-29-88
Owner Tank Id:	Not reported
SWRCB Tank Id:	37-000-006217-000004
Tank Status:	A
Capacity:	24000
Active Date:	Not reported
Tank Use:	CHEMICAL

MACDERMID PRINTING SOLUTIONS (Continued) **1000344725**

STG: W
Content: Not reported
Number Of Tanks: 5

Name: NAPP SYSTEMS INC
Address: 360 PACIFIC ST
City: SAN MARCOS
Status: Active
Comp Number: 6217
Number: 9
Board Of Equalization: 44-022350
Referral Date: Not reported
Action Date: 06-26-92
Created Date: 02-29-88
Owner Tank Id: Not reported
SWRCB Tank Id: 37-000-006217-000005
Tank Status: A
Capacity: 1000
Active Date: Not reported
Tank Use: CHEMICAL
STG: P
Content: Not reported
Number Of Tanks: Not reported

Name: NAPP SYSTEMS INC
Address: 360 PACIFIC ST
City: SAN MARCOS
Status: Active
Comp Number: 6217
Number: 9
Board Of Equalization: 44-022350
Referral Date: Not reported
Action Date: 06-26-92
Created Date: 02-29-88
Owner Tank Id: Not reported
SWRCB Tank Id: 37-000-006217-000007
Tank Status: A
Capacity: 55
Active Date: Not reported
Tank Use: CHEMICAL
STG: W
Content: Not reported
Number Of Tanks: Not reported

Name: NAPP SYSTEMS INC
Address: 360 PACIFIC ST
City: SAN MARCOS
Status: Active
Comp Number: 6217
Number: 9
Board Of Equalization: 44-022350
Referral Date: Not reported
Action Date: 06-26-92
Created Date: 02-29-88
Owner Tank Id: Not reported
SWRCB Tank Id: 37-000-006217-000008
Tank Status: A

MACDERMID PRINTING SOLUTIONS (Continued) **1000344725**

Capacity: 2000
Active Date: Not reported
Tank Use: CHEMICAL
STG: W
Content: Not reported
Number Of Tanks: Not reported

Name: NAPP SYSTEMS INC
Address: 360 PACIFIC ST
City: SAN MARCOS
Status: Active
Comp Number: 6217
Number: 9
Board Of Equalization: 44-022350
Referral Date: Not reported
Action Date: 06-26-92
Created Date: 02-29-88
Owner Tank Id: Not reported
SWRCB Tank Id: 37-000-006217-000009
Tank Status: A
Capacity: 20000
Active Date: Not reported
Tank Use: M.V. FUEL
STG: P
Content: OTHER
Number Of Tanks: Not reported

Name: NAPP SYSTEMS INC
Address: 360 PACIFIC ST
City: SAN MARCOS
Status: Not reported
Comp Number: 6217
Number: Not reported
Board Of Equalization: 44-022350
Referral Date: Not reported
Action Date: Not reported
Created Date: Not reported
Owner Tank Id: Not reported
SWRCB Tank Id: 37-000-006217-000001
Tank Status: Not reported
Capacity: 12000
Active Date: Not reported
Tank Use: M.V. FUEL
STG: PRODUCT
Content: OTHER
Number Of Tanks: 4

Name: NAPP SYSTEMS INC
Address: 360 PACIFIC ST
City: SAN MARCOS
Status: Not reported
Comp Number: 6217
Number: Not reported
Board Of Equalization: 44-022350
Referral Date: Not reported
Action Date: Not reported
Created Date: Not reported

MACDERMID PRINTING SOLUTIONS (Continued) **1000344725**

Owner Tank Id: Not reported
SWRCB Tank Id: 37-000-006217-000002
Tank Status: Not reported
Capacity: 30000
Active Date: Not reported
Tank Use: M.V. FUEL
STG: PRODUCT
Content: OTHER
Number Of Tanks: Not reported

Name: NAPP SYSTEMS INC
Address: 360 PACIFIC ST
City: SAN MARCOS
Status: Not reported
Comp Number: 6217
Number: Not reported
Board Of Equalization: 44-022350
Referral Date: Not reported
Action Date: Not reported
Created Date: Not reported
Owner Tank Id: Not reported
SWRCB Tank Id: 37-000-006217-000003
Tank Status: Not reported
Capacity: 12000
Active Date: Not reported
Tank Use: CHEMICAL
STG: WASTE
Content: Not reported
Number Of Tanks: Not reported

Name: NAPP SYSTEMS INC
Address: 360 PACIFIC ST
City: SAN MARCOS
Status: Not reported
Comp Number: 6217
Number: Not reported
Board Of Equalization: 44-022350
Referral Date: Not reported
Action Date: Not reported
Created Date: Not reported
Owner Tank Id: Not reported
SWRCB Tank Id: 37-000-006217-000006
Tank Status: Not reported
Capacity: 1000
Active Date: Not reported
Tank Use: CHEMICAL
STG: WASTE
Content: Not reported
Number Of Tanks: Not reported

HIST UST:
Name: NAPP SYSTEMS (USA) INC
Address: 360 S PACIFIC STREET
City,State,Zip: SAN MARCOS, CA 92069
File Number: 0002F087
URL: http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0002F087.pdf
Region: STATE

MACDERMID PRINTING SOLUTIONS (Continued) **1000344725**

Facility ID:	00000019396
Facility Type:	Other
Other Type:	MANUFACTURING
Contact Name:	AUGUST FISCHER, PRES.
Telephone:	6197444387
Owner Name:	NAPP SYSTEMS (USA), INC.
Owner Address:	360 S. PACIFIC STREET
Owner City,St,Zip:	SAN MARCOS, CA 92069
Total Tanks:	0008
Tank Num:	001
Container Num:	001
Year Installed:	1973
Tank Capacity:	00012000
Tank Used for:	PRODUCT
Type of Fuel:	DIESEL
Container Construction Thickness:	.240
Leak Detection:	Stock Inventor
Tank Num:	002
Container Num:	002
Year Installed:	1975
Tank Capacity:	00030000
Tank Used for:	PRODUCT
Type of Fuel:	DIESEL
Container Construction Thickness:	.36522
Leak Detection:	Stock Inventor
Tank Num:	003
Container Num:	003
Year Installed:	1973
Tank Capacity:	00012000
Tank Used for:	WASTE
Type of Fuel:	Not reported
Container Construction Thickness:	Not reported
Leak Detection:	None
Tank Num:	004
Container Num:	004
Year Installed:	1973
Tank Capacity:	00024000
Tank Used for:	WASTE
Type of Fuel:	Not reported
Container Construction Thickness:	1/4
Leak Detection:	None
Tank Num:	005
Container Num:	005
Year Installed:	1983
Tank Capacity:	00001000
Tank Used for:	Not reported
Type of Fuel:	Not reported
Container Construction Thickness:	3/16
Leak Detection:	None
Tank Num:	006
Container Num:	006

MACDERMID PRINTING SOLUTIONS (Continued) **1000344725**

Year Installed:	1982
Tank Capacity:	00001000
Tank Used for:	WASTE
Type of Fuel:	Not reported
Container Construction Thickness:	3/16
Leak Detection:	None

Tank Num:	007
Container Num:	007
Year Installed:	1973
Tank Capacity:	00000055
Tank Used for:	WASTE
Type of Fuel:	Not reported
Container Construction Thickness:	4
Leak Detection:	Visual

Tank Num:	008
Container Num:	008
Year Installed:	Not reported
Tank Capacity:	00002000
Tank Used for:	WASTE
Type of Fuel:	Not reported
Container Construction Thickness:	8
Leak Detection:	None

Click here for Geo Tracker PDF:

CORTESE:

Name:	NAPP SYSTEMS *
Address:	360 PACIFIC ST S
City,State,Zip:	SAN MARCOS, CA 92069
Region:	CORTESE
Envirostor Id:	Not reported
Global ID:	T0607302457
Site/Facility Type:	LUST CLEANUP SITE
Cleanup Status:	COMPLETED - CASE CLOSED
Status Date:	Not reported
Site Code:	Not reported
Latitude:	Not reported
Longitude:	Not reported
Owner:	Not reported
Enf Type:	Not reported
Swat R:	Not reported
Flag:	active
Order No:	Not reported
Waste Discharge System No:	Not reported
Effective Date:	Not reported
Region 2:	Not reported
WID Id:	Not reported
Solid Waste Id No:	Not reported
Waste Management Uit Name:	Not reported
File Name:	Active Open

ENF:

Name:	NAPP SYSTEMS
Address:	360 PACIFIC AVE S

MACDERMID PRINTING SOLUTIONS (Continued) **1000344725**

City,State,Zip:	SAN MARCOS, CA
Region:	9
Facility Id:	243864
Agency Name:	Napp Systems
Place Type:	Facility
Place Subtype:	Not reported
Facility Type:	All other facilities
Agency Type:	Privately-Owned Business
# Of Agencies:	1
Place Latitude:	Not reported
Place Longitude:	Not reported
SIC Code 1:	5111
SIC Desc 1:	Printing and Writing Paper
SIC Code 2:	Not reported
SIC Desc 2:	Not reported
SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	Not reported
NAICS Desc 1:	Not reported
NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Reg Meas
Design Flow:	Not reported
Threat To Water Quality:	Not reported
Complexity:	Not reported
Pretreatment:	Not reported
Facility Waste Type:	Not reported
Facility Waste Type 2:	Not reported
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	Not reported
Program Category1:	Not reported
Program Category2:	UNREGS
# Of Programs:	Not reported
WDID:	9 000211N87
Reg Measure Id:	160984
Reg Measure Type:	Unregulated
Region:	9
Order #:	Not reported
Npdes# CA#:	Not reported
Major-Minor:	Not reported
Npdes Type:	Not reported
Reclamation:	Not reported
Dredge Fill Fee:	Not reported
301H:	Not reported
Application Fee Amt Received:	Not reported
Status:	Historical
Status Date:	06/17/2005
Effective Date:	Not reported
Expiration/Review Date:	Not reported
Termination Date:	Not reported
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported

MACDERMID PRINTING SOLUTIONS (Continued) **1000344725**

WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	N
Individual/General:	Not reported
Fee Code:	Not reported
Direction/Voice:	Passive
Enforcement Id(EID):	220633
Region:	9
Order / Resolution Number:	LT851202
Enforcement Action Type:	Clean-up and Abatement Order
Effective Date:	12/02/1985
Adoption/Issuance Date:	Not reported
Achieve Date:	Not reported
Termination Date:	Not reported
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Historical
Title:	Enforcement - 9 000211N87
Description:	UNKNOWN
Program:	ENFCAO
Latest Milestone Completion Date:	Not reported
# Of Programs1:	1
Total Assessment Amount:	0
Initial Assessed Amount:	0
Liability $ Amount:	0
Project $ Amount:	0
Liability $ Paid:	0
Project $ Completed:	0
Total $ Paid/Completed Amount:	0

Name:	NAPP SYSTEMS
Address:	360 PACIFIC AVE S
City,State,Zip:	SAN MARCOS, CA
Region:	9
Facility Id:	243864
Agency Name:	Napp Systems
Place Type:	Facility
Place Subtype:	Not reported
Facility Type:	All other facilities
Agency Type:	Privately-Owned Business
# Of Agencies:	1
Place Latitude:	Not reported
Place Longitude:	Not reported
SIC Code 1:	5111
SIC Desc 1:	Printing and Writing Paper
SIC Code 2:	Not reported
SIC Desc 2:	Not reported
SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	Not reported
NAICS Desc 1:	Not reported
NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1

MACDERMID PRINTING SOLUTIONS (Continued) **1000344725**

Source Of Facility:	Reg Meas
Design Flow:	Not reported
Threat To Water Quality:	Not reported
Complexity:	Not reported
Pretreatment:	Not reported
Facility Waste Type:	Not reported
Facility Waste Type 2:	Not reported
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	Not reported
Program Category1:	Not reported
Program Category2:	UNREGS
# Of Programs:	Not reported
WDID:	9 000211N87
Reg Measure Id:	160984
Reg Measure Type:	Unregulated
Region:	9
Order #:	Not reported
Npdes# CA#:	Not reported
Major-Minor:	Not reported
Npdes Type:	Not reported
Reclamation:	Not reported
Dredge Fill Fee:	Not reported
301H:	Not reported
Application Fee Amt Received:	Not reported
Status:	Historical
Status Date:	06/17/2005
Effective Date:	Not reported
Expiration/Review Date:	Not reported
Termination Date:	Not reported
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	N
Individual/General:	Not reported
Fee Code:	Not reported
Direction/Voice:	Passive
Enforcement Id(EID):	220632
Region:	9
Order / Resolution Number:	96-023
Enforcement Action Type:	Clean-up and Abatement Order
Effective Date:	03/14/1996
Adoption/Issuance Date:	Not reported
Achieve Date:	Not reported
Termination Date:	Not reported
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Historical
Title:	Enforcement - 9 000211N87
Description:	UNKNOWN
Program:	ENFCAO
Latest Milestone Completion Date:	Not reported
# Of Programs1:	1
Total Assessment Amount:	0

MACDERMID PRINTING SOLUTIONS (Continued) **1000344725**

Initial Assessed Amount:	0
Liability $ Amount:	0
Project $ Amount:	0
Liability $ Paid:	0
Project $ Completed:	0
Total $ Paid/Completed Amount:	0

HIST CORTESE:

edr_fname:	NAPP SYSTEMS
edr_fadd1:	360 PACIFIC
City,State,Zip:	SAN MARCOS, CA 92069
Region:	CORTESE
Facility County Code:	37
Reg By:	LTNKA
Reg Id:	9UT369

WDS:

Name:	MACDERMID PRINTING SOLUTIONS
Address:	260 S Pacific St
City:	SAN MARCOS
Facility ID:	San Diego 37I017442
Facility Type:	Industrial - Facility that treats and/or disposes of liquid or semisolid wastes from any servicing, producing, manufacturing or processing operation of whatever nature, including mining, gravel washing, geothermal operations, air conditioning, ship building and repairing, oil production, storage and disposal operations, water pumping.
Facility Status:	Active - Any facility with a continuous or seasonal discharge that is under Waste Discharge Requirements.
NPDES Number:	CAS000001 The 1st 2 characters designate the state. The remaining 7 are assigned by the Regional Board
Subregion:	9
Facility Telephone:	7605106136
Facility Contact:	BEAS RICARDO
Agency Name:	MACDERMID PRINTING SOLUTIONS
Agency Address:	260 S Pacific St
Agency City,St,Zip:	San Marcos 920692430
Agency Contact:	BEAS RICARDO
Agency Telephone:	7605106136
Agency Type:	Private
SIC Code:	0
SIC Code 2:	Not reported
Primary Waste Type:	Not reported
Primary Waste:	Not reported
Waste Type2:	Not reported
Waste2:	Not reported
Primary Waste Type:	Not reported
Secondary Waste:	Not reported
Secondary Waste Type:	Not reported
Design Flow:	0
Baseline Flow:	0
Reclamation:	Not reported
POTW:	Not reported
Treat To Water:	Minor Threat to Water Quality. A violation of a regional board order should cause a relatively minor impairment of beneficial uses compared to a major or minor threat. Not: All nurds without a TTWQ will be

MACDERMID PRINTING SOLUTIONS (Continued) **1000344725**

considered a minor threat to water quality unless coded at a higher Level. A Zero (0) may be used to code those NURDS that are found to represent no threat to water quality.

Complexity: Category C - Facilities having no waste treatment systems, such as cooling water dischargers or thosewho must comply through best management practices, facilities with passive waste treatment and disposal systems, such as septic systems with subsurface disposal, or dischargers having waste storage systems with land disposal such as dairy waste ponds.

CERS:
- Name: NAPP SYSTEMS *
- Address: 360 PACIFIC ST S
- City,State,Zip: SAN MARCOS, CA 92069
- Site ID: 240786
- CERS ID: T0607302457
- CERS Description: Leaking Underground Storage Tank Cleanup Site

Affiliation:
- Affiliation Type Desc: Regional Board Caseworker
- Entity Name: VICENTE R. RODRIGUEZ - SAN DIEGO RWQCB (REGION 9)
- Entity Title: Not reported
- Affiliation Address: 2375 NORTHSIDE DRIVE, SUITE 100
- Affiliation City: SAN DIEGO
- Affiliation State: CA
- Affiliation Country: Not reported
- Affiliation Zip: Not reported
- Affiliation Phone: 6195213966

95
SE
1/2-1
0.832 mi.
4395 ft.

SAN MARCOS CAL STATE UNIVERSITY CAMPUS **ENVIROSTOR** **S101481952**
800 WEST VALLECITOS BOULEVARD **N/A**
SAN MARCOS, CA 92069

Relative:
Lower

Actual:
557 ft.

ENVIROSTOR:
- Name: SAN MARCOS CAL STATE UNIVERSITY CAMPUS
- Address: 800 WEST VALLECITOS BOULEVARD
- City,State,Zip: SAN MARCOS, CA 92069
- Facility ID: 37020001
- Status: Refer: RWQCB
- Status Date: 03/27/1995
- Site Code: 400480
- Site Type: Historical
- Site Type Detailed: * Historical
- Acres: 0
- NPL: NO
- Regulatory Agencies: NONE SPECIFIED
- Lead Agency: NONE SPECIFIED
- Program Manager: Not reported
- Supervisor: * Mmonroy
- Division Branch: Southern California Schools & Brownfields Outreach
- Assembly: Not reported
- Senate: Not reported
- Special Program: Not reported
- Restricted Use: NO
- Site Mgmt Req: NONE SPECIFIED

SAN MARCOS CAL STATE UNIVERSITY CAMPUS (Continued) **S101481952**

Funding: Not reported
Latitude: 33.14013
Longitude: -117.1797
APN: NONE SPECIFIED
Past Use: NONE SPECIFIED
Potential COC: NONE SPECIFIED
Confirmed COC: NONE SPECIFIED
Potential Description: NONE SPECIFIED
Alias Name: C S U SAN MARCOS
Alias Type: Alternate Name
Alias Name: CALIFORNIA STATE UNIVERSITY, SAN MARCOS
Alias Type: Alternate Name
Alias Name: SAN MARCOS STATE UNIVERSITY
Alias Type: Alternate Name
Alias Name: 400480
Alias Type: Project Code (Site Code)
Alias Name: 37020001
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 07/08/1991
Comments: Meeting was held between CSU San Marcos & DHS TSCP. PEA guidance given. Letter from Ted Binkley of CSU asking for DHS/TSCP oversight of a PEA (10/9/90). PEA volume one submitted on 10/16/90. Letter dated 12/18/90 from DHS/TSCP to CSU San Marcos stating findings: Need for Deed Restriction and second PEA to cover entire campus. Letter to CSU San Marcos referring lead agency status to San Diego RWQCB (03/04/91). Site was once a poultry farm.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Screening
Completed Date: 03/27/1995
Comments: NFA for DTSC due to RWQCB involvement.

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

96
South
1/2-1
0.888 mi.
4688 ft.

NO. CO. HEALTH SVCS. SAN MARCOS LOT **ENVIROSTOR** **S118756864**
BOARDWALK & PARK PLACE **N/A**
SAN MARCOS, CA 92069

Relative:
Lower

Actual:
538 ft.

ENVIROSTOR:
Name: NO. CO. HEALTH SVCS. SAN MARCOS LOT
Address: BOARDWALK & PARK PLACE
City,State,Zip: SAN MARCOS, CA 92069

NO. CO. HEALTH SVCS. SAN MARCOS LOT (Continued) **S118756864**

Facility ID:	37800068
Status:	No Action Required
Status Date:	08/30/1995
Site Code:	400524
Site Type:	Calmortgage
Site Type Detailed:	Calmortgage
Acres:	0
NPL:	NO
Regulatory Agencies:	SMBRP
Lead Agency:	SMBRP
Program Manager:	Not reported
Supervisor:	William Beckman
Division Branch:	Cleanup Sacramento
Assembly:	75
Senate:	38
Special Program:	Not reported
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	CalMortgage
Latitude:	33.13611
Longitude:	-117.1872
APN:	NONE SPECIFIED
Past Use:	NONE
Potential COC:	NONE SPECIFIED No Contaminants found
Confirmed COC:	No Contaminants found
Potential Description:	NMA
Alias Name:	400524
Alias Type:	Project Code (Site Code)
Alias Name:	37800068
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Phase 1
Completed Date:	08/30/1995
Comments:	Pursuant to the MOU, DTSC has prepared a Phase I Environmental Assessment for the North County Health Services (NCHS). The subject properties are vacant, undeveloped lots owned by NCHS which are located in the city of San Marcos. No development of the lots is being proposed at this time. A Phase I Report was prepared by DTSC and concluded that no action was needed for this property; there is no contamination on the property.
Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

97
ESE
1/2-1
0.937 mi.
4945 ft.

SAN MARCOS UNIFIED SD-PROPOSED SCHOOL SITE
SOUTHWEST CORNER OF WEST MISSION AND KNOLL ROADS
SAN MARCOS, CA 92069

ENVIROSTOR
SCH

S121475159
N/A

Relative:
Higher

Actual:
586 ft.

ENVIROSTOR:

Name:	SAN MARCOS UNIFIED SD-PROPOSED SCHOOL SITE
Address:	SOUTHWEST CORNER OF WEST MISSION AND KNOLL ROADS
City,State,Zip:	SAN MARCOS, CA 92069
Facility ID:	60002596
Status:	No Further Action
Status Date:	04/25/2018
Site Code:	404946
Site Type:	School Investigation
Site Type Detailed:	School
Acres:	34
NPL:	NO
Regulatory Agencies:	SMBRP
Lead Agency:	SMBRP
Program Manager:	Not reported
Supervisor:	Shahir Haddad
Division Branch:	Southern California Schools & Brownfields Outreach
Assembly:	, 75
Senate:	, 38
Special Program:	Not reported
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	School District
Latitude:	33.14476
Longitude:	-117.1746
APN:	220-022-06
Past Use:	NONE
Potential COC:	NONE SPECIFIED No Contaminants found
Confirmed COC:	No Contaminants found
Potential Description:	NMA
Alias Name:	220-022-06
Alias Type:	APN
Alias Name:	404946
Alias Type:	Project Code (Site Code)
Alias Name:	60002596
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Environmental Oversight Agreement Application
Completed Date:	01/08/2018
Comments:	District submitted EOP Application, Phase I ESA and Ltd Soil Sampling & Analysis Report. A $1500 check was included with the application. District was contacted and thru its consultant, Dave Brown-Tetra Tech, $1500 is to be used towards the EOA advance payment.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Preliminary Endangerment Assessment Report
Completed Date:	04/20/2018
Comments:	DTSC approved the PEA with a No Further Action determination
Completed Area Name:	PROJECT WIDE

SAN MARCOS UNIFIED SD-PROPOSED SCHOOL SITE (Continued) **S121475159**

Completed Sub Area Name: Not reported
Completed Document Type: Environmental Oversight Agreement
Completed Date: 01/25/2018
Comments: An original fully executed EOA sent to District.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 01/18/2018
Comments: FY 17/18 Cost Estimate included in the fully executed EOA; see EOA.

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

SCH:

Name: SAN MARCOS UNIFIED SD-PROPOSED SCHOOL SITE
Address: SOUTHWEST CORNER OF WEST MISSION AND KNOLL ROADS
City,State,Zip: SAN MARCOS, CA 92069
Facility ID: 60002596
Site Type: School Investigation
Site Type Detail: School
Site Mgmt. Req.: NONE SPECIFIED
Acres: 34
National Priorities List: NO
Cleanup Oversight Agencies: SMBRP
Lead Agency: SMBRP
Lead Agency Description: DTSC - Site Cleanup Program
Project Manager: Not reported
Supervisor: Shahir Haddad
Division Branch: Southern California Schools & Brownfields Outreach
Site Code: 404946
Assembly: , 75
Senate: , 38
Special Program Status: Not reported
Status: No Further Action
Status Date: 04/25/2018
Restricted Use: NO
Funding: School District
Latitude: 33.14476
Longitude: -117.1746
APN: 220-022-06
Past Use: NONE
Potential COC: NONE SPECIFIED, No Contaminants found
Confirmed COC: No Contaminants found
Potential Description: NMA
Alias Name: 220-022-06
Alias Type: APN
Alias Name: 404946
Alias Type: Project Code (Site Code)

SAN MARCOS UNIFIED SD-PROPOSED SCHOOL SITE (Continued) **S121475159**

Alias Name: 60002596
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Environmental Oversight Agreement Application
Completed Date: 01/08/2018
Comments: District submitted EOP Application, Phase I ESA and Ltd Soil Sampling & Analysis Report. A $1500 check was included with the application. District was contacted and thru its consultant, Dave Brown-Tetra Tech, $1500 is to be used towards the EOA advance payment.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 04/20/2018
Comments: DTSC approved the PEA with a No Further Action determination

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Environmental Oversight Agreement
Completed Date: 01/25/2018
Comments: An original fully executed EOA sent to District.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 01/18/2018
Comments: FY 17/18 Cost Estimate included in the fully executed EOA; see EOA.

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

98
SSE
1/2-1
0.977 mi.
5160 ft.

CRIBBAGE LANE & SAN MARCOS BL. **Notify 65** **S100178376**
N/A

SAN MARCOS, CA

Relative:
Lower

Actual:
541 ft.

NOTIFY 65:
Name: CRIBBAGE LANE & SAN MARCOS BL.
Address: Not reported
City,State,Zip: SAN MARCOS, CA
Date Reported: Not reported
Staff Initials: Not reported
Board File Number: Not reported
Facility Type: Not reported
Discharge Date: Not reported
Issue Date: Not reported
Incident Description: Not reported

CRIBBAGE LANE & SAN MARCOS BL. (Continued) **S100178376**

Global ID: Not reported
Status: Not reported

Count: 2 records. ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
SAN MARCOS	S106797672	EVANS DEDICATED SYSTEMS	HIGHWAY 78 AND SAN MARCOS BLVD	92069	ENVIROSTOR
SAN MARCOS	S127085279	K-TECH MACHINE INC.	1370, 1377 ARMORLITE DR	92069	CERS HAZ WASTE

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 04/27/2021
Date Data Arrived at EDR: 05/03/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 16

Source: EPA
Telephone: N/A
Last EDR Contact: 06/04/2021
Next Scheduled EDR Contact: 07/12/2021
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 04/27/2021
Date Data Arrived at EDR: 05/03/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 16

Source: EPA
Telephone: N/A
Last EDR Contact: 06/04/2021
Next Scheduled EDR Contact: 07/12/2021
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

Federal Delisted NPL site list

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 04/27/2021
Date Data Arrived at EDR: 05/03/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 16

Source: EPA
Telephone: N/A
Last EDR Contact: 06/04/2021
Next Scheduled EDR Contact: 07/12/2021
Data Release Frequency: Quarterly

Federal CERCLIS list

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 04/03/2019
Date Data Arrived at EDR: 04/05/2019
Date Made Active in Reports: 05/14/2019
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 03/30/2021
Next Scheduled EDR Contact: 07/12/2021
Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 04/27/2021
Date Data Arrived at EDR: 05/03/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 16

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 06/04/2021
Next Scheduled EDR Contact: 07/26/2021
Data Release Frequency: Quarterly

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that. based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 04/27/2021
Date Data Arrived at EDR: 05/03/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 16

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 06/04/2021
Next Scheduled EDR Contact: 07/26/2021
Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 03/22/2021
Date Data Arrived at EDR: 03/23/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 57

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 03/23/2021
Next Scheduled EDR Contact: 07/05/2021
Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 03/22/2021
Date Data Arrived at EDR: 03/23/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 57

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/23/2021
Next Scheduled EDR Contact: 07/05/2021
Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 03/22/2021
Date Data Arrived at EDR: 03/23/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 57

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/23/2021
Next Scheduled EDR Contact: 07/05/2021
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 03/22/2021
Date Data Arrived at EDR: 03/23/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 57

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/23/2021
Next Scheduled EDR Contact: 07/05/2021
Data Release Frequency: Quarterly

RCRA-VSQG: RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Very small quantity generators (VSQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 03/22/2021
Date Data Arrived at EDR: 03/23/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 57

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/23/2021
Next Scheduled EDR Contact: 07/05/2021
Data Release Frequency: Quarterly

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 02/09/2021
Date Data Arrived at EDR: 02/11/2021
Date Made Active in Reports: 03/22/2021
Number of Days to Update: 39

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 05/05/2021
Next Scheduled EDR Contact: 08/23/2021
Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 02/22/2021
Date Data Arrived at EDR: 02/23/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 85

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 05/21/2021
Next Scheduled EDR Contact: 09/06/2021
Data Release Frequency: Varies

US INST CONTROLS: Institutional Controls Sites List

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 02/22/2021
Date Data Arrived at EDR: 02/23/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 85

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 05/21/2021
Next Scheduled EDR Contact: 09/06/2021
Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 12/14/2020
Date Data Arrived at EDR: 12/15/2020
Date Made Active in Reports: 12/22/2020
Number of Days to Update: 7

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 12/15/2020
Next Scheduled EDR Contact: 07/05/2021
Data Release Frequency: Quarterly

State- and tribal - equivalent NPL

RESPONSE: State Response Sites

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 01/25/2021
Date Data Arrived at EDR: 01/26/2021
Date Made Active in Reports: 04/13/2021
Number of Days to Update: 77

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 04/23/2021
Next Scheduled EDR Contact: 08/09/2021
Data Release Frequency: Quarterly

State- and tribal - equivalent CERCLIS

ENVIROSTOR: EnviroStor Database

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Date of Government Version: 01/25/2021
Date Data Arrived at EDR: 01/26/2021
Date Made Active in Reports: 04/13/2021
Number of Days to Update: 77

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 04/23/2021
Next Scheduled EDR Contact: 08/09/2021
Data Release Frequency: Quarterly

State and tribal landfill and/or solid waste disposal site lists

SWF/LF (SWIS): Solid Waste Information System

Active, Closed and Inactive Landfills. SWF/LF records typically contain an inve ntory of solid waste disposal facilities or landfills. These may be active or i nactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 02/08/2021
Date Data Arrived at EDR: 02/09/2021
Date Made Active in Reports: 05/03/2021
Number of Days to Update: 83

Source: Department of Resources Recycling and Recovery
Telephone: 916-341-6320
Last EDR Contact: 05/11/2021
Next Scheduled EDR Contact: 08/23/2021
Data Release Frequency: Quarterly

State and tribal leaking storage tank lists

LUST: Leaking Underground Fuel Tank Report (GEOTRACKER)

Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 03/08/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/30/2021
Number of Days to Update: 21

Source: State Water Resources Control Board
Telephone: see region list
Last EDR Contact: 06/03/2021
Next Scheduled EDR Contact: 09/20/2021
Data Release Frequency: Quarterly

LUST REG 4: Underground Storage Tank Leak List

Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6710
Last EDR Contact: 09/06/2011
Next Scheduled EDR Contact: 12/19/2011
Data Release Frequency: No Update Planned

LUST REG 3: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.

Date of Government Version: 05/19/2003
Date Data Arrived at EDR: 05/19/2003
Date Made Active in Reports: 06/02/2003
Number of Days to Update: 14

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-542-4786
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

LUST REG 2: Fuel Leak List

Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma counties.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-622-2433
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: No Update Planned

LUST REG 1: Active Toxic Site Investigation

Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001
Date Data Arrived at EDR: 02/28/2001
Date Made Active in Reports: 03/29/2001
Number of Days to Update: 29

Source: California Regional Water Quality Control Board North Coast (1)
Telephone: 707-570-3769
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 6V: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Inyo, Kern, Los Angeles, Mono, San Bernardino counties.

Date of Government Version: 06/07/2005
Date Data Arrived at EDR: 06/07/2005
Date Made Active in Reports: 06/29/2005
Number of Days to Update: 22

Source: California Regional Water Quality Control Board Victorville Branch Office (6)
Telephone: 760-241-7365
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 6L: Leaking Underground Storage Tank Case Listing

For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/2003
Date Data Arrived at EDR: 09/10/2003
Date Made Active in Reports: 10/07/2003
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Lahontan Region (6)
Telephone: 530-542-5572
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 7: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Imperial, Riverside, San Diego, Santa Barbara counties.

Date of Government Version: 02/26/2004
Date Data Arrived at EDR: 02/26/2004
Date Made Active in Reports: 03/24/2004
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Telephone: 760-776-8943
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 8: Leaking Underground Storage Tanks

California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/2005
Date Data Arrived at EDR: 02/15/2005
Date Made Active in Reports: 03/28/2005
Number of Days to Update: 41

Source: California Regional Water Quality Control Board Santa Ana Region (8)
Telephone: 909-782-4496
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

LUST REG 9: Leaking Underground Storage Tank Report

Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001
Date Data Arrived at EDR: 04/23/2001
Date Made Active in Reports: 05/21/2001
Number of Days to Update: 28

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-637-5595
Last EDR Contact: 09/26/2011
Next Scheduled EDR Contact: 01/09/2012
Data Release Frequency: No Update Planned

LUST REG 5: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.

Date of Government Version: 07/01/2008
Date Data Arrived at EDR: 07/22/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 9

Source: California Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-4834
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 11/12/2020
Date Data Arrived at EDR: 12/16/2020
Date Made Active in Reports: 03/12/2021
Number of Days to Update: 86

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 04/23/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Varies

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land

Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 10/07/2020
Date Data Arrived at EDR: 12/16/2020
Date Made Active in Reports: 03/12/2021
Number of Days to Update: 86

Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 04/23/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Varies

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 10/01/2020
Date Data Arrived at EDR: 12/16/2020
Date Made Active in Reports: 03/12/2021
Number of Days to Update: 86

Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 04/23/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 10/09/2020
Date Data Arrived at EDR: 12/16/2020
Date Made Active in Reports: 03/12/2021
Number of Days to Update: 86

Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 04/23/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 09/30/2020
Date Data Arrived at EDR: 12/22/2020
Date Made Active in Reports: 03/12/2021
Number of Days to Update: 80

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 04/23/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 10/02/2020
Date Data Arrived at EDR: 12/18/2020
Date Made Active in Reports: 03/12/2021
Number of Days to Update: 84

Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 04/23/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Varies

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 10/01/2020
Date Data Arrived at EDR: 12/16/2020
Date Made Active in Reports: 03/12/2021
Number of Days to Update: 86

Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 04/23/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 04/08/2020
Date Data Arrived at EDR: 05/20/2020
Date Made Active in Reports: 08/12/2020
Number of Days to Update: 84

Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 04/23/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Varies

CPS-SLIC: Statewide SLIC Cases (GEOTRACKER)
Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 03/08/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/30/2021
Number of Days to Update: 21

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/03/2021
Next Scheduled EDR Contact: 09/20/2021
Data Release Frequency: Varies

SLIC REG 1: Active Toxic Site Investigations

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2003
Date Data Arrived at EDR: 04/07/2003
Date Made Active in Reports: 04/25/2003
Number of Days to Update: 18

Source: California Regional Water Quality Control Board, North Coast Region (1)
Telephone: 707-576-2220
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-286-0457
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: No Update Planned

SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/18/2006
Date Data Arrived at EDR: 05/18/2006
Date Made Active in Reports: 06/15/2006
Number of Days to Update: 28

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-549-3147
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/17/2004
Date Data Arrived at EDR: 11/18/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 47

Source: Region Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6600
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/01/2005
Date Data Arrived at EDR: 04/05/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 16

Source: Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-3291
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/24/2005
Date Data Arrived at EDR: 05/25/2005
Date Made Active in Reports: 06/16/2005
Number of Days to Update: 22

Source: Regional Water Quality Control Board, Victorville Branch
Telephone: 619-241-6583
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 6L: SLIC Sites
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board, Lahontan Region
Telephone: 530-542-5574
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 7: SLIC List
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/24/2004
Date Data Arrived at EDR: 11/29/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 36

Source: California Regional Quality Control Board, Colorado River Basin Region
Telephone: 760-346-7491
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2008
Date Data Arrived at EDR: 04/03/2008
Date Made Active in Reports: 04/14/2008
Number of Days to Update: 11

Source: California Region Water Quality Control Board Santa Ana Region (8)
Telephone: 951-782-3298
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/10/2007
Date Data Arrived at EDR: 09/11/2007
Date Made Active in Reports: 09/28/2007
Number of Days to Update: 17

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-467-2980
Last EDR Contact: 08/08/2011
Next Scheduled EDR Contact: 11/21/2011
Data Release Frequency: No Update Planned

State and tribal registered storage tank lists

FEMA UST: Underground Storage Tank Listing
A listing of all FEMA owned underground storage tanks.

Date of Government Version: 01/29/2021
Date Data Arrived at EDR: 02/17/2021
Date Made Active in Reports: 03/22/2021
Number of Days to Update: 33

Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 04/05/2021
Next Scheduled EDR Contact: 07/19/2021
Data Release Frequency: Varies

UST CLOSURE: Proposed Closure of Underground Storage Tank (UST) Cases
UST cases that are being considered for closure by either the State Water Resources Control Board or the Executive Director have been posted for a 60-day public comment period. UST Case Closures being proposed for consideration by the State Water Resources Control Board. These are primarily UST cases that meet closure criteria under the decisional framework in State Water Board Resolution No. 92-49 and other Board orders. UST Case Closures proposed for consideration by the Executive Director pursuant to State Water Board Resolution No. 2012-0061. These are cases that meet the criteria of the Low-Threat UST Case Closure Policy. UST Case Closure Review Denials and Approved Orders.

Date of Government Version: 03/05/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 04/01/2021
Number of Days to Update: 23

Source: State Water Resources Control Board
Telephone: 916-327-7844
Last EDR Contact: 06/04/2021
Next Scheduled EDR Contact: 09/20/2021
Data Release Frequency: Varies

MILITARY UST SITES: Military UST Sites (GEOTRACKER)
Military ust sites

Date of Government Version: 03/08/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/30/2021
Number of Days to Update: 21

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/03/2021
Next Scheduled EDR Contact: 09/20/2021
Data Release Frequency: Varies

UST: Active UST Facilities
Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 03/08/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/31/2021
Number of Days to Update: 22

Source: SWRCB
Telephone: 916-341-5851
Last EDR Contact: 06/03/2021
Next Scheduled EDR Contact: 09/20/2021
Data Release Frequency: Semi-Annually

AST: Aboveground Petroleum Storage Tank Facilities
A listing of aboveground storage tank petroleum storage tank locations.

Date of Government Version: 07/06/2016
Date Data Arrived at EDR: 07/12/2016
Date Made Active in Reports: 09/19/2016
Number of Days to Update: 69

Source: California Environmental Protection Agency
Telephone: 916-327-5092
Last EDR Contact: 03/12/2021
Next Scheduled EDR Contact: 06/28/2021
Data Release Frequency: Varies

INDIAN UST R1: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 10/01/2020
Date Data Arrived at EDR: 12/16/2020
Date Made Active in Reports: 03/12/2021
Number of Days to Update: 86

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 04/23/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 10/02/2020
Date Data Arrived at EDR: 12/18/2020
Date Made Active in Reports: 03/12/2021
Number of Days to Update: 84

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 04/23/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Varies

INDIAN UST R10: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 11/12/2020
Date Data Arrived at EDR: 12/16/2020
Date Made Active in Reports: 03/12/2021
Number of Days to Update: 86

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 04/23/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 04/08/2020
Date Data Arrived at EDR: 05/20/2020
Date Made Active in Reports: 08/12/2020
Number of Days to Update: 84

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 04/23/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 10/09/2020
Date Data Arrived at EDR: 12/16/2020
Date Made Active in Reports: 03/12/2021
Number of Days to Update: 86

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 04/23/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Varies

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 10/01/2020
Date Data Arrived at EDR: 12/16/2020
Date Made Active in Reports: 03/12/2021
Number of Days to Update: 86

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 04/23/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Varies

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 09/30/2020
Date Data Arrived at EDR: 12/22/2020
Date Made Active in Reports: 03/12/2021
Number of Days to Update: 80

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 04/23/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Varies

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 10/07/2020
Date Data Arrived at EDR: 12/16/2020
Date Made Active in Reports: 03/12/2021
Number of Days to Update: 86

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 04/23/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Varies

State and tribal voluntary cleanup sites

INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015
Date Data Arrived at EDR: 09/29/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 142

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 03/22/2021
Next Scheduled EDR Contact: 07/05/2021
Data Release Frequency: Varies

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 04/20/2009
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

VCP: Voluntary Cleanup Program Properties

Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 01/25/2021
Date Data Arrived at EDR: 01/26/2021
Date Made Active in Reports: 04/13/2021
Number of Days to Update: 77

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 04/23/2021
Next Scheduled EDR Contact: 08/09/2021
Data Release Frequency: Quarterly

State and tribal Brownfields sites

BROWNFIELDS: Considered Brownfieds Sites Listing

A listing of sites the SWRCB considers to be Brownfields since these are sites have come to them through the MOA Process.

Date of Government Version: 12/17/2020
Date Data Arrived at EDR: 12/17/2020
Date Made Active in Reports: 03/09/2021
Number of Days to Update: 82

Source: State Water Resources Control Board
Telephone: 916-323-7905
Last EDR Contact: 03/23/2021
Next Scheduled EDR Contact: 07/05/2021
Data Release Frequency: Quarterly

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 12/11/2020
Date Data Arrived at EDR: 12/11/2020
Date Made Active in Reports: 03/02/2021
Number of Days to Update: 81

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 03/16/2021
Next Scheduled EDR Contact: 06/28/2021
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT: Waste Management Unit Database

Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

Date of Government Version: 04/01/2000
Date Data Arrived at EDR: 04/10/2000
Date Made Active in Reports: 05/10/2000
Number of Days to Update: 30

Source: State Water Resources Control Board
Telephone: 916-227-4448
Last EDR Contact: 04/21/2021
Next Scheduled EDR Contact: 08/09/2021
Data Release Frequency: No Update Planned

SWRCY: Recycler Database

A listing of recycling facilities in California.

Date of Government Version: 03/09/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/31/2021
Number of Days to Update: 22

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 06/04/2021
Next Scheduled EDR Contact: 09/20/2021
Data Release Frequency: Quarterly

HAULERS: Registered Waste Tire Haulers Listing

A listing of registered waste tire haulers.

Date of Government Version: 11/23/2020
Date Data Arrived at EDR: 11/23/2020
Date Made Active in Reports: 02/08/2021
Number of Days to Update: 77

Source: Integrated Waste Management Board
Telephone: 916-341-6422
Last EDR Contact: 05/18/2021
Next Scheduled EDR Contact: 08/23/2021
Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 04/22/2021
Next Scheduled EDR Contact: 08/09/2021
Data Release Frequency: Varies

ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 04/14/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: No Update Planned

IHS OPEN DUMPS: Open Dumps on Indian Land

A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014
Date Data Arrived at EDR: 08/06/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 176

Source: Department of Health & Human Serivces, Indian Health Service
Telephone: 301-443-1452
Last EDR Contact: 04/29/2021
Next Scheduled EDR Contact: 08/09/2021
Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 12/07/2020
Date Data Arrived at EDR: 12/09/2020
Date Made Active in Reports: 03/02/2021
Number of Days to Update: 83

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 05/22/2021
Next Scheduled EDR Contact: 09/06/2021
Data Release Frequency: No Update Planned

HIST CAL-SITES: Calsites Database

The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

Date of Government Version: 08/08/2005
Date Data Arrived at EDR: 08/03/2006
Date Made Active in Reports: 08/24/2006
Number of Days to Update: 21

Source: Department of Toxic Substance Control
Telephone: 916-323-3400
Last EDR Contact: 02/23/2009
Next Scheduled EDR Contact: 05/25/2009
Data Release Frequency: No Update Planned

SCH: School Property Evaluation Program

This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 01/25/2021
Date Data Arrived at EDR: 01/26/2021
Date Made Active in Reports: 04/13/2021
Number of Days to Update: 77

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 04/23/2021
Next Scheduled EDR Contact: 08/09/2021
Data Release Frequency: Quarterly

CDL: Clandestine Drug Labs

A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 12/31/2019
Date Data Arrived at EDR: 01/20/2021
Date Made Active in Reports: 04/08/2021
Number of Days to Update: 78

Source: Department of Toxic Substances Control
Telephone: 916-255-6504
Last EDR Contact: 04/14/2021
Next Scheduled EDR Contact: 07/19/2021
Data Release Frequency: Varies

TOXIC PITS: Toxic Pits Cleanup Act Sites

Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/1995
Date Data Arrived at EDR: 08/30/1995
Date Made Active in Reports: 09/26/1995
Number of Days to Update: 27

Source: State Water Resources Control Board
Telephone: 916-227-4364
Last EDR Contact: 01/26/2009
Next Scheduled EDR Contact: 04/27/2009
Data Release Frequency: No Update Planned

CERS HAZ WASTE: CERS HAZ WASTE

List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, and RCRA LQ HW Generator programs.

Date of Government Version: 01/20/2021
Date Data Arrived at EDR: 01/20/2021
Date Made Active in Reports: 04/08/2021
Number of Days to Update: 78

Source: CalEPA
Telephone: 916-323-2514
Last EDR Contact: 04/20/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Quarterly

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 12/07/2020
Date Data Arrived at EDR: 12/09/2020
Date Made Active in Reports: 03/02/2021
Number of Days to Update: 83

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 05/18/2021
Next Scheduled EDR Contact: 09/06/2021
Data Release Frequency: Quarterly

PFAS: PFAS Contamination Site Location Listing

A listing of PFAS contaminated sites included in the GeoTracker database.

Date of Government Version: 02/24/2021
Date Data Arrived at EDR: 02/24/2021
Date Made Active in Reports: 05/14/2021
Number of Days to Update: 79

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/04/2021
Next Scheduled EDR Contact: 09/20/2021
Data Release Frequency: Varies

Local Lists of Registered Storage Tanks

SWEEPS UST: SWEEPS UST Listing

Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994
Date Data Arrived at EDR: 07/07/2005
Date Made Active in Reports: 08/11/2005
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/03/2005
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

HIST UST: Hazardous Substance Storage Container Database

The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990
Date Data Arrived at EDR: 01/25/1991
Date Made Active in Reports: 02/12/1991
Number of Days to Update: 18

Source: State Water Resources Control Board
Telephone: 916-341-5851
Last EDR Contact: 07/26/2001
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

SAN FRANCISCO AST: Aboveground Storage Tank Site Listing

Aboveground storage tank sites

Date of Government Version: 02/11/2021
Date Data Arrived at EDR: 02/11/2021
Date Made Active in Reports: 05/05/2021
Number of Days to Update: 83

Source: San Francisco County Department of Public Health
Telephone: 415-252-3896
Last EDR Contact: 04/27/2021
Next Scheduled EDR Contact: 08/16/2021
Data Release Frequency: Varies

CA FID UST: Facility Inventory Database

The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994
Date Data Arrived at EDR: 09/05/1995
Date Made Active in Reports: 09/29/1995
Number of Days to Update: 24

Source: California Environmental Protection Agency
Telephone: 916-341-5851
Last EDR Contact: 12/28/1998
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CERS TANKS: California Environmental Reporting System (CERS) Tanks

List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Aboveground Petroleum Storage and Underground Storage Tank regulatory programs.

Date of Government Version: 01/20/2021
Date Data Arrived at EDR: 01/20/2021
Date Made Active in Reports: 04/08/2021
Number of Days to Update: 78

Source: California Environmental Protection Agency
Telephone: 916-323-2514
Last EDR Contact: 04/20/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Quarterly

Local Land Records

LIENS: Environmental Liens Listing

A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 03/01/2021
Date Data Arrived at EDR: 03/03/2021
Date Made Active in Reports: 05/20/2021
Number of Days to Update: 78

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 05/25/2021
Next Scheduled EDR Contact: 09/13/2021
Data Release Frequency: Varies

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 04/27/2021
Date Data Arrived at EDR: 05/03/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 16

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 06/04/2021
Next Scheduled EDR Contact: 07/12/2021
Data Release Frequency: Semi-Annually

DEED: Deed Restriction Listing

Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 03/02/2021
Date Data Arrived at EDR: 03/03/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 77

Source: DTSC and SWRCB
Telephone: 916-323-3400
Last EDR Contact: 05/28/2021
Next Scheduled EDR Contact: 09/13/2021
Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 12/16/2020
Date Data Arrived at EDR: 12/17/2020
Date Made Active in Reports: 03/12/2021
Number of Days to Update: 85

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 03/24/2021
Next Scheduled EDR Contact: 07/05/2021
Data Release Frequency: Quarterly

CHMIRS: California Hazardous Material Incident Report System

California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 12/31/2020
Date Data Arrived at EDR: 01/20/2021
Date Made Active in Reports: 04/08/2021
Number of Days to Update: 78

Source: Office of Emergency Services
Telephone: 916-845-8400
Last EDR Contact: 04/20/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Semi-Annually

LDS: Land Disposal Sites Listing (GEOTRACKER)

Land Disposal sites (Landfills) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 03/08/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/31/2021
Number of Days to Update: 22

Source: State Water Qualilty Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/03/2021
Next Scheduled EDR Contact: 09/20/2021
Data Release Frequency: Quarterly

MCS: Military Cleanup Sites Listing (GEOTRACKER)

Military sites (consisting of: Military UST sites; Military Privatized sites; and Military Cleanup sites [formerly known as DoD non UST]) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 03/08/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/31/2021
Number of Days to Update: 22

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/03/2021
Next Scheduled EDR Contact: 09/20/2021
Data Release Frequency: Quarterly

SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 06/06/2012
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 02/22/2013
Number of Days to Update: 50

Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 03/22/2021
Date Data Arrived at EDR: 03/23/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 57

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/23/2021
Next Scheduled EDR Contact: 07/05/2021
Data Release Frequency: Quarterly

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 02/11/2021
Date Data Arrived at EDR: 02/17/2021
Date Made Active in Reports: 04/05/2021
Number of Days to Update: 47

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 05/18/2021
Next Scheduled EDR Contact: 08/30/2021
Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 11/10/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 62

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 04/16/2021
Next Scheduled EDR Contact: 07/26/2021
Data Release Frequency: Semi-Annually

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 04/02/2018
Date Data Arrived at EDR: 04/11/2018
Date Made Active in Reports: 11/06/2019
Number of Days to Update: 574

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 04/05/2021
Next Scheduled EDR Contact: 07/19/2021
Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 01/01/2017
Date Data Arrived at EDR: 02/03/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 63

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 05/18/2021
Next Scheduled EDR Contact: 08/23/2021
Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 12/14/2020
Date Data Arrived at EDR: 12/17/2020
Date Made Active in Reports: 03/12/2021
Number of Days to Update: 85

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 03/23/2021
Next Scheduled EDR Contact: 07/05/2021
Data Release Frequency: Quarterly

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 06/17/2014
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 04/30/2021
Next Scheduled EDR Contact: 08/16/2021
Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 09/30/2017
Date Data Arrived at EDR: 05/08/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 73

Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 05/07/2021
Next Scheduled EDR Contact: 08/16/2021
Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 06/17/2020
Date Made Active in Reports: 09/10/2020
Number of Days to Update: 85

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 03/19/2021
Next Scheduled EDR Contact: 06/28/2021
Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 08/14/2020
Date Made Active in Reports: 11/04/2020
Number of Days to Update: 82

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 05/17/2021
Next Scheduled EDR Contact: 08/30/2021
Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 01/20/2021
Date Data Arrived at EDR: 01/21/2021
Date Made Active in Reports: 03/22/2021
Number of Days to Update: 60

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 04/20/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Annually

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 04/27/2021
Date Data Arrived at EDR: 05/03/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 16

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 06/04/2021
Next Scheduled EDR Contact: 09/13/2021
Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 01/22/2021
Date Data Arrived at EDR: 02/18/2021
Date Made Active in Reports: 05/11/2021
Number of Days to Update: 82

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 04/19/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties
A listing of verified Potentially Responsible Parties

Date of Government Version: 12/30/2020
Date Data Arrived at EDR: 01/14/2021
Date Made Active in Reports: 03/05/2021
Number of Days to Update: 50
Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 06/04/2021
Next Scheduled EDR Contact: 08/16/2021
Data Release Frequency: Quarterly

PADS: PCB Activity Database System
PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 11/19/2020
Date Data Arrived at EDR: 01/08/2021
Date Made Active in Reports: 03/22/2021
Number of Days to Update: 73
Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 04/09/2021
Next Scheduled EDR Contact: 07/19/2021
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System
The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016
Date Data Arrived at EDR: 11/23/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 79
Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 03/31/2021
Next Scheduled EDR Contact: 07/19/2021
Data Release Frequency: Quarterly

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25
Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: No Update Planned

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25
Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: No Update Planned

MLTS: Material Licensing Tracking System
MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 03/08/2021
Date Data Arrived at EDR: 03/11/2021
Date Made Active in Reports: 05/11/2021
Number of Days to Update: 61
Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 04/16/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Quarterly

COAL ASH DOE: Steam-Electric Plant Operation Data
A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2019
Date Data Arrived at EDR: 12/01/2020
Date Made Active in Reports: 02/09/2021
Number of Days to Update: 70
Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 05/27/2021
Next Scheduled EDR Contact: 09/13/2021
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List
A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 01/12/2017
Date Data Arrived at EDR: 03/05/2019
Date Made Active in Reports: 11/11/2019
Number of Days to Update: 251
Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 05/27/2021
Next Scheduled EDR Contact: 09/13/2021
Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database
The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 09/13/2019
Date Data Arrived at EDR: 11/06/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 96
Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 05/07/2021
Next Scheduled EDR Contact: 08/16/2021
Data Release Frequency: Varies

RADINFO: Radiation Information Database
The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 07/01/2019
Date Data Arrived at EDR: 07/01/2019
Date Made Active in Reports: 09/23/2019
Number of Days to Update: 84
Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 03/25/2021
Next Scheduled EDR Contact: 07/12/2021
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing
A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing
A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data

Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 01/02/2020
Date Data Arrived at EDR: 01/28/2020
Date Made Active in Reports: 04/17/2020
Number of Days to Update: 80

Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 04/27/2021
Next Scheduled EDR Contact: 08/09/2021
Data Release Frequency: Quarterly

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 12/31/2020
Date Data Arrived at EDR: 01/13/2021
Date Made Active in Reports: 03/22/2021
Number of Days to Update: 68

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 04/05/2021
Next Scheduled EDR Contact: 07/19/2021
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 06/22/2020
Date Made Active in Reports: 11/20/2020
Number of Days to Update: 151

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 03/23/2021
Next Scheduled EDR Contact: 07/05/2021
Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 07/14/2015
Date Made Active in Reports: 01/10/2017
Number of Days to Update: 546

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 04/06/2021
Next Scheduled EDR Contact: 07/19/2021
Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 08/08/2017
Date Data Arrived at EDR: 09/11/2018
Date Made Active in Reports: 09/14/2018
Number of Days to Update: 3

Source: Department of Energy
Telephone: 202-586-3559
Last EDR Contact: 04/28/2021
Next Scheduled EDR Contact: 08/16/2021
Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 08/30/2019
Date Data Arrived at EDR: 11/15/2019
Date Made Active in Reports: 01/28/2020
Number of Days to Update: 74

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 05/21/2021
Next Scheduled EDR Contact: 08/30/2021
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 04/27/2021
Date Data Arrived at EDR: 05/03/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 16

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 06/04/2021
Next Scheduled EDR Contact: 07/12/2021
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

MINES VIOLATIONS: MSHA Violation Assessment Data

Mines violation and assessment information. Department of Labor, Mine Safety & Health Administration.

Date of Government Version: 11/24/2020
Date Data Arrived at EDR: 11/30/2020
Date Made Active in Reports: 01/25/2021
Number of Days to Update: 56

Source: DOL, Mine Safety & Health Admi
Telephone: 202-693-9424
Last EDR Contact: 05/26/2021
Next Scheduled EDR Contact: 09/13/2021
Data Release Frequency: Quarterly

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 02/01/2021
Date Data Arrived at EDR: 02/24/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 84

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 05/25/2021
Next Scheduled EDR Contact: 09/06/2021
Data Release Frequency: Semi-Annually

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 05/06/2020
Date Data Arrived at EDR: 05/27/2020
Date Made Active in Reports: 08/13/2020
Number of Days to Update: 78

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 05/27/2021
Next Scheduled EDR Contact: 09/06/2021
Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011
Date Data Arrived at EDR: 06/08/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 97

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 05/27/2021
Next Scheduled EDR Contact: 09/06/2021
Data Release Frequency: Varies

ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 12/11/2020
Date Data Arrived at EDR: 12/11/2020
Date Made Active in Reports: 03/02/2021
Number of Days to Update: 81

Source: Department of Interior
Telephone: 202-208-2609
Last EDR Contact: 06/02/2021
Next Scheduled EDR Contact: 09/20/2021
Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 02/03/2021
Date Data Arrived at EDR: 03/03/2021
Date Made Active in Reports: 04/05/2021
Number of Days to Update: 33

Source: EPA
Telephone: (415) 947-8000
Last EDR Contact: 05/18/2021
Next Scheduled EDR Contact: 09/13/2021
Data Release Frequency: Quarterly

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 07/02/2020
Date Made Active in Reports: 09/17/2020
Number of Days to Update: 77

Source: Department of Defense
Telephone: 703-704-1564
Last EDR Contact: 04/13/2021
Next Scheduled EDR Contact: 07/26/2021
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 01/02/2021
Date Data Arrived at EDR: 01/08/2021
Date Made Active in Reports: 03/22/2021
Number of Days to Update: 73

Source: Environmental Protection Agency
Telephone: 202-564-2280
Last EDR Contact: 04/06/2021
Next Scheduled EDR Contact: 07/19/2021
Data Release Frequency: Quarterly

DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 11/03/2020
Date Data Arrived at EDR: 11/17/2020
Date Made Active in Reports: 02/09/2021
Number of Days to Update: 84

Source: Environmental Protection Agency
Telephone: 202-564-0527
Last EDR Contact: 05/21/2021
Next Scheduled EDR Contact: 09/06/2021
Data Release Frequency: Varies

FUELS PROGRAM: EPA Fuels Program Registered Listing

This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 02/17/2021
Date Data Arrived at EDR: 02/17/2021
Date Made Active in Reports: 03/22/2021
Number of Days to Update: 33

Source: EPA
Telephone: 800-385-6164
Last EDR Contact: 05/14/2021
Next Scheduled EDR Contact: 08/30/2021
Data Release Frequency: Quarterly

CA BOND EXP. PLAN: Bond Expenditure Plan

Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/1989
Date Data Arrived at EDR: 07/27/1994
Date Made Active in Reports: 08/02/1994
Number of Days to Update: 6

Source: Department of Health Services
Telephone: 916-255-2118
Last EDR Contact: 05/31/1994
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CORTESE: "Cortese" Hazardous Waste & Substances Sites List

The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

Date of Government Version: 12/17/2020
Date Data Arrived at EDR: 12/17/2020
Date Made Active in Reports: 03/09/2021
Number of Days to Update: 82

Source: CAL EPA/Office of Emergency Information
Telephone: 916-323-3400
Last EDR Contact: 03/23/2021
Next Scheduled EDR Contact: 07/05/2021
Data Release Frequency: Quarterly

CUPA LIVERMORE-PLEASANTON: CUPA Facility Listing

list of facilities associated with the various CUPA programs in Livermore-Pleasanton

Date of Government Version: 05/01/2019
Date Data Arrived at EDR: 05/14/2019
Date Made Active in Reports: 07/17/2019
Number of Days to Update: 64

Source: Livermore-Pleasanton Fire Department
Telephone: 925-454-2361
Last EDR Contact: 05/14/2021
Next Scheduled EDR Contact: 08/23/2021
Data Release Frequency: Varies

DRYCLEANERS: Cleaner Facilities

A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

Date of Government Version: 03/01/2021
Date Data Arrived at EDR: 03/04/2021
Date Made Active in Reports: 05/20/2021
Number of Days to Update: 77

Source: Department of Toxic Substance Control
Telephone: 916-327-4498
Last EDR Contact: 05/25/2021
Next Scheduled EDR Contact: 09/13/2021
Data Release Frequency: Annually

DRYCLEAN SOUTH COAST: South Coast Air Quality Management District Drycleaner Listing
A listing of dry cleaners in the South Coast Air Quality Management District

Date of Government Version: 02/23/2021
Date Data Arrived at EDR: 02/25/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 83

Source: South Coast Air Quality Management District
Telephone: 909-396-3211
Last EDR Contact: 05/18/2021
Next Scheduled EDR Contact: 09/06/2021
Data Release Frequency: Varies

DRYCLEAN AVAQMD: Antelope Valley Air Quality Management District Drycleaner Listing
A listing of dry cleaners in the Antelope Valley Air Quality Management District.

Date of Government Version: 02/26/2021
Date Data Arrived at EDR: 03/02/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 78

Source: Antelope Valley Air Quality Management District
Telephone: 661-723-8070
Last EDR Contact: 05/25/2021
Next Scheduled EDR Contact: 09/13/2021
Data Release Frequency: Varies

EMI: Emissions Inventory Data
Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 06/16/2020
Date Made Active in Reports: 08/28/2020
Number of Days to Update: 73

Source: California Air Resources Board
Telephone: 916-322-2990
Last EDR Contact: 03/19/2021
Next Scheduled EDR Contact: 06/28/2021
Data Release Frequency: Varies

ENF: Enforcement Action Listing
A listing of Water Board Enforcement Actions. Formal is everything except Oral/Verbal Communication, Notice of Violation, Expedited Payment Letter, and Staff Enforcement Letter.

Date of Government Version: 12/31/2020
Date Data Arrived at EDR: 01/20/2021
Date Made Active in Reports: 04/09/2021
Number of Days to Update: 79

Source: State Water Resoruces Control Board
Telephone: 916-445-9379
Last EDR Contact: 04/20/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing
Financial Assurance information

Date of Government Version: 01/25/2021
Date Data Arrived at EDR: 01/26/2021
Date Made Active in Reports: 04/13/2021
Number of Days to Update: 77

Source: Department of Toxic Substances Control
Telephone: 916-255-3628
Last EDR Contact: 04/14/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Varies

Financial Assurance 2: Financial Assurance Information Listing
A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 02/08/2021
Date Data Arrived at EDR: 02/12/2021
Date Made Active in Reports: 05/05/2021
Number of Days to Update: 82

Source: California Integrated Waste Management Board
Telephone: 916-341-6066
Last EDR Contact: 05/05/2021
Next Scheduled EDR Contact: 08/23/2021
Data Release Frequency: Varies

HAZNET: Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method. This database begins with calendar year 1993.

Date of Government Version: 12/31/2019
Date Data Arrived at EDR: 04/15/2020
Date Made Active in Reports: 07/02/2020
Number of Days to Update: 78

Source: California Environmental Protection Agency
Telephone: 916-255-1136
Last EDR Contact: 04/09/2021
Next Scheduled EDR Contact: 07/19/2021
Data Release Frequency: Annually

ICE: ICE

Contains data pertaining to the Permitted Facilities with Inspections / Enforcements sites tracked in Envirostor.

Date of Government Version: 02/16/2021
Date Data Arrived at EDR: 02/17/2021
Date Made Active in Reports: 05/07/2021
Number of Days to Update: 79

Source: Department of Toxic Subsances Control
Telephone: 877-786-9427
Last EDR Contact: 05/14/2021
Next Scheduled EDR Contact: 08/30/2021
Data Release Frequency: Quarterly

HIST CORTESE: Hazardous Waste & Substance Site List

The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001
Date Data Arrived at EDR: 01/22/2009
Date Made Active in Reports: 04/08/2009
Number of Days to Update: 76

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/22/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

HWP: EnviroStor Permitted Facilities Listing

Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

Date of Government Version: 02/16/2021
Date Data Arrived at EDR: 02/17/2021
Date Made Active in Reports: 05/10/2021
Number of Days to Update: 82

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 05/14/2021
Next Scheduled EDR Contact: 08/30/2021
Data Release Frequency: Quarterly

HWT: Registered Hazardous Waste Transporter Database

A listing of hazardous waste transporters. In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by DTSC. A hazardous waste transporter registration is valid for one year and is assigned a unique registration number.

Date of Government Version: 01/05/2021
Date Data Arrived at EDR: 01/05/2021
Date Made Active in Reports: 03/18/2021
Number of Days to Update: 72

Source: Department of Toxic Substances Control
Telephone: 916-440-7145
Last EDR Contact: 04/06/2021
Next Scheduled EDR Contact: 07/19/2021
Data Release Frequency: Quarterly

MINES: Mines Site Location Listing

A listing of mine site locations from the Office of Mine Reclamation.

Date of Government Version: 03/08/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/30/2021
Number of Days to Update: 21

Source: Department of Conservation
Telephone: 916-322-1080
Last EDR Contact: 06/03/2021
Next Scheduled EDR Contact: 09/20/2021
Data Release Frequency: Quarterly

MWMP: Medical Waste Management Program Listing

The Medical Waste Management Program (MWMP) ensures the proper handling and disposal of medical waste by permitting and inspecting medical waste Offsite Treatment Facilities (PDF) and Transfer Stations (PDF) throughout the state. MWMP also oversees all Medical Waste Transporters.

Date of Government Version: 01/29/2021
Date Data Arrived at EDR: 03/03/2021
Date Made Active in Reports: 05/20/2021
Number of Days to Update: 78

Source: Department of Public Health
Telephone: 916-558-1784
Last EDR Contact: 05/28/2021
Next Scheduled EDR Contact: 09/13/2021
Data Release Frequency: Varies

NPDES: NPDES Permits Listing

A listing of NPDES permits, including stormwater.

Date of Government Version: 02/08/2021
Date Data Arrived at EDR: 02/09/2021
Date Made Active in Reports: 05/04/2021
Number of Days to Update: 84

Source: State Water Resources Control Board
Telephone: 916-445-9379
Last EDR Contact: 05/11/2021
Next Scheduled EDR Contact: 08/23/2021
Data Release Frequency: Quarterly

PEST LIC: Pesticide Regulation Licenses Listing

A listing of licenses and certificates issued by the Department of Pesticide Regulation. The DPR issues licenses and/or certificates to: Persons and businesses that apply or sell pesticides; Pest control dealers and brokers; Persons who advise on agricultural pesticide applications.

Date of Government Version: 03/02/2021
Date Data Arrived at EDR: 03/03/2021
Date Made Active in Reports: 05/20/2021
Number of Days to Update: 78

Source: Department of Pesticide Regulation
Telephone: 916-445-4038
Last EDR Contact: 05/28/2021
Next Scheduled EDR Contact: 09/13/2021
Data Release Frequency: Quarterly

PROC: Certified Processors Database

A listing of certified processors.

Date of Government Version: 03/09/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/31/2021
Number of Days to Update: 22

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 06/04/2021
Next Scheduled EDR Contact: 09/20/2021
Data Release Frequency: Quarterly

NOTIFY 65: Proposition 65 Records

Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

Date of Government Version: 03/12/2021
Date Data Arrived at EDR: 03/16/2021
Date Made Active in Reports: 06/01/2021
Number of Days to Update: 77

Source: State Water Resources Control Board
Telephone: 916-445-3846
Last EDR Contact: 03/12/2021
Next Scheduled EDR Contact: 06/28/2021
Data Release Frequency: No Update Planned

UIC: UIC Listing

A listing of wells identified as underground injection wells, in the California Oil and Gas Wells database.

Date of Government Version: 03/08/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/31/2021
Number of Days to Update: 22

Source: Deaprtment of Conservation
Telephone: 916-445-2408
Last EDR Contact: 06/03/2021
Next Scheduled EDR Contact: 09/20/2021
Data Release Frequency: Varies

UIC GEO: Underground Injection Control Sites (GEOTRACKER)
Underground control injection sites

Date of Government Version: 03/08/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/30/2021
Number of Days to Update: 21
Source: State Water Resource Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/03/2021
Next Scheduled EDR Contact: 09/20/2021
Data Release Frequency: Varies

WASTEWATER PITS: Oil Wastewater Pits Listing
Water officials discovered that oil producers have been dumping chemical-laden wastewater into hundreds of unlined pits that are operating without proper permits. Inspections completed by the Central Valley Regional Water Quality Control Board revealed the existence of previously unidentified waste sites. The water boards review found that more than one-third of the region's active disposal pits are operating without permission.

Date of Government Version: 11/19/2019
Date Data Arrived at EDR: 01/07/2020
Date Made Active in Reports: 03/09/2020
Number of Days to Update: 62
Source: RWQCB, Central Valley Region
Telephone: 559-445-5577
Last EDR Contact: 04/09/2021
Next Scheduled EDR Contact: 07/19/2021
Data Release Frequency: Varies

WDS: Waste Discharge System
Sites which have been issued waste discharge requirements.

Date of Government Version: 06/19/2007
Date Data Arrived at EDR: 06/20/2007
Date Made Active in Reports: 06/29/2007
Number of Days to Update: 9
Source: State Water Resources Control Board
Telephone: 916-341-5227
Last EDR Contact: 05/14/2021
Next Scheduled EDR Contact: 08/30/2021
Data Release Frequency: No Update Planned

WIP: Well Investigation Program Case List
Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 07/03/2009
Date Data Arrived at EDR: 07/21/2009
Date Made Active in Reports: 08/03/2009
Number of Days to Update: 13
Source: Los Angeles Water Quality Control Board
Telephone: 213-576-6726
Last EDR Contact: 03/19/2021
Next Scheduled EDR Contact: 07/05/2021
Data Release Frequency: No Update Planned

MILITARY PRIV SITES: Military Privatized Sites (GEOTRACKER)
Military privatized sites

Date of Government Version: 03/08/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/30/2021
Number of Days to Update: 21
Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/03/2021
Next Scheduled EDR Contact: 09/20/2021
Data Release Frequency: Varies

PROJECT: Project Sites (GEOTRACKER)
Projects sites

Date of Government Version: 03/08/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/30/2021
Number of Days to Update: 21
Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/03/2021
Next Scheduled EDR Contact: 09/20/2021
Data Release Frequency: Varies

WDR: Waste Discharge Requirements Listing
In general, the Waste Discharge Requirements (WDRs) Program (sometimes also referred to as the "Non Chapter 15 (Non 15) Program") regulates point discharges that are exempt pursuant to Subsection 20090 of Title 27 and not subject to the Federal Water Pollution Control Act. Exemptions from Title 27 may be granted for nine categories of discharges (e.g., sewage, wastewater, etc.) that meet, and continue to meet, the preconditions listed for each specific exemption. The scope of the WDRs Program also includes the discharge of wastes classified as inert, pursuant to section 20230 of Title 27.

Date of Government Version: 03/09/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/31/2021
Number of Days to Update: 22

Source: State Water Resources Control Board
Telephone: 916-341-5810
Last EDR Contact: 03/09/2021
Next Scheduled EDR Contact: 06/21/2021
Data Release Frequency: Quarterly

CIWQS: California Integrated Water Quality System

The California Integrated Water Quality System (CIWQS) is a computer system used by the State and Regional Water Quality Control Boards to track information about places of environmental interest, manage permits and other orders, track inspections, and manage violations and enforcement activities.

Date of Government Version: 11/30/2020
Date Data Arrived at EDR: 12/01/2020
Date Made Active in Reports: 02/12/2021
Number of Days to Update: 73

Source: State Water Resources Control Board
Telephone: 866-794-4977
Last EDR Contact: 05/19/2021
Next Scheduled EDR Contact: 09/13/2021
Data Release Frequency: Varies

CERS: CalEPA Regulated Site Portal Data

The CalEPA Regulated Site Portal database combines data about environmentally regulated sites and facilities in California into a single database. It combines data from a variety of state and federal databases, and provides an overview of regulated activities across the spectrum of environmental programs for any given location in California. These activities include hazardous materials and waste, state and federal cleanups, impacted ground and surface waters, and toxic materials

Date of Government Version: 01/20/2021
Date Data Arrived at EDR: 01/20/2021
Date Made Active in Reports: 04/08/2021
Number of Days to Update: 78

Source: California Environmental Protection Agency
Telephone: 916-323-2514
Last EDR Contact: 04/20/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Varies

NON-CASE INFO: Non-Case Information Sites (GEOTRACKER)

Non-Case Information sites

Date of Government Version: 03/08/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/30/2021
Number of Days to Update: 21

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/03/2021
Next Scheduled EDR Contact: 09/20/2021
Data Release Frequency: Varies

OTHER OIL GAS: Other Oil & Gas Projects Sites (GEOTRACKER)

Other Oil & Gas Projects sites

Date of Government Version: 03/08/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/30/2021
Number of Days to Update: 21

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/03/2021
Next Scheduled EDR Contact: 09/20/2021
Data Release Frequency: Varies

PROD WATER PONDS: Produced Water Ponds Sites (GEOTRACKER)

Produced water ponds sites

Date of Government Version: 03/08/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/30/2021
Number of Days to Update: 21

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/03/2021
Next Scheduled EDR Contact: 09/20/2021
Data Release Frequency: Varies

SAMPLING POINT: Sampling Point ? Public Sites (GEOTRACKER)

Sampling point - public sites

Date of Government Version: 03/08/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/30/2021
Number of Days to Update: 21

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/03/2021
Next Scheduled EDR Contact: 09/20/2021
Data Release Frequency: Varies

WELL STIM PROJ: Well Stimulation Project (GEOTRACKER)

Includes areas of groundwater monitoring plans, a depiction of the monitoring network, and the facilities, boundaries, and subsurface characteristics of the oilfield and the features (oil and gas wells, produced water ponds, UIC wells, water supply wells, etc?) being monitored

Date of Government Version: 03/08/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/30/2021
Number of Days to Update: 21

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/03/2021
Next Scheduled EDR Contact: 09/20/2021
Data Release Frequency: Varies

PCS INACTIVE: Listing of Inactive PCS Permits

An inactive permit is a facility that has shut down or is no longer discharging.

Date of Government Version: 11/05/2014
Date Data Arrived at EDR: 01/06/2015
Date Made Active in Reports: 05/06/2015
Number of Days to Update: 120

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 03/31/2021
Next Scheduled EDR Contact: 07/19/2021
Data Release Frequency: Semi-Annually

HWTS: Hazardous Waste Tracking System

DTSC maintains the Hazardous Waste Tracking System that stores ID number information since the early 1980s and manifest data since 1993. The system collects both manifest copies from the generator and destination facility.

Date of Government Version: 04/08/2021
Date Data Arrived at EDR: 04/09/2021
Date Made Active in Reports: 04/20/2021
Number of Days to Update: 11

Source: Department of Toxic Substances Control
Telephone: 916-324-2444
Last EDR Contact: 04/05/2021
Next Scheduled EDR Contact: 07/19/2021
Data Release Frequency: Varies

MINES MRDS: Mineral Resources Data System

Mineral Resources Data System

Date of Government Version: 04/06/2018
Date Data Arrived at EDR: 10/21/2019
Date Made Active in Reports: 10/24/2019
Number of Days to Update: 3

Source: USGS
Telephone: 703-648-6533
Last EDR Contact: 05/27/2021
Next Scheduled EDR Contact: 09/06/2021
Data Release Frequency: Varies

PCS: Permit Compliance System

PCS is a computerized management information system that contains data on National Pollutant Discharge Elimination System (NPDES) permit holding facilities. PCS tracks the permit, compliance, and enforcement status of NPDES facilities.

Date of Government Version: 07/14/2011
Date Data Arrived at EDR: 08/05/2011
Date Made Active in Reports: 09/29/2011
Number of Days to Update: 55

Source: EPA, Office of Water
Telephone: 202-564-2496
Last EDR Contact: 03/31/2021
Next Scheduled EDR Contact: 07/19/2021
Data Release Frequency: Semi-Annually

PCS ENF: Enforcement data

No description is available for this data

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 02/05/2015
Date Made Active in Reports: 03/06/2015
Number of Days to Update: 29

Source: EPA
Telephone: 202-564-2497
Last EDR Contact: 03/31/2021
Next Scheduled EDR Contact: 07/19/2021
Data Release Frequency: Varies

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historical Auto Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historical Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Resources Recycling and Recovery in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/13/2014
Number of Days to Update: 196

Source: Department of Resources Recycling and Recovery
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the State Water Resources Control Board in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/30/2013
Number of Days to Update: 182

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

COUNTY RECORDS

ALAMEDA COUNTY:

CS ALAMEDA: Contaminated Sites

A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 01/09/2019
Date Data Arrived at EDR: 01/11/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 53

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 03/31/2021
Next Scheduled EDR Contact: 07/19/2021
Data Release Frequency: Semi-Annually

UST ALAMEDA: Underground Tanks

Underground storage tank sites located in Alameda county.

Date of Government Version: 03/17/2021
Date Data Arrived at EDR: 03/18/2021
Date Made Active in Reports: 03/25/2021
Number of Days to Update: 7

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 03/17/2021
Next Scheduled EDR Contact: 07/19/2021
Data Release Frequency: Semi-Annually

AMADOR COUNTY:

CUPA AMADOR: CUPA Facility List

Cupa Facility List

Date of Government Version: 02/02/2021
Date Data Arrived at EDR: 02/04/2021
Date Made Active in Reports: 04/23/2021
Number of Days to Update: 78

Source: Amador County Environmental Health
Telephone: 209-223-6439
Last EDR Contact: 05/25/2021
Next Scheduled EDR Contact: 08/16/2021
Data Release Frequency: Varies

BUTTE COUNTY:

CUPA BUTTE: CUPA Facility Listing
Cupa facility list.

Date of Government Version: 04/21/2017
Date Data Arrived at EDR: 04/25/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 106

Source: Public Health Department
Telephone: 530-538-7149
Last EDR Contact: 03/31/2021
Next Scheduled EDR Contact: 07/19/2021
Data Release Frequency: No Update Planned

CALVERAS COUNTY:

CUPA CALVERAS: CUPA Facility Listing
Cupa Facility Listing

Date of Government Version: 12/15/2020
Date Data Arrived at EDR: 12/16/2020
Date Made Active in Reports: 12/24/2020
Number of Days to Update: 8

Source: Calveras County Environmental Health
Telephone: 209-754-6399
Last EDR Contact: 04/14/2021
Next Scheduled EDR Contact: 07/05/2021
Data Release Frequency: Quarterly

COLUSA COUNTY:

CUPA COLUSA: CUPA Facility List
Cupa facility list.

Date of Government Version: 04/06/2020
Date Data Arrived at EDR: 04/23/2020
Date Made Active in Reports: 07/10/2020
Number of Days to Update: 78

Source: Health & Human Services
Telephone: 530-458-0396
Last EDR Contact: 04/27/2021
Next Scheduled EDR Contact: 08/16/2021
Data Release Frequency: Semi-Annually

CONTRA COSTA COUNTY:

SL CONTRA COSTA: Site List
List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 01/25/2021
Date Data Arrived at EDR: 01/26/2021
Date Made Active in Reports: 04/16/2021
Number of Days to Update: 80

Source: Contra Costa Health Services Department
Telephone: 925-646-2286
Last EDR Contact: 04/20/2021
Next Scheduled EDR Contact: 08/09/2021
Data Release Frequency: Semi-Annually

DEL NORTE COUNTY:

CUPA DEL NORTE: CUPA Facility List
Cupa Facility list

Date of Government Version: 12/17/2020
Date Data Arrived at EDR: 01/28/2021
Date Made Active in Reports: 04/16/2021
Number of Days to Update: 78

Source: Del Norte County Environmental Health Division
Telephone: 707-465-0426
Last EDR Contact: 04/21/2021
Next Scheduled EDR Contact: 08/09/2021
Data Release Frequency: Varies

EL DORADO COUNTY:

CUPA EL DORADO: CUPA Facility List
CUPA facility list.

Date of Government Version: 02/09/2021
Date Data Arrived at EDR: 02/11/2021
Date Made Active in Reports: 05/05/2021
Number of Days to Update: 83

Source: El Dorado County Environmental Management Department
Telephone: 530-621-6623
Last EDR Contact: 05/05/2021
Next Scheduled EDR Contact: 08/09/2021
Data Release Frequency: Varies

FRESNO COUNTY:

CUPA FRESNO: CUPA Resources List
Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 01/14/2021
Date Data Arrived at EDR: 01/15/2021
Date Made Active in Reports: 04/05/2021
Number of Days to Update: 80

Source: Dept. of Community Health
Telephone: 559-445-3271
Last EDR Contact: 04/01/2021
Next Scheduled EDR Contact: 07/12/2021
Data Release Frequency: Semi-Annually

GLENN COUNTY:

CUPA GLENN: CUPA Facility List
Cupa facility list

Date of Government Version: 01/22/2018
Date Data Arrived at EDR: 01/24/2018
Date Made Active in Reports: 03/14/2018
Number of Days to Update: 49

Source: Glenn County Air Pollution Control District
Telephone: 830-934-6500
Last EDR Contact: 04/14/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: No Update Planned

HUMBOLDT COUNTY:

CUPA HUMBOLDT: CUPA Facility List
CUPA facility list.

Date of Government Version: 05/17/2021
Date Data Arrived at EDR: 05/18/2021
Date Made Active in Reports: 05/20/2021
Number of Days to Update: 2

Source: Humboldt County Environmental Health
Telephone: N/A
Last EDR Contact: 05/10/2021
Next Scheduled EDR Contact: 08/30/2021
Data Release Frequency: Semi-Annually

IMPERIAL COUNTY:

CUPA IMPERIAL: CUPA Facility List
Cupa facility list.

Date of Government Version: 01/19/2021
Date Data Arrived at EDR: 01/20/2021
Date Made Active in Reports: 04/08/2021
Number of Days to Update: 78

Source: San Diego Border Field Office
Telephone: 760-339-2777
Last EDR Contact: 04/14/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Varies

INYO COUNTY:

CUPA INYO: CUPA Facility List
Cupa facility list.

Date of Government Version: 04/02/2018
Date Data Arrived at EDR: 04/03/2018
Date Made Active in Reports: 06/14/2018
Number of Days to Update: 72

Source: Inyo County Environmental Health Services
Telephone: 760-878-0238
Last EDR Contact: 05/11/2021
Next Scheduled EDR Contact: 08/30/2021
Data Release Frequency: Varies

KERN COUNTY:

CUPA KERN: CUPA Facility List
A listing of sites included in the Kern County Hazardous Material Business Plan.

Date of Government Version: 10/29/2020
Date Data Arrived at EDR: 10/30/2020
Date Made Active in Reports: 01/15/2021
Number of Days to Update: 77

Source: Kern County Public Health
Telephone: 661-321-3000
Last EDR Contact: 04/27/2021
Next Scheduled EDR Contact: 08/16/2021
Data Release Frequency: Varies

UST KERN: Underground Storage Tank Sites & Tank Listing
Kern County Sites and Tanks Listing.

Date of Government Version: 01/19/2021
Date Data Arrived at EDR: 01/21/2021
Date Made Active in Reports: 01/28/2021
Number of Days to Update: 7

Source: Kern County Environment Health Services Department
Telephone: 661-862-8700
Last EDR Contact: 05/25/2021
Next Scheduled EDR Contact: 08/16/2021
Data Release Frequency: Quarterly

KINGS COUNTY:

CUPA KINGS: CUPA Facility List
A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 12/03/2020
Date Data Arrived at EDR: 01/26/2021
Date Made Active in Reports: 04/14/2021
Number of Days to Update: 78

Source: Kings County Department of Public Health
Telephone: 559-584-1411
Last EDR Contact: 05/25/2021
Next Scheduled EDR Contact: 08/30/2021
Data Release Frequency: Varies

LAKE COUNTY:

CUPA LAKE: CUPA Facility List
Cupa facility list

Date of Government Version: 02/10/2021
Date Data Arrived at EDR: 02/12/2021
Date Made Active in Reports: 03/11/2021
Number of Days to Update: 27

Source: Lake County Environmental Health
Telephone: 707-263-1164
Last EDR Contact: 04/07/2021
Next Scheduled EDR Contact: 07/26/2021
Data Release Frequency: Varies

LASSEN COUNTY:

CUPA LASSEN: CUPA Facility List
Cupa facility list

Date of Government Version: 07/31/2020
Date Data Arrived at EDR: 08/21/2020
Date Made Active in Reports: 11/09/2020
Number of Days to Update: 80

Source: Lassen County Environmental Health
Telephone: 530-251-8528
Last EDR Contact: 06/04/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Varies

LOS ANGELES COUNTY:

AOCONCERN: Key Areas of Concerns in Los Angeles County
San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office. Date of Government Version: 3/30/2009 Exide Site area is a cleanup plan of lead-impacted soil surrounding the former Exide Facility as designated by the DTSC. Date of Government Version: 7/17/2017

Date of Government Version: 03/30/2009
Date Data Arrived at EDR: 03/31/2009
Date Made Active in Reports: 10/23/2009
Number of Days to Update: 206

Source: N/A
Telephone: N/A
Last EDR Contact: 03/12/2021
Next Scheduled EDR Contact: 06/28/2021
Data Release Frequency: No Update Planned

HMS LOS ANGELES: HMS: Street Number List
Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 01/11/2021
Date Data Arrived at EDR: 01/12/2021
Date Made Active in Reports: 03/25/2021
Number of Days to Update: 72

Source: Department of Public Works
Telephone: 626-458-3517
Last EDR Contact: 04/05/2021
Next Scheduled EDR Contact: 07/19/2021
Data Release Frequency: Semi-Annually

LF LOS ANGELES: List of Solid Waste Facilities
Solid Waste Facilities in Los Angeles County.

Date of Government Version: 01/11/2021
Date Data Arrived at EDR: 01/12/2021
Date Made Active in Reports: 03/26/2021
Number of Days to Update: 73

Source: La County Department of Public Works
Telephone: 818-458-5185
Last EDR Contact: 04/13/2021
Next Scheduled EDR Contact: 07/26/2021
Data Release Frequency: Varies

LF LOS ANGELES CITY: City of Los Angeles Landfills
Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 01/01/2021
Date Data Arrived at EDR: 02/18/2021
Date Made Active in Reports: 05/10/2021
Number of Days to Update: 81

Source: Engineering & Construction Division
Telephone: 213-473-7869
Last EDR Contact: 04/07/2021
Next Scheduled EDR Contact: 07/26/2021
Data Release Frequency: Varies

LOS ANGELES AST: Active & Inactive AST Inventory
A listing of active & inactive above ground petroleum storage tank site locations, located in the City of Los Angeles.

Date of Government Version: 06/01/2019
Date Data Arrived at EDR: 06/25/2019
Date Made Active in Reports: 08/22/2019
Number of Days to Update: 58

Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 03/26/2021
Next Scheduled EDR Contact: 07/05/2021
Data Release Frequency: Varies

LOS ANGELES CO LF METHANE: Methane Producing Landfills

This data was created on April 30, 2012 to represent known disposal sites in Los Angeles County that may produce and emanate methane gas. The shapefile contains disposal sites within Los Angeles County that once accepted degradable refuse material. Information used to create this data was extracted from a landfill survey performed by County Engineers (Major Waste System Map, 1973) as well as historical records from CalRecycle, Regional Water Quality Control Board, and Los Angeles County Department of Public Health

Date of Government Version: 02/04/2021
Date Data Arrived at EDR: 04/16/2021
Date Made Active in Reports: 04/21/2021
Number of Days to Update: 5

Source: Los Angeles County Department of Public Works
Telephone: 626-458-6973
Last EDR Contact: 04/16/2021
Next Scheduled EDR Contact: 07/26/2021
Data Release Frequency: No Update Planned

LOS ANGELES HM: Active & Inactive Hazardous Materials Inventory

A listing of active & inactive hazardous materials facility locations, located in the City of Los Angeles.

Date of Government Version: 06/01/2019
Date Data Arrived at EDR: 06/25/2019
Date Made Active in Reports: 08/22/2019
Number of Days to Update: 58

Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 03/26/2021
Next Scheduled EDR Contact: 07/05/2021
Data Release Frequency: Varies

LOS ANGELES UST: Active & Inactive UST Inventory

A listing of active & inactive underground storage tank site locations and underground storage tank historical sites, located in the City of Los Angeles.

Date of Government Version: 06/01/2019
Date Data Arrived at EDR: 06/25/2019
Date Made Active in Reports: 08/22/2019
Number of Days to Update: 58

Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 03/26/2021
Next Scheduled EDR Contact: 07/05/2021
Data Release Frequency: Varies

SITE MIT LOS ANGELES: Site Mitigation List

Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 10/19/2020
Date Data Arrived at EDR: 01/12/2021
Date Made Active in Reports: 03/26/2021
Number of Days to Update: 73

Source: Community Health Services
Telephone: 323-890-7806
Last EDR Contact: 04/16/2021
Next Scheduled EDR Contact: 07/26/2021
Data Release Frequency: Annually

UST EL SEGUNDO: City of El Segundo Underground Storage Tank

Underground storage tank sites located in El Segundo city.

Date of Government Version: 01/21/2017
Date Data Arrived at EDR: 04/19/2017
Date Made Active in Reports: 05/10/2017
Number of Days to Update: 21

Source: City of El Segundo Fire Department
Telephone: 310-524-2236
Last EDR Contact: 04/07/2021
Next Scheduled EDR Contact: 07/26/2021
Data Release Frequency: No Update Planned

UST LONG BEACH: City of Long Beach Underground Storage Tank

Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 04/22/2019
Date Data Arrived at EDR: 04/23/2019
Date Made Active in Reports: 06/27/2019
Number of Days to Update: 65

Source: City of Long Beach Fire Department
Telephone: 562-570-2563
Last EDR Contact: 04/14/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Varies

UST TORRANCE: City of Torrance Underground Storage Tank
Underground storage tank sites located in the city of Torrance.

Date of Government Version: 09/11/2020
Date Data Arrived at EDR: 10/07/2020
Date Made Active in Reports: 12/23/2020
Number of Days to Update: 77

Source: City of Torrance Fire Department
Telephone: 310-618-2973
Last EDR Contact: 04/23/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Semi-Annually

MADERA COUNTY:

CUPA MADERA: CUPA Facility List
A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 08/10/2020
Date Data Arrived at EDR: 08/12/2020
Date Made Active in Reports: 10/23/2020
Number of Days to Update: 72

Source: Madera County Environmental Health
Telephone: 559-675-7823
Last EDR Contact: 05/12/2021
Next Scheduled EDR Contact: 08/30/2021
Data Release Frequency: Varies

MARIN COUNTY:

UST MARIN: Underground Storage Tank Sites
Currently permitted USTs in Marin County.

Date of Government Version: 09/26/2018
Date Data Arrived at EDR: 10/04/2018
Date Made Active in Reports: 11/02/2018
Number of Days to Update: 29

Source: Public Works Department Waste Management
Telephone: 415-473-6647
Last EDR Contact: 03/25/2021
Next Scheduled EDR Contact: 07/12/2021
Data Release Frequency: Semi-Annually

MENDOCINO COUNTY:

UST MENDOCINO: Mendocino County UST Database
A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 12/21/2020
Date Data Arrived at EDR: 12/21/2020
Date Made Active in Reports: 03/10/2021
Number of Days to Update: 79

Source: Department of Public Health
Telephone: 707-463-4466
Last EDR Contact: 05/18/2021
Next Scheduled EDR Contact: 09/06/2021
Data Release Frequency: Annually

MERCED COUNTY:

CUPA MERCED: CUPA Facility List
CUPA facility list.

Date of Government Version: 02/04/2021
Date Data Arrived at EDR: 02/09/2021
Date Made Active in Reports: 02/18/2021
Number of Days to Update: 9

Source: Merced County Environmental Health
Telephone: 209-381-1094
Last EDR Contact: 05/12/2021
Next Scheduled EDR Contact: 08/30/2021
Data Release Frequency: Varies

MONO COUNTY:

CUPA MONO: CUPA Facility List
CUPA Facility List

Date of Government Version: 02/22/2021
Date Data Arrived at EDR: 03/02/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 78

Source: Mono County Health Department
Telephone: 760-932-5580
Last EDR Contact: 06/02/2021
Next Scheduled EDR Contact: 09/06/3021
Data Release Frequency: Varies

MONTEREY COUNTY:

CUPA MONTEREY: CUPA Facility Listing
CUPA Program listing from the Environmental Health Division.

Date of Government Version: 01/08/2021
Date Data Arrived at EDR: 01/12/2021
Date Made Active in Reports: 03/25/2021
Number of Days to Update: 72

Source: Monterey County Health Department
Telephone: 831-796-1297
Last EDR Contact: 03/25/2021
Next Scheduled EDR Contact: 07/12/2021
Data Release Frequency: Varies

NAPA COUNTY:

LUST NAPA: Sites With Reported Contamination
A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 01/09/2017
Date Data Arrived at EDR: 01/11/2017
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 50

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 05/18/2021
Next Scheduled EDR Contact: 09/06/2021
Data Release Frequency: No Update Planned

UST NAPA: Closed and Operating Underground Storage Tank Sites
Underground storage tank sites located in Napa county.

Date of Government Version: 09/05/2019
Date Data Arrived at EDR: 09/09/2019
Date Made Active in Reports: 10/31/2019
Number of Days to Update: 52

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 05/18/2021
Next Scheduled EDR Contact: 09/06/2021
Data Release Frequency: No Update Planned

NEVADA COUNTY:

CUPA NEVADA: CUPA Facility List
CUPA facility list.

Date of Government Version: 02/03/2021
Date Data Arrived at EDR: 02/04/2021
Date Made Active in Reports: 04/23/2021
Number of Days to Update: 78

Source: Community Development Agency
Telephone: 530-265-1467
Last EDR Contact: 04/21/2021
Next Scheduled EDR Contact: 08/09/2021
Data Release Frequency: Varies

ORANGE COUNTY:

IND_SITE ORANGE: List of Industrial Site Cleanups
Petroleum and non-petroleum spills.

Date of Government Version: 02/01/2021
Date Data Arrived at EDR: 02/04/2021
Date Made Active in Reports: 04/23/2021
Number of Days to Update: 78
Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 04/29/2021
Next Scheduled EDR Contact: 08/16/2021
Data Release Frequency: Annually

LUST ORANGE: List of Underground Storage Tank Cleanups
Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 03/01/2021
Date Data Arrived at EDR: 05/03/2021
Date Made Active in Reports: 05/12/2021
Number of Days to Update: 9
Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 04/29/2021
Next Scheduled EDR Contact: 08/16/2021
Data Release Frequency: Quarterly

UST ORANGE: List of Underground Storage Tank Facilities
Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 02/01/2021
Date Data Arrived at EDR: 02/02/2021
Date Made Active in Reports: 04/20/2021
Number of Days to Update: 77
Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 04/30/2021
Next Scheduled EDR Contact: 08/16/2021
Data Release Frequency: Quarterly

PLACER COUNTY:

MS PLACER: Master List of Facilities
List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 05/25/2021
Date Data Arrived at EDR: 05/26/2021
Date Made Active in Reports: 06/01/2021
Number of Days to Update: 6
Source: Placer County Health and Human Services
Telephone: 530-745-2363
Last EDR Contact: 05/25/2021
Next Scheduled EDR Contact: 09/13/2021
Data Release Frequency: Semi-Annually

PLUMAS COUNTY:

CUPA PLUMAS: CUPA Facility List
Plumas County CUPA Program facilities.

Date of Government Version: 03/31/2019
Date Data Arrived at EDR: 04/23/2019
Date Made Active in Reports: 06/26/2019
Number of Days to Update: 64
Source: Plumas County Environmental Health
Telephone: 530-283-6355
Last EDR Contact: 04/14/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Varies

RIVERSIDE COUNTY:

LUST RIVERSIDE: Listing of Underground Tank Cleanup Sites
Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 01/13/2021
Date Data Arrived at EDR: 01/14/2021
Date Made Active in Reports: 03/10/2021
Number of Days to Update: 55
Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 03/15/2021
Next Scheduled EDR Contact: 06/28/2021
Data Release Frequency: Quarterly

UST RIVERSIDE: Underground Storage Tank Tank List
Underground storage tank sites located in Riverside county.

Date of Government Version: 01/13/2021
Date Data Arrived at EDR: 01/14/2021
Date Made Active in Reports: 03/10/2021
Number of Days to Update: 55
Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 03/15/2021
Next Scheduled EDR Contact: 06/28/2021
Data Release Frequency: Quarterly

SACRAMENTO COUNTY:

CS SACRAMENTO: Toxic Site Clean-Up List
List of sites where unauthorized releases of potentially hazardous materials have occurred.

Date of Government Version: 02/18/2020
Date Data Arrived at EDR: 03/31/2020
Date Made Active in Reports: 06/15/2020
Number of Days to Update: 76
Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 03/31/2021
Next Scheduled EDR Contact: 07/12/2021
Data Release Frequency: Quarterly

ML SACRAMENTO: Master Hazardous Materials Facility List
Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 02/24/2020
Date Data Arrived at EDR: 03/31/2020
Date Made Active in Reports: 06/17/2020
Number of Days to Update: 78
Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 04/01/2021
Next Scheduled EDR Contact: 07/12/2021
Data Release Frequency: Quarterly

SAN BENITO COUNTY:

CUPA SAN BENITO: CUPA Facility List
Cupa facility list

Date of Government Version: 04/28/2021
Date Data Arrived at EDR: 04/29/2021
Date Made Active in Reports: 05/03/2021
Number of Days to Update: 4
Source: San Benito County Environmental Health
Telephone: N/A
Last EDR Contact: 04/27/2021
Next Scheduled EDR Contact: 08/16/2021
Data Release Frequency: Varies

SAN BERNARDINO COUNTY:

PERMITS SAN BERNARDINO: Hazardous Material Permits
This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 11/16/2020
Date Data Arrived at EDR: 11/18/2020
Date Made Active in Reports: 02/04/2021
Number of Days to Update: 78
Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 909-387-3041
Last EDR Contact: 05/03/2021
Next Scheduled EDR Contact: 08/16/2021
Data Release Frequency: Quarterly

SAN DIEGO COUNTY:

HMMD SAN DIEGO: Hazardous Materials Management Division Database

The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 03/02/2021
Date Data Arrived at EDR: 03/03/2021
Date Made Active in Reports: 05/21/2021
Number of Days to Update: 79

Source: Hazardous Materials Management Division
Telephone: 619-338-2268
Last EDR Contact: 05/28/2021
Next Scheduled EDR Contact: 09/13/2021
Data Release Frequency: Quarterly

LF SAN DIEGO: Solid Waste Facilities

San Diego County Solid Waste Facilities.

Date of Government Version: 10/01/2020
Date Data Arrived at EDR: 11/23/2020
Date Made Active in Reports: 02/08/2021
Number of Days to Update: 77

Source: Department of Health Services
Telephone: 619-338-2209
Last EDR Contact: 05/21/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Varies

SAN DIEGO CO LOP: Local Oversight Program Listing

A listing of all LOP release sites that are or were under the County of San Diego's jurisdiction. Included are closed or transferred cases, open cases, and cases that did not have a case type indicated. The cases without a case type are mostly complaints; however, some of them could be LOP cases.

Date of Government Version: 07/14/2020
Date Data Arrived at EDR: 07/16/2020
Date Made Active in Reports: 09/29/2020
Number of Days to Update: 75

Source: Department of Environmental Health
Telephone: 858-505-6874
Last EDR Contact: 04/14/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Varies

SAN DIEGO CO SAM: Environmental Case Listing

The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 03/23/2010
Date Data Arrived at EDR: 06/15/2010
Date Made Active in Reports: 07/09/2010
Number of Days to Update: 24

Source: San Diego County Department of Environmental Health
Telephone: 619-338-2371
Last EDR Contact: 05/25/2021
Next Scheduled EDR Contact: 09/13/2021
Data Release Frequency: No Update Planned

SAN FRANCISCO COUNTY:

CUPA SAN FRANCISCO CO: CUPA Facility Listing

Cupa facilities

Date of Government Version: 02/11/2021
Date Data Arrived at EDR: 02/11/2021
Date Made Active in Reports: 05/05/2021
Number of Days to Update: 83

Source: San Francisco County Department of Environmental Health
Telephone: 415-252-3896
Last EDR Contact: 04/27/2021
Next Scheduled EDR Contact: 08/16/2021
Data Release Frequency: Varies

LUST SAN FRANCISCO: Local Oversite Facilities

A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008
Date Data Arrived at EDR: 09/19/2008
Date Made Active in Reports: 09/29/2008
Number of Days to Update: 10

Source: Department Of Public Health San Francisco County
Telephone: 415-252-3920
Last EDR Contact: 04/27/2021
Next Scheduled EDR Contact: 08/16/2021
Data Release Frequency: No Update Planned

UST SAN FRANCISCO: Underground Storage Tank Information
Underground storage tank sites located in San Francisco county.

Date of Government Version: 02/11/2021
Date Data Arrived at EDR: 02/11/2021
Date Made Active in Reports: 05/05/2021
Number of Days to Update: 83

Source: Department of Public Health
Telephone: 415-252-3920
Last EDR Contact: 04/27/2021
Next Scheduled EDR Contact: 08/16/2021
Data Release Frequency: Quarterly

SAN JOAQUIN COUNTY:

UST SAN JOAQUIN: San Joaquin Co. UST
A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 06/22/2018
Date Data Arrived at EDR: 06/26/2018
Date Made Active in Reports: 07/11/2018
Number of Days to Update: 15

Source: Environmental Health Department
Telephone: N/A
Last EDR Contact: 03/12/2021
Next Scheduled EDR Contact: 06/28/2021
Data Release Frequency: Semi-Annually

SAN LUIS OBISPO COUNTY:

CUPA SAN LUIS OBISPO: CUPA Facility List
Cupa Facility List.

Date of Government Version: 05/07/2021
Date Data Arrived at EDR: 05/11/2021
Date Made Active in Reports: 05/14/2021
Number of Days to Update: 3

Source: San Luis Obispo County Public Health Department
Telephone: 805-781-5596
Last EDR Contact: 05/06/2021
Next Scheduled EDR Contact: 08/30/2021
Data Release Frequency: Varies

SAN MATEO COUNTY:

BI SAN MATEO: Business Inventory
List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 02/20/2020
Date Data Arrived at EDR: 02/20/2020
Date Made Active in Reports: 04/24/2020
Number of Days to Update: 64

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 03/12/2021
Next Scheduled EDR Contact: 06/21/2021
Data Release Frequency: Annually

LUST SAN MATEO: Fuel Leak List
A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 03/29/2019
Date Data Arrived at EDR: 03/29/2019
Date Made Active in Reports: 05/29/2019
Number of Days to Update: 61

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 06/02/2021
Next Scheduled EDR Contact: 09/20/2021
Data Release Frequency: Semi-Annually

SANTA BARBARA COUNTY:

CUPA SANTA BARBARA: CUPA Facility Listing
CUPA Program Listing from the Environmental Health Services division.

Date of Government Version: 09/08/2011
Date Data Arrived at EDR: 09/09/2011
Date Made Active in Reports: 10/07/2011
Number of Days to Update: 28

Source: Santa Barbara County Public Health Department
Telephone: 805-686-8167
Last EDR Contact: 05/12/2021
Next Scheduled EDR Contact: 08/30/2021
Data Release Frequency: No Update Planned

SANTA CLARA COUNTY:

CUPA SANTA CLARA: Cupa Facility List
Cupa facility list

Date of Government Version: 02/24/2021
Date Data Arrived at EDR: 02/26/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 82

Source: Department of Environmental Health
Telephone: 408-918-1973
Last EDR Contact: 05/12/2021
Next Scheduled EDR Contact: 08/30/2021
Data Release Frequency: Varies

HIST LUST SANTA CLARA: HIST LUST - Fuel Leak Site Activity Report
A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005
Date Data Arrived at EDR: 03/30/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 22

Source: Santa Clara Valley Water District
Telephone: 408-265-2600
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

LUST SANTA CLARA: LOP Listing
A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 03/03/2014
Date Data Arrived at EDR: 03/05/2014
Date Made Active in Reports: 03/18/2014
Number of Days to Update: 13

Source: Department of Environmental Health
Telephone: 408-918-3417
Last EDR Contact: 05/18/2021
Next Scheduled EDR Contact: 09/06/2021
Data Release Frequency: No Update Planned

SAN JOSE HAZMAT: Hazardous Material Facilities
Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 11/03/2020
Date Data Arrived at EDR: 11/05/2020
Date Made Active in Reports: 01/26/2021
Number of Days to Update: 82

Source: City of San Jose Fire Department
Telephone: 408-535-7694
Last EDR Contact: 05/21/2021
Next Scheduled EDR Contact: 08/16/2021
Data Release Frequency: Annually

SANTA CRUZ COUNTY:

CUPA SANTA CRUZ: CUPA Facility List
CUPA facility listing.

Date of Government Version: 01/21/2017
Date Data Arrived at EDR: 02/22/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 90

Source: Santa Cruz County Environmental Health
Telephone: 831-464-2761
Last EDR Contact: 05/12/2021
Next Scheduled EDR Contact: 08/30/2021
Data Release Frequency: Varies

SHASTA COUNTY:

CUPA SHASTA: CUPA Facility List
Cupa Facility List.

Date of Government Version: 06/15/2017
Date Data Arrived at EDR: 06/19/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 51

Source: Shasta County Department of Resource Management
Telephone: 530-225-5789
Last EDR Contact: 05/12/2021
Next Scheduled EDR Contact: 08/30/2021
Data Release Frequency: Varies

SOLANO COUNTY:

LUST SOLANO: Leaking Underground Storage Tanks
A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 06/04/2019
Date Data Arrived at EDR: 06/06/2019
Date Made Active in Reports: 08/13/2019
Number of Days to Update: 68

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 05/25/2021
Next Scheduled EDR Contact: 09/13/2021
Data Release Frequency: Quarterly

UST SOLANO: Underground Storage Tanks
Underground storage tank sites located in Solano county.

Date of Government Version: 12/03/2020
Date Data Arrived at EDR: 12/03/2020
Date Made Active in Reports: 02/18/2021
Number of Days to Update: 77

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 05/24/2021
Next Scheduled EDR Contact: 09/12/2021
Data Release Frequency: Quarterly

SONOMA COUNTY:

CUPA SONOMA: Cupa Facility List
Cupa Facility list

Date of Government Version: 12/15/2020
Date Data Arrived at EDR: 12/16/2020
Date Made Active in Reports: 12/23/2020
Number of Days to Update: 7

Source: County of Sonoma Fire & Emergency Services Department
Telephone: 707-565-1174
Last EDR Contact: 03/19/2021
Next Scheduled EDR Contact: 07/05/2021
Data Release Frequency: Varies

LUST SONOMA: Leaking Underground Storage Tank Sites
A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 01/05/2021
Date Data Arrived at EDR: 01/06/2021
Date Made Active in Reports: 03/18/2021
Number of Days to Update: 71

Source: Department of Health Services
Telephone: 707-565-6565
Last EDR Contact: 03/19/2021
Next Scheduled EDR Contact: 07/05/2021
Data Release Frequency: Quarterly

STANISLAUS COUNTY:

CUPA STANISLAUS: CUPA Facility List
Cupa facility list

Date of Government Version: 02/09/2021
Date Data Arrived at EDR: 02/11/2021
Date Made Active in Reports: 05/05/2021
Number of Days to Update: 83

Source: Stanislaus County Department of Ennvironmental Protection
Telephone: 209-525-6751
Last EDR Contact: 04/21/2021
Next Scheduled EDR Contact: 07/26/2021
Data Release Frequency: Varies

SUTTER COUNTY:

UST SUTTER: Underground Storage Tanks
Underground storage tank sites located in Sutter county.

Date of Government Version: 03/01/2021
Date Data Arrived at EDR: 03/02/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 78

Source: Sutter County Environmental Health Services
Telephone: 530-822-7500
Last EDR Contact: 05/25/2021
Next Scheduled EDR Contact: 09/13/2021
Data Release Frequency: Semi-Annually

TEHAMA COUNTY:

CUPA TEHAMA: CUPA Facility List
Cupa facilities

Date of Government Version: 01/13/2021
Date Data Arrived at EDR: 01/14/2021
Date Made Active in Reports: 04/06/2021
Number of Days to Update: 82

Source: Tehama County Department of Environmental Health
Telephone: 530-527-8020
Last EDR Contact: 04/27/2021
Next Scheduled EDR Contact: 08/16/2021
Data Release Frequency: Varies

TRINITY COUNTY:

CUPA TRINITY: CUPA Facility List
Cupa facility list

Date of Government Version: 01/19/2021
Date Data Arrived at EDR: 01/20/2021
Date Made Active in Reports: 04/08/2021
Number of Days to Update: 78

Source: Department of Toxic Substances Control
Telephone: 760-352-0381
Last EDR Contact: 04/14/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Varies

TULARE COUNTY:

CUPA TULARE: CUPA Facility List
Cupa program facilities

Date of Government Version: 02/02/2021
Date Data Arrived at EDR: 02/04/2021
Date Made Active in Reports: 04/23/2021
Number of Days to Update: 78

Source: Tulare County Environmental Health Services Division
Telephone: 559-624-7400
Last EDR Contact: 04/27/2021
Next Scheduled EDR Contact: 08/16/2021
Data Release Frequency: Varies

TUOLUMNE COUNTY:

CUPA TUOLUMNE: CUPA Facility List
Cupa facility list

Date of Government Version: 04/23/2018
Date Data Arrived at EDR: 04/25/2018
Date Made Active in Reports: 06/25/2018
Number of Days to Update: 61

Source: Divison of Environmental Health
Telephone: 209-533-5633
Last EDR Contact: 04/14/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Varies

VENTURA COUNTY:

BWT VENTURA: Business Plan, Hazardous Waste Producers, and Operating Underground Tanks
The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 12/28/2020
Date Data Arrived at EDR: 01/29/2021
Date Made Active in Reports: 04/22/2021
Number of Days to Update: 83
Source: Ventura County Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 04/19/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Quarterly

LF VENTURA: Inventory of Illegal Abandoned and Inactive Sites
Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 12/01/2011
Date Data Arrived at EDR: 12/01/2011
Date Made Active in Reports: 01/19/2012
Number of Days to Update: 49
Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 03/25/2021
Next Scheduled EDR Contact: 07/12/2021
Data Release Frequency: No Update Planned

LUST VENTURA: Listing of Underground Tank Cleanup Sites
Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/29/2008
Date Data Arrived at EDR: 06/24/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 37
Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 05/05/2021
Next Scheduled EDR Contact: 08/23/2021
Data Release Frequency: No Update Planned

MED WASTE VENTURA: Medical Waste Program List
To protect public health and safety and the environment from potential exposure to disease causing agents, the Environmental Health Division Medical Waste Program regulates the generation, handling, storage, treatment and disposal of medical waste throughout the County.

Date of Government Version: 03/29/2021
Date Data Arrived at EDR: 04/21/2021
Date Made Active in Reports: 04/23/2021
Number of Days to Update: 2
Source: Ventura County Resource Management Agency
Telephone: 805-654-2813
Last EDR Contact: 04/19/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Quarterly

UST VENTURA: Underground Tank Closed Sites List
Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 03/01/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/31/2021
Number of Days to Update: 22
Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 06/04/2021
Next Scheduled EDR Contact: 09/20/2021
Data Release Frequency: Quarterly

YOLO COUNTY:

UST YOLO: Underground Storage Tank Comprehensive Facility Report
Underground storage tank sites located in Yolo county.

Date of Government Version: 12/21/2020
Date Data Arrived at EDR: 12/23/2020
Date Made Active in Reports: 01/04/2021
Number of Days to Update: 12
Source: Yolo County Department of Health
Telephone: 530-666-8646
Last EDR Contact: 03/26/2021
Next Scheduled EDR Contact: 07/12/2021
Data Release Frequency: Annually

YUBA COUNTY:

CUPA YUBA: CUPA Facility List
CUPA facility listing for Yuba County.

Date of Government Version: 04/21/2021
Date Data Arrived at EDR: 04/22/2021
Date Made Active in Reports: 05/12/2021
Number of Days to Update: 20

Source: Yuba County Environmental Health Department
Telephone: 530-749-7523
Last EDR Contact: 04/24/2021
Next Scheduled EDR Contact: 08/09/2021
Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data
Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 10/05/2020
Date Data Arrived at EDR: 02/17/2021
Date Made Active in Reports: 05/10/2021
Number of Days to Update: 82

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 05/11/2021
Next Scheduled EDR Contact: 08/23/2021
Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 04/10/2019
Date Made Active in Reports: 05/16/2019
Number of Days to Update: 36

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 04/09/2021
Next Scheduled EDR Contact: 07/19/2021
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data
Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 01/01/2019
Date Data Arrived at EDR: 04/29/2020
Date Made Active in Reports: 07/10/2020
Number of Days to Update: 72

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 04/30/2021
Next Scheduled EDR Contact: 08/09/2021
Data Release Frequency: Quarterly

PA MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 06/30/2018
Date Data Arrived at EDR: 07/19/2019
Date Made Active in Reports: 09/10/2019
Number of Days to Update: 53

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 04/09/2021
Next Scheduled EDR Contact: 07/26/2021
Data Release Frequency: Annually

RI MANIFEST: Manifest information
Hazardous waste manifest information

Date of Government Version: 12/31/2019
Date Data Arrived at EDR: 02/11/2021
Date Made Active in Reports: 02/24/2021
Number of Days to Update: 13

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 05/13/2021
Next Scheduled EDR Contact: 08/30/2021
Data Release Frequency: Annually

WI MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 05/31/2018
Date Data Arrived at EDR: 06/19/2019
Date Made Active in Reports: 09/03/2019
Number of Days to Update: 76

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 06/03/2021
Next Scheduled EDR Contact: 09/20/2021
Data Release Frequency: Annually

Oil/Gas Pipelines
Source: Endeavor Business Media
Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by Endeavor Business Media. This information is provided on a best effort basis and Endeavor Business Media does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of Endeavor Business Media.

Electric Power Transmission Line Data
Source: Endeavor Business Media
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Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Licensed Facilities
Source: Department of Social Services
Telephone: 916-657-4041

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish and Wildlife
Telephone: 916-445-0411

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

W MISSION RD & N LAS POSAS RD
W MISSION RD & N LAS POSAS RD
SAN MARCOS, CA 92069

TARGET PROPERTY COORDINATES

Latitude (North):	33.150441 - 33° 9' 1.59''
Longitude (West):	117.189618 - 117° 11' 22.62''
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	482316.4
UTM Y (Meters):	3667789.5
Elevation:	575 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	5641320 SAN MARCOS, CA
Version Date:	2012

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

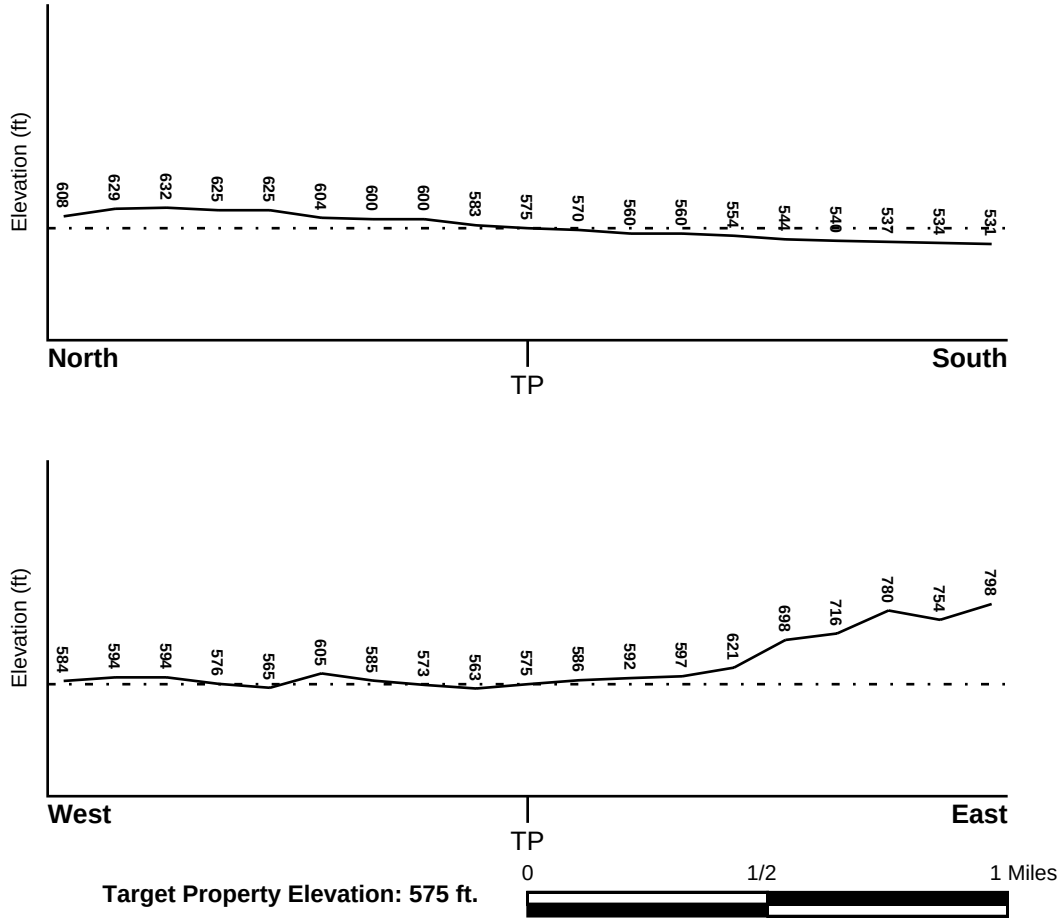
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General SSW

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Flood Plain Panel at Target Property	FEMA Source Type
06073C0789H	FEMA FIRM Flood data

Additional Panels in search area:	FEMA Source Type
06073C0787H	FEMA FIRM Flood data
06073C0791G	FEMA FIRM Flood data
06073C0793G	FEMA FIRM Flood data

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
SAN MARCOS	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data*:

Search Radius:	1.25 miles
Status:	Not found

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
34	1/4 - 1/2 Mile SSW	Not Reported
B39	1/4 - 1/2 Mile West	SSE
51	1/4 - 1/2 Mile SE	S
S213	1/2 - 1 Mile SW	NE
S215	1/2 - 1 Mile SW	E
218	1/2 - 1 Mile SSE	Not Reported

* ©1996 Site−specific hydrogeological data gathered by CERCLIS Alerts, Inc., Bainbridge Island, WA. All rights reserved. All of the information and opinions presented are those of the cited EPA report(s), which were completed under a Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) investigation.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
1G	1/4 - 1/2 Mile West	SSE
2G	1/4 - 1/2 Mile SE	S
3G	1/4 - 1/2 Mile SSW	Not Reported
4G	1/2 - 1 Mile SW	E
5G	1/2 - 1 Mile SW	NE
6G	1/2 - 1 Mile SSE	Not Reported

For additional site information, refer to Physical Setting Source Map Findings.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

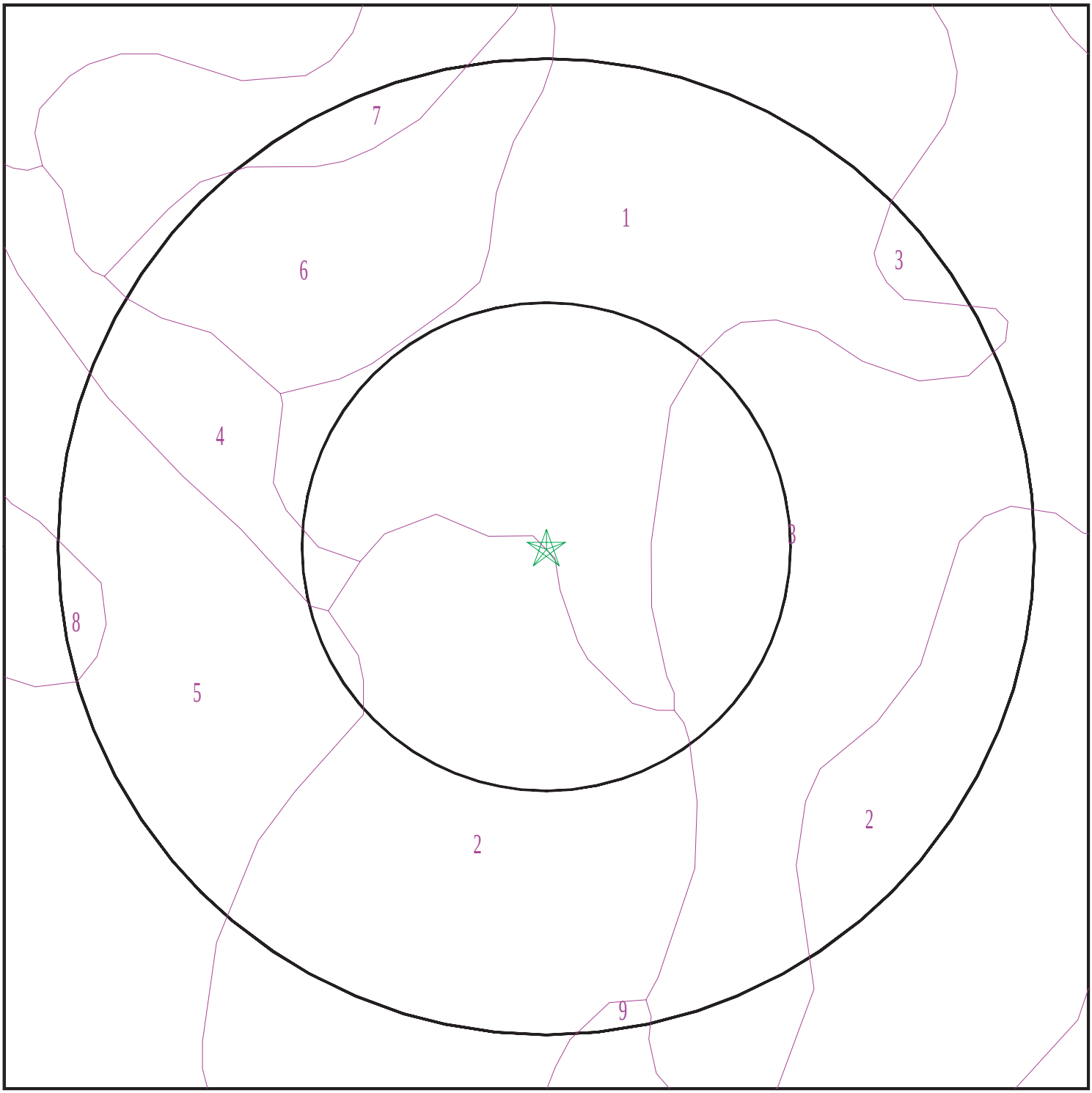
Era:	Mesozoic
System:	Lower Jurassic and Upper Triassic
Series:	Lower Mesozoic
Code:	lMze *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Eugeosynclinal Deposits

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 06526060.2r



Target Property
SSURGO Soil
Water

0 1/16 1/8 1/4 Miles

N

SITE NAME:	W Mission Rd & N Las Posas Rd	CLIENT:	Hillmann Environmental Co.
ADDRESS:	W Mission Rd & N Las Posas Rd San Marcos CA 92069	CONTACT:	Gabby Cyrulik
		INQUIRY #:	06526060.2r
LAT/LONG:	33.150441 / 117.189618	DATE:	June 07, 2021 5:23 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: HUERHUERO

Soil Surface Texture: loam

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Moderately well drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	11 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 4 Min: 1.4	Max: 8.4 Min: 7.4
2	11 inches	55 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 4 Min: 1.4	Max: 8.4 Min: 7.4
3	55 inches	72 inches	stratified sand to sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 4 Min: 1.4	Max: 8.4 Min: 7.4

Soil Map ID: 2

Soil Component Name: PLACENTIA

Soil Surface Texture: sandy loam

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Moderately well drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	12 inches	sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand.	Max: 0.42 Min: 0.01	Max: 8.4 Min: 7.9
2	12 inches	33 inches	sandy clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand.	Max: 0.42 Min: 0.01	Max: 8.4 Min: 7.9
3	33 inches	62 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand.	Max: 0.42 Min: 0.01	Max: 8.4 Min: 7.9

Soil Map ID: 3

Soil Component Name: FALLBROOK

Soil Surface Texture: sandy loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	5 inches	sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	Not reported	Max: Min:	Max: Min:
2	5 inches	11 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	Not reported	Max: Min:	Max: Min:
3	11 inches	27 inches	sandy clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	Not reported	Max: Min:	Max: Min:
4	27 inches	46 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	Not reported	Max: Min:	Max: Min:
5	46 inches	51 inches	weathered bedrock	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	Not reported	Max: Min:	Max: Min:

Soil Map ID: 4

Soil Component Name: ESCONDIDO

Soil Surface Texture: very fine sandy loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 86 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	7 inches	very fine sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	Not reported	Max: Min:	Max: Min:
2	7 inches	33 inches	silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	Not reported	Max: Min:	Max: Min:
3	33 inches	38 inches	unweathered bedrock	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	Not reported	Max: Min:	Max: Min:

Soil Map ID: 5

Soil Component Name: LAS FLORES

Soil Surface Texture: loamy fine sand

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Moderately well drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	20 inches	loamy fine sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	Not reported	Max: Min:	Max: Min:
2	20 inches	29 inches	clay	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	Not reported	Max: Min:	Max: Min:
3	29 inches	40 inches	sandy clay	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	Not reported	Max: Min:	Max: Min:
4	40 inches	48 inches	loamy coarse sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	Not reported	Max: Min:	Max: Min:
5	48 inches	51 inches	weathered bedrock	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	Not reported	Max: Min:	Max: Min:

Soil Map ID: 6

Soil Component Name: AULD

Soil Surface Texture: clay

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	53 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Not reported	Max: Min:	Max: Min:
2	53 inches	53 inches	weathered bedrock	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Not reported	Max: Min:	Max: Min:

Soil Map ID: 7

Soil Component Name: AULD

Soil Surface Texture: stony clay

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	29 inches	stony clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Not reported	Max: Min:	Max: Min:
2	29 inches	29 inches	weathered bedrock	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Not reported	Max: Min:	Max: Min:

Soil Map ID: 8

Soil Component Name: DIABLO

Soil Surface Texture: clay

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	14 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Not reported	Max: Min:	Max: Min:

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
2	14 inches	31 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Not reported	Max: Min:	Max: Min:
3	31 inches	35 inches	weathered bedrock	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Not reported	Max: Min:	Max: Min:

Soil Map ID: 9

Soil Component Name: PLACENTIA

Soil Surface Texture: sandy loam

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Moderately well drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	12 inches	sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 0.42 Min: 0.01	Max: 8.4 Min: 7.7

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
2	12 inches	33 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 0.42 Min: 0.01	Max: 8.4 Min: 7.7
3	33 inches	62 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 0.42 Min: 0.01	Max: 8.4 Min: 7.7

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No Wells Found		

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

Note: PWS System location is not always the same as well location.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A1	CAEDF0000131462	1/4 - 1/2 Mile SSE
B2	CAEDF0000064841	1/4 - 1/2 Mile West
A3	CAEDF0000115238	1/4 - 1/2 Mile SSE
B4	CAEDF0000065005	1/4 - 1/2 Mile West
C5	CAEDF0000095674	1/4 - 1/2 Mile WSW
B6	CAEDF0000037712	1/4 - 1/2 Mile West
C7	CAEDF0000133216	1/4 - 1/2 Mile WSW
C8	CAEDF0000140369	1/4 - 1/2 Mile WSW
C9	CAEDF0000122519	1/4 - 1/2 Mile WSW
C10	CAEDF0000073785	1/4 - 1/2 Mile WSW
B11	CAEDF0000039294	1/4 - 1/2 Mile West
B12	CAEDF0000031915	1/4 - 1/2 Mile West
B13	CAEDF0000071499	1/4 - 1/2 Mile West
C14	CAEDF0000118424	1/4 - 1/2 Mile WSW
C15	CAEDF0000063928	1/4 - 1/2 Mile WSW
B16	CAEDF0000081405	1/4 - 1/2 Mile West
B17	CAEDF0000045796	1/4 - 1/2 Mile West
B18	CAEDF0000039167	1/4 - 1/2 Mile West
B19	CAEDF0000040855	1/4 - 1/2 Mile West
B20	CAEDF0000042330	1/4 - 1/2 Mile West
C21	CAEDF0000089438	1/4 - 1/2 Mile WSW
C22	CAEDF0000066948	1/4 - 1/2 Mile WSW
B23	CAEDF0000074306	1/4 - 1/2 Mile West
A24	CAEDF0000040778	1/4 - 1/2 Mile SSE
B25	CAEDF0000090849	1/4 - 1/2 Mile West
C26	CAEDF0000131445	1/4 - 1/2 Mile WSW
A27	CAEDF0000008671	1/4 - 1/2 Mile SSE
A28	CAEDF0000018645	1/4 - 1/2 Mile SSE
A29	CAEDF0000127259	1/4 - 1/2 Mile SSE
A30	CAEDF0000056526	1/4 - 1/2 Mile SSE
A31	CAEDF0000052161	1/4 - 1/2 Mile SSE
A32	CAEDF0000031287	1/4 - 1/2 Mile SSE
A33	CAEDF0000106374	1/4 - 1/2 Mile SSE
A35	CAEDF0000104682	1/4 - 1/2 Mile SSE
A36	CAEDF0000120758	1/4 - 1/2 Mile SSE
A37	CAEDF0000136641	1/4 - 1/2 Mile SSE
A38	CAEDF0000101568	1/4 - 1/2 Mile SSE
A40	CAEDF0000129085	1/4 - 1/2 Mile SSE
A41	CAEDF0000137737	1/4 - 1/2 Mile SSE
A42	CAEDF0000022897	1/4 - 1/2 Mile SSE
A43	CAEDF0000130495	1/4 - 1/2 Mile SSE
A44	CAEDF0000016754	1/4 - 1/2 Mile SSE
A45	CAEDF0000073985	1/4 - 1/2 Mile SSE
A46	CAEDF0000123597	1/4 - 1/2 Mile SSE
A47	CAEDF0000072903	1/4 - 1/2 Mile SSE
A48	CAEDF0000014808	1/4 - 1/2 Mile SSE
A49	CAEDF0000049327	1/4 - 1/2 Mile SSE
A50	CAEDF0000018233	1/4 - 1/2 Mile SSE
A52	CAEDF0000003204	1/4 - 1/2 Mile SSE
A53	CAEDF0000092076	1/4 - 1/2 Mile SSE
A54	CAEDF0000104245	1/2 - 1 Mile SSE
A55	CAEDF0000047121	1/2 - 1 Mile SSE

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A56	CAEDF0000058982	1/2 - 1 Mile SSE
A57	CAEDF0000075034	1/2 - 1 Mile SSE
D58	CAEDF0000122182	1/2 - 1 Mile SSE
D59	CAEDF0000014594	1/2 - 1 Mile SSE
D60	CAEDF0000083818	1/2 - 1 Mile SSE
E61	CAEDF0000082991	1/2 - 1 Mile West
D62	CAEDF0000053323	1/2 - 1 Mile SSE
E63	CAEDF0000117897	1/2 - 1 Mile WSW
E64	CAEDF0000044649	1/2 - 1 Mile WSW
D65	CAEDF0000020363	1/2 - 1 Mile SSE
F66	CAEDF0000102035	1/2 - 1 Mile SSE
E67	CAEDF0000112933	1/2 - 1 Mile WSW
D68	CAEDF0000100907	1/2 - 1 Mile SSE
E69	CAEDF0000022122	1/2 - 1 Mile WSW
E70	CAEDF0000096392	1/2 - 1 Mile WSW
E71	CAEDF0000045462	1/2 - 1 Mile WSW
E72	CAEDF0000103439	1/2 - 1 Mile WSW
E73	CAEDF0000128955	1/2 - 1 Mile West
E74	CAEDF0000061367	1/2 - 1 Mile West
E75	CAEDF0000133458	1/2 - 1 Mile WSW
E76	CAEDF0000056211	1/2 - 1 Mile WSW
E77	CAEDF0000033752	1/2 - 1 Mile WSW
E78	CAEDF0000065953	1/2 - 1 Mile West
E79	CAEDF0000092752	1/2 - 1 Mile WSW
E80	CAEDF0000066040	1/2 - 1 Mile WSW
E81	CAEDF0000056016	1/2 - 1 Mile WSW
E82	CAEDF0000004678	1/2 - 1 Mile West
D83	CAEDF0000072002	1/2 - 1 Mile SSE
E84	CAEDF0000009727	1/2 - 1 Mile WSW
E85	CAEDF0000113287	1/2 - 1 Mile WSW
E86	CAEDF0000029815	1/2 - 1 Mile WSW
D87	CAEDF0000087945	1/2 - 1 Mile SSE
E88	CAEDF0000077643	1/2 - 1 Mile WSW
E89	CAEDF0000049177	1/2 - 1 Mile WSW
E90	CAEDF0000031723	1/2 - 1 Mile WSW
E91	CAEDF0000034556	1/2 - 1 Mile WSW
D92	CAEDF0000086504	1/2 - 1 Mile SSE
E93	CAEDF0000135009	1/2 - 1 Mile WSW
E94	CAEDF0000129756	1/2 - 1 Mile WSW
E95	CAEDF0000084770	1/2 - 1 Mile West
E96	CAEDF0000131729	1/2 - 1 Mile WSW
D97	CAEDF0000059314	1/2 - 1 Mile SSE
E98	CAEDF0000069064	1/2 - 1 Mile West
G99	CAEDF0000031291	1/2 - 1 Mile West
G100	CAEDF0000058826	1/2 - 1 Mile West
E101	CAEDF0000013855	1/2 - 1 Mile WSW
E102	CAEDF0000059158	1/2 - 1 Mile WSW
E103	CAEDF0000000531	1/2 - 1 Mile WSW
E104	CAEDF0000015935	1/2 - 1 Mile West
E105	CAEDF0000019555	1/2 - 1 Mile WSW
E106	CAEDF0000107594	1/2 - 1 Mile West
E107	CAEDF0000133980	1/2 - 1 Mile West

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
E108	CAEDF0000099606	1/2 - 1 Mile West
E109	CAEDF0000015671	1/2 - 1 Mile WSW
E110	CAEDF0000109716	1/2 - 1 Mile West
E111	CAEDF0000087740	1/2 - 1 Mile WSW
E112	CAEDF0000132028	1/2 - 1 Mile West
E113	CAEDF0000082501	1/2 - 1 Mile WSW
E114	CAEDF0000018701	1/2 - 1 Mile West
E115	CAEDF0000066185	1/2 - 1 Mile WSW
D116	CAEDF0000070036	1/2 - 1 Mile SSE
E117	CAEDF0000115929	1/2 - 1 Mile West
E118	CAEDF0000124137	1/2 - 1 Mile West
E119	CAEDF0000137312	1/2 - 1 Mile West
D120	CAEDF0000009574	1/2 - 1 Mile SSE
E121	CAEDF0000114887	1/2 - 1 Mile WSW
E122	CAEDF0000095516	1/2 - 1 Mile WSW
E123	CAEDF0000082303	1/2 - 1 Mile WSW
E124	CAEDF0000134082	1/2 - 1 Mile WSW
E125	CAEDF0000089261	1/2 - 1 Mile WSW
E126	CAEDF0000136217	1/2 - 1 Mile WSW
G127	CAEDF0000126832	1/2 - 1 Mile West
F128	CAEDF0000088046	1/2 - 1 Mile SSE
E129	CAEDF0000086698	1/2 - 1 Mile West
E130	CAEDF0000020828	1/2 - 1 Mile West
E131	CAEDF0000056357	1/2 - 1 Mile West
E132	CAEDF0000126032	1/2 - 1 Mile West
133	CAEDF0000048726	1/2 - 1 Mile WSW
E134	CAEDF0000058245	1/2 - 1 Mile WSW
H135	CAEDF0000008590	1/2 - 1 Mile West
H136	CAEDF0000068530	1/2 - 1 Mile West
F137	CAEDF0000010826	1/2 - 1 Mile SSE
F138	CAEDF0000018395	1/2 - 1 Mile SSE
F139	CAEDF0000088905	1/2 - 1 Mile SSE
I140	CAEDF0000143214	1/2 - 1 Mile SSE
G141	CAEDF0000059999	1/2 - 1 Mile West
J142	CAEDF0000006292	1/2 - 1 Mile South
G143	CAEDF0000107356	1/2 - 1 Mile West
E144	CAEDF0000077728	1/2 - 1 Mile WSW
I145	CAEDF0000052265	1/2 - 1 Mile SSE
I146	CAEDF0000048855	1/2 - 1 Mile SSE
G147	CAEDF0000010591	1/2 - 1 Mile West
J148	CAEDF0000059941	1/2 - 1 Mile South
J149	CAEDF0000079510	1/2 - 1 Mile South
J150	CAEDF0000113813	1/2 - 1 Mile South
J151	CAEDF0000019095	1/2 - 1 Mile South
J152	CAEDF0000004057	1/2 - 1 Mile South
J153	CAEDF0000062067	1/2 - 1 Mile South
K154	CAEDF0000053679	1/2 - 1 Mile SSW
J155	CAEDF0000041824	1/2 - 1 Mile South
K156	CAEDF0000060495	1/2 - 1 Mile SSW
K157	CAEDF0000076795	1/2 - 1 Mile SSW
L158	CAEDF0000065903	1/2 - 1 Mile WSW
L159	CAEDF0000116886	1/2 - 1 Mile WSW

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
160	CAEDF0000022484	1/2 - 1 Mile South
L161	CAEDF0000059124	1/2 - 1 Mile WSW
L162	CAEDF0000008573	1/2 - 1 Mile WSW
L163	CAEDF0000060762	1/2 - 1 Mile WSW
M164	CAEDF0000096482	1/2 - 1 Mile WSW
L165	CAEDF0000104772	1/2 - 1 Mile WSW
L166	CAEDF0000042687	1/2 - 1 Mile WSW
L167	CAEDF0000053692	1/2 - 1 Mile WSW
N168	CAEDF0000128927	1/2 - 1 Mile SSE
N169	CAEDF0000020594	1/2 - 1 Mile SSE
M170	CAEDF0000125713	1/2 - 1 Mile WSW
N171	CAEDF0000042258	1/2 - 1 Mile SSE
N172	CAEDF0000104855	1/2 - 1 Mile SSE
N173	CAEDF0000076686	1/2 - 1 Mile SSE
O174	CAEDF0000090717	1/2 - 1 Mile NW
M175	CAEDF0000067827	1/2 - 1 Mile WSW
O176	CAEDF0000079627	1/2 - 1 Mile NW
O177	CAEDF0000089827	1/2 - 1 Mile NW
O178	CAEDF0000078245	1/2 - 1 Mile NW
O179	CAEDF0000072534	1/2 - 1 Mile NW
O180	CAEDF0000107573	1/2 - 1 Mile NW
O181	CAEDF0000125673	1/2 - 1 Mile NW
O182	CAEDF0000018033	1/2 - 1 Mile NW
O183	CAEDF0000041180	1/2 - 1 Mile NW
O184	CAEDF0000085538	1/2 - 1 Mile NW
O185	CAEDF0000096679	1/2 - 1 Mile NW
O186	CAEDF0000002153	1/2 - 1 Mile NW
O187	CAEDF0000126956	1/2 - 1 Mile NW
O188	CAEDF0000064018	1/2 - 1 Mile NW
O189	CAEDF0000095039	1/2 - 1 Mile NW
O190	CAEDF0000111209	1/2 - 1 Mile NW
O191	CAEDF0000117393	1/2 - 1 Mile NW
O192	CAEDF0000101020	1/2 - 1 Mile NW
O193	CAEDF0000134461	1/2 - 1 Mile NW
O194	CAEDF0000101244	1/2 - 1 Mile NW
O195	CAEDF0000002168	1/2 - 1 Mile NW
196	CAEDF0000003905	1/2 - 1 Mile NW
P197	CAEDF0000032174	1/2 - 1 Mile SW
P198	CAEDF0000117022	1/2 - 1 Mile SW
P199	CAEDF0000100287	1/2 - 1 Mile SW
P200	CAEDF0000079997	1/2 - 1 Mile SW
P201	CAEDF0000135476	1/2 - 1 Mile SW
P202	CAEDF0000110271	1/2 - 1 Mile SW
P203	CAEDF0000013350	1/2 - 1 Mile SW
P204	CAEDF0000129710	1/2 - 1 Mile SW
Q205	CAEDF0000003131	1/2 - 1 Mile SSE
Q206	CAEDF0000061559	1/2 - 1 Mile SSE
Q207	CAEDF0000111586	1/2 - 1 Mile SSE
Q208	CAEDF0000000696	1/2 - 1 Mile SSE
R209	CAEDF0000050975	1/2 - 1 Mile SW
R210	CAEDF0000110587	1/2 - 1 Mile SW
R211	CAEDF0000069358	1/2 - 1 Mile SW

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

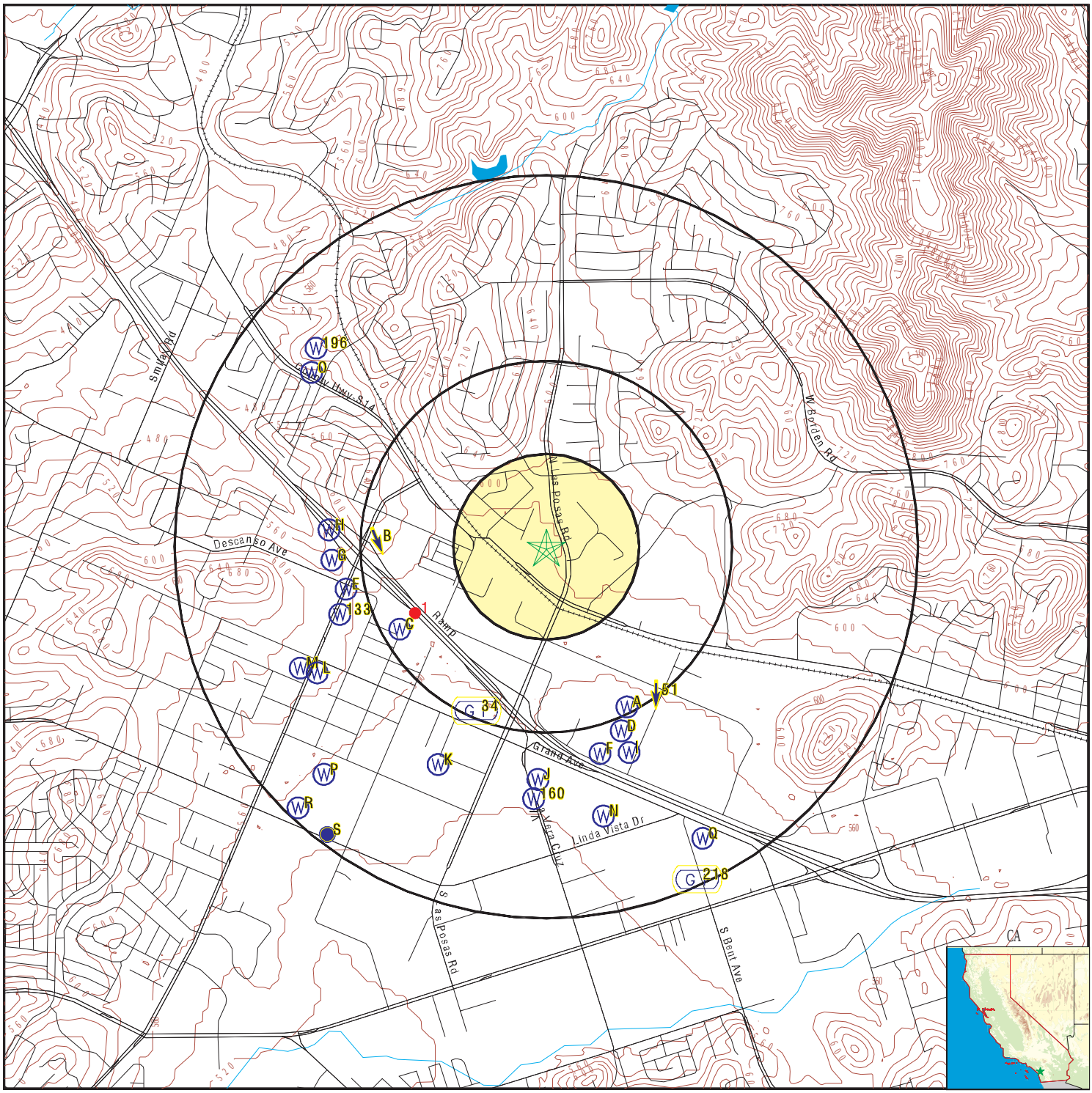
MAP ID	WELL ID	LOCATION FROM TP
R212	CAEDF0000060202	1/2 - 1 Mile SW
R214	CAEDF0000066785	1/2 - 1 Mile SW
R216	CAEDF0000056573	1/2 - 1 Mile SW
R217	CAEDF0000042737	1/2 - 1 Mile SW
R219	CAEDF0000135093	1/2 - 1 Mile SW

OTHER STATE DATABASE INFORMATION

STATE OIL/GAS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
1	CAOG14000006684	1/4 - 1/2 Mile WSW

PHYSICAL SETTING SOURCE MAP - 06526060.2r



- County Boundary
- Major Roads
- Contour Lines
- Earthquake Fault Lines
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons
- Groundwater Flow Direction
- Indeterminate Groundwater Flow at Location
- Groundwater Flow Varies at Location
- Closest Hydrogeological Data
- Oil, gas or related wells

SITE NAME:	W Mission Rd & N Las Posas Rd	CLIENT:	Hillmann Environmental Co.
ADDRESS:	W Mission Rd & N Las Posas Rd San Marcos CA 92069	CONTACT:	Gabby Cyrulik
		INQUIRY #:	06526060.2r
LAT/LONG:	33.150441 / 117.189618	DATE:	June 07, 2021 5:22 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

A1
SSE
1/4 - 1/2 Mile
Lower

CA WELLS **CAEDF0000131462**

Well ID:	SL209154190-D-3	Well Type:	MONITORING
Source:	EDF	Other Name:	D-3
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL209154190&assigned_name=D-3&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL209154190&assigned_name=D-3		

B2
West
1/4 - 1/2 Mile
Higher

CA WELLS **CAEDF0000064841**

Well ID:	T0607301273-MW-11	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-11
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607301273&assigned_name=MW-11&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607301273&assigned_name=MW-11		

A3
SSE
1/4 - 1/2 Mile
Lower

CA WELLS **CAEDF0000115238**

Well ID:	SL209154190-MPE-6	Well Type:	MONITORING
Source:	EDF	Other Name:	MPE-6
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL209154190&assigned_name=MPE-6&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL209154190&assigned_name=MPE-6		

B4
West
1/4 - 1/2 Mile
Higher

CA WELLS **CAEDF0000065005**

Well ID:	T0607301273-MW-5	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-5
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607301273&assigned_name=MW-5&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607301273&assigned_name=MW-5		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

C5
WSW
1/4 - 1/2 Mile
Lower

CA WELLS **CAEDF0000095674**

Well ID:	T0607302697-MW-8	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-8
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607302697&assigned_name=MW-8&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607302697&assigned_name=MW-8		

B6
West
1/4 - 1/2 Mile
Higher

CA WELLS **CAEDF0000037712**

Well ID:	T0607301273-MW-6	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-6
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607301273&assigned_name=MW-6&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607301273&assigned_name=MW-6		

C7
WSW
1/4 - 1/2 Mile
Lower

CA WELLS **CAEDF0000133216**

Well ID:	T0607302697-MW-7	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-7
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607302697&assigned_name=MW-7&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607302697&assigned_name=MW-7		

C8
WSW
1/4 - 1/2 Mile
Lower

CA WELLS **CAEDF0000140369**

Well ID:	T0607302282-MW-7	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-7
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607302282&assigned_name=MW-7&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607302282&assigned_name=MW-7		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

C9
WSW
1/4 - 1/2 Mile
Lower

CA WELLS **CAEDF0000122519**

Well ID:	T0607302282-MW-6	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-6
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607302282&assigned_name=MW-6&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607302282&assigned_name=MW-6		

C10
WSW
1/4 - 1/2 Mile
Lower

CA WELLS **CAEDF0000073785**

Well ID:	T0607302697-MW-6	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-6
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607302697&assigned_name=MW-6&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607302697&assigned_name=MW-6		

B11
West
1/4 - 1/2 Mile
Higher

CA WELLS **CAEDF0000039294**

Well ID:	T0607301273-MW-1	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-1
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607301273&assigned_name=MW-1&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607301273&assigned_name=MW-1		

B12
West
1/4 - 1/2 Mile
Higher

CA WELLS **CAEDF0000031915**

Well ID:	T0607301273-MW-9	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-9
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607301273&assigned_name=MW-9&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607301273&assigned_name=MW-9		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

B13
West
1/4 - 1/2 Mile
Higher

CA WELLS **CAEDF0000071499**

Well ID:	T0607301273-MW-4	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-4
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607301273&assigned_name=MW-4&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607301273&assigned_name=MW-4		

C14
WSW
1/4 - 1/2 Mile
Lower

CA WELLS **CAEDF0000118424**

Well ID:	T0607302282-MW-5	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-5
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607302282&assigned_name=MW-5&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607302282&assigned_name=MW-5		

C15
WSW
1/4 - 1/2 Mile
Lower

CA WELLS **CAEDF0000063928**

Well ID:	T0607302697-MW-5	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-5
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607302697&assigned_name=MW-5&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607302697&assigned_name=MW-5		

B16
West
1/4 - 1/2 Mile
Higher

CA WELLS **CAEDF0000081405**

Well ID:	T0607301273-MW-7	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-7
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607301273&assigned_name=MW-7&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607301273&assigned_name=MW-7		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

B17
West
1/4 - 1/2 Mile
Higher

CA WELLS **CAEDF0000045796**

Well ID:	T0607301273-MW-3	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-3
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607301273&assigned_name=MW-3&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607301273&assigned_name=MW-3		

B18
West
1/4 - 1/2 Mile
Higher

CA WELLS **CAEDF0000039167**

Well ID:	T0607301273-EW-1	Well Type:	MONITORING
Source:	EDF	Other Name:	EW-1
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607301273&assigned_name=EW-1&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607301273&assigned_name=EW-1		

B19
West
1/4 - 1/2 Mile
Higher

CA WELLS **CAEDF0000040855**

Well ID:	T0607301273-MW-2	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-2
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607301273&assigned_name=MW-2&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607301273&assigned_name=MW-2		

B20
West
1/4 - 1/2 Mile
Higher

CA WELLS **CAEDF0000042330**

Well ID:	T0607301273-MW-10	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-10
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607301273&assigned_name=MW-10&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607301273&assigned_name=MW-10		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

C21
WSW
1/4 - 1/2 Mile
Lower

CA WELLS **CAEDF0000089438**

Well ID:	T0607302697-MW-11	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-11
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607302697&assigned_name=MW-11&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607302697&assigned_name=MW-11		

C22
WSW
1/4 - 1/2 Mile
Lower

CA WELLS **CAEDF0000066948**

Well ID:	T0607302697-MW-9	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-9
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607302697&assigned_name=MW-9&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607302697&assigned_name=MW-9		

B23
West
1/4 - 1/2 Mile
Higher

CA WELLS **CAEDF0000074306**

Well ID:	T0607301273-MW-8	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-8
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607301273&assigned_name=MW-8&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607301273&assigned_name=MW-8		

A24
SSE
1/4 - 1/2 Mile
Lower

CA WELLS **CAEDF0000040778**

Well ID:	SL209154190-W-2	Well Type:	MONITORING
Source:	EDF	Other Name:	W-2
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL209154190&assigned_name=W-2&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL209154190&assigned_name=W-2		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

B25
West
1/4 - 1/2 Mile
Higher

CA WELLS **CAEDF0000090849**

Well ID:	T0607301273-MW-12	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-12
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607301273&assigned_name=MW-12&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607301273&assigned_name=MW-12		

C26
WSW
1/4 - 1/2 Mile
Lower

CA WELLS **CAEDF0000131445**

Well ID:	T0607302697-MW-10	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-10
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607302697&assigned_name=MW-10&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607302697&assigned_name=MW-10		

A27
SSE
1/4 - 1/2 Mile
Lower

CA WELLS **CAEDF0000008671**

Well ID:	SL209154190-MPE-14	Well Type:	MONITORING
Source:	EDF	Other Name:	MPE-14
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL209154190&assigned_name=MPE-14&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL209154190&assigned_name=MPE-14		

A28
SSE
1/4 - 1/2 Mile
Lower

CA WELLS **CAEDF0000018645**

Well ID:	SL209154190-W-3	Well Type:	MONITORING
Source:	EDF	Other Name:	W-3
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL209154190&assigned_name=W-3&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL209154190&assigned_name=W-3		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

A29
SSE
1/4 - 1/2 Mile
Lower

CA WELLS **CAEDF0000127259**

Well ID:	SL209154190-MPE-1	Well Type:	MONITORING
Source:	EDF	Other Name:	MPE-1
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL209154190&assigned_name=MPE-1&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL209154190&assigned_name=MPE-1		

A30
SSE
1/4 - 1/2 Mile
Lower

CA WELLS **CAEDF0000056526**

Well ID:	SL209154190-MPE-9	Well Type:	MONITORING
Source:	EDF	Other Name:	MPE-9
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL209154190&assigned_name=MPE-9&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL209154190&assigned_name=MPE-9		

A31
SSE
1/4 - 1/2 Mile
Lower

CA WELLS **CAEDF0000052161**

Well ID:	SL209154190-MPE-11	Well Type:	MONITORING
Source:	EDF	Other Name:	MPE-11
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL209154190&assigned_name=MPE-11&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL209154190&assigned_name=MPE-11		

A32
SSE
1/4 - 1/2 Mile
Lower

CA WELLS **CAEDF0000031287**

Well ID:	SL209154190-W-1	Well Type:	MONITORING
Source:	EDF	Other Name:	W-1
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL209154190&assigned_name=W-1&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL209154190&assigned_name=W-1		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

A33
SSE
1/4 - 1/2 Mile
Lower

CA WELLS **CAEDF0000106374**

Well ID:	SL209154190-MPE-5	Well Type:	MONITORING
Source:	EDF	Other Name:	MPE-5
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL209154190&assigned_name=MPE-5&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL209154190&assigned_name=MPE-5		

34
SSW
1/4 - 1/2 Mile
Lower

AQUIFLOW **38459**

Site ID:	Not Reported
Groundwater Flow:	Not Reported
Shallow Water Depth:	Not Reported
Deep Water Depth:	Not Reported
Average Water Depth:	12
Date:	05/29/1987

A35
SSE
1/4 - 1/2 Mile
Lower

CA WELLS **CAEDF0000104682**

Well ID:	SL209154190-MPE-13	Well Type:	MONITORING
Source:	EDF	Other Name:	MPE-13
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL209154190&assigned_name=MPE-13&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL209154190&assigned_name=MPE-13		

A36
SSE
1/4 - 1/2 Mile
Lower

CA WELLS **CAEDF0000120758**

Well ID:	SL209154190-MPE-2	Well Type:	MONITORING
Source:	EDF	Other Name:	MPE-2
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL209154190&assigned_name=MPE-2&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL209154190&assigned_name=MPE-2		

A37
SSE
1/4 - 1/2 Mile
Lower

CA WELLS **CAEDF0000136641**

Well ID:	SL209154190-MPE-8	Well Type:	MONITORING
Source:	EDF	Other Name:	MPE-8

GAMA PFAS Testing: Not Reported
Groundwater Quality Data: https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL209154190&assigned_name=MPE-8&store_num=
GeoTracker Data: https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL209154190&assigned_name=MPE-8

A38
SSE
1/4 - 1/2 Mile
Lower

CA WELLS **CAEDF0000101568**

Well ID: SL209154190-MPE-10
Source: EDF
Well Type: MONITORING
Other Name: MPE-10
GAMA PFAS Testing: Not Reported
Groundwater Quality Data: https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL209154190&assigned_name=MPE-10&store_num=
GeoTracker Data: https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL209154190&assigned_name=MPE-10

B39
West
1/4 - 1/2 Mile
Higher

AQUIFLOW **38806**

Site ID: Not Reported
Groundwater Flow: SSE
Shallow Water Depth: Not Reported
Deep Water Depth: Not Reported
Average Water Depth: 30
Date: 10/15/1993

A40
SSE
1/4 - 1/2 Mile
Lower

CA WELLS **CAEDF0000129085**

Well ID: SL209154190-MPE-12
Source: EDF
Well Type: MONITORING
Other Name: MPE-12
GAMA PFAS Testing: Not Reported
Groundwater Quality Data: https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL209154190&assigned_name=MPE-12&store_num=
GeoTracker Data: https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL209154190&assigned_name=MPE-12

A41
SSE
1/4 - 1/2 Mile
Lower

CA WELLS **CAEDF0000137737**

Well ID: SL209154190-MPE-7
Source: EDF
Well Type: MONITORING
Other Name: MPE-7
GAMA PFAS Testing: Not Reported
Groundwater Quality Data: https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL209154190&assigned_name=MPE-7&store_num=
GeoTracker Data: https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL209154190&assigned_name=MPE-7

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

A42
SSE
1/4 - 1/2 Mile
Lower

CA WELLS **CAEDF0000022897**

Well ID:	SL209154190-MPE-4	Well Type:	MONITORING
Source:	EDF	Other Name:	MPE-4
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL209154190&assigned_name=MPE-4&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL209154190&assigned_name=MPE-4		

A43
SSE
1/4 - 1/2 Mile
Lower

CA WELLS **CAEDF0000130495**

Well ID:	SL209154190-P-7	Well Type:	MONITORING
Source:	EDF	Other Name:	P-7
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL209154190&assigned_name=P-7&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL209154190&assigned_name=P-7		

A44
SSE
1/4 - 1/2 Mile
Lower

CA WELLS **CAEDF0000016754**

Well ID:	SL209154190-D-6	Well Type:	MONITORING
Source:	EDF	Other Name:	D-6
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL209154190&assigned_name=D-6&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL209154190&assigned_name=D-6		

A45
SSE
1/4 - 1/2 Mile
Lower

CA WELLS **CAEDF0000073985**

Well ID:	SL209154190-D-2	Well Type:	MONITORING
Source:	EDF	Other Name:	D-2
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL209154190&assigned_name=D-2&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL209154190&assigned_name=D-2		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

A46
SSE
1/4 - 1/2 Mile
Lower

CA WELLS **CAEDF0000123597**

Well ID:	SL209154190-P-3	Well Type:	MONITORING
Source:	EDF	Other Name:	P-3
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL209154190&assigned_name=P-3&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL209154190&assigned_name=P-3		

A47
SSE
1/4 - 1/2 Mile
Lower

CA WELLS **CAEDF0000072903**

Well ID:	SL209154190-MPE-15	Well Type:	MONITORING
Source:	EDF	Other Name:	MPE-15
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL209154190&assigned_name=MPE-15&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL209154190&assigned_name=MPE-15		

A48
SSE
1/4 - 1/2 Mile
Lower

CA WELLS **CAEDF0000014808**

Well ID:	SL209154190-MPE-3	Well Type:	MONITORING
Source:	EDF	Other Name:	MPE-3
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL209154190&assigned_name=MPE-3&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL209154190&assigned_name=MPE-3		

A49
SSE
1/4 - 1/2 Mile
Lower

CA WELLS **CAEDF0000049327**

Well ID:	SL209154190-P-5	Well Type:	MONITORING
Source:	EDF	Other Name:	P-5
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL209154190&assigned_name=P-5&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL209154190&assigned_name=P-5		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

A50
SSE
1/4 - 1/2 Mile
Lower

CA WELLS **CAEDF0000018233**

Well ID:	SL209154190-MPE-16	Well Type:	MONITORING
Source:	EDF	Other Name:	MPE-16
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL209154190&assigned_name=MPE-16&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL209154190&assigned_name=MPE-16		

51
SE
1/4 - 1/2 Mile
Lower

AQUIFLOW **34135**

Site ID:	Not Reported
Groundwater Flow:	S
Shallow Water Depth:	6.5
Deep Water Depth:	15
Average Water Depth:	Not Reported
Date:	08/31/1993

A52
SSE
1/4 - 1/2 Mile
Lower

CA WELLS **CAEDF0000003204**

Well ID:	SL209154190-MPE-20	Well Type:	MONITORING
Source:	EDF	Other Name:	MPE-20
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL209154190&assigned_name=MPE-20&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL209154190&assigned_name=MPE-20		

A53
SSE
1/4 - 1/2 Mile
Lower

CA WELLS **CAEDF0000092076**

Well ID:	SL209154190-MPE-17	Well Type:	MONITORING
Source:	EDF	Other Name:	MPE-17
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL209154190&assigned_name=MPE-17&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL209154190&assigned_name=MPE-17		

A54
SSE
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000104245**

Well ID:	SL209154190-MPE-19	Well Type:	MONITORING
Source:	EDF	Other Name:	MPE-19

GAMA PFAS Testing: Not Reported
Groundwater Quality Data: https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL209154190&assigned_name=MPE-19&store_num=
GeoTracker Data: https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL209154190&assigned_name=MPE-19

A55
SSE **CA WELLS** **CAEDF0000047121**
1/2 - 1 Mile
Lower

Well ID: SL209154190-MPE-18 Well Type: MONITORING
Source: EDF Other Name: MPE-18
GAMA PFAS Testing: Not Reported
Groundwater Quality Data: https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL209154190&assigned_name=MPE-18&store_num=
GeoTracker Data: https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL209154190&assigned_name=MPE-18

A56
SSE **CA WELLS** **CAEDF0000058982**
1/2 - 1 Mile
Lower

Well ID: SL209154190-P-6 Well Type: MONITORING
Source: EDF Other Name: P-6
GAMA PFAS Testing: Not Reported
Groundwater Quality Data: https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL209154190&assigned_name=P-6&store_num=
GeoTracker Data: https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL209154190&assigned_name=P-6

A57
SSE **CA WELLS** **CAEDF0000075034**
1/2 - 1 Mile
Lower

Well ID: SL209154190-D-4 Well Type: MONITORING
Source: EDF Other Name: D-4
GAMA PFAS Testing: Not Reported
Groundwater Quality Data: https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL209154190&assigned_name=D-4&store_num=
GeoTracker Data: https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL209154190&assigned_name=D-4

D58
SSE **CA WELLS** **CAEDF0000122182**
1/2 - 1 Mile
Lower

Well ID: SL0607396081-MW-12 Well Type: MONITORING
Source: EDF Other Name: MW-12
GAMA PFAS Testing: Not Reported
Groundwater Quality Data: https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL0607396081&assigned_name=MW-12&store_num=

GeoTracker Data: https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL0607396081&assigned_name=MW-12

D59
SSE **CA WELLS** **CAEDF0000014594**
1/2 - 1 Mile
Lower

Well ID:	SL209154190-P-2	Well Type:	MONITORING
Source:	EDF	Other Name:	P-2
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL209154190&assigned_name=P-2&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL209154190&assigned_name=P-2		

D60
SSE **CA WELLS** **CAEDF0000083818**
1/2 - 1 Mile
Lower

Well ID:	SL209154190-D-1	Well Type:	MONITORING
Source:	EDF	Other Name:	D-1
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL209154190&assigned_name=D-1&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL209154190&assigned_name=D-1		

E61
West **CA WELLS** **CAEDF0000082991**
1/2 - 1 Mile
Higher

Well ID:	T0607303122-URS-MW-4	Well Type:	MONITORING
Source:	EDF	Other Name:	URS-MW-4
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607303122&assigned_name=URS-MW-4&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607303122&assigned_name=URS-MW-4		

D62
SSE **CA WELLS** **CAEDF0000053323**
1/2 - 1 Mile
Lower

Well ID:	SL0607396081-MW-18	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-18
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL0607396081&assigned_name=MW-18&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL0607396081&assigned_name=MW-18		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

E63
WSW
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000117897**

Well ID:	T0607301309-MW-20	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-20
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607301309&assigned_name=MW-20&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607301309&assigned_name=MW-20		

E64
WSW
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000044649**

Well ID:	T0607301309-MW-21	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-21
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607301309&assigned_name=MW-21&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607301309&assigned_name=MW-21		

D65
SSE
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000020363**

Well ID:	SL0607396081-MW-16	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-16
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL0607396081&assigned_name=MW-16&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL0607396081&assigned_name=MW-16		

F66
SSE
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000102035**

Well ID:	SL0607396081-MW-15	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-15
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL0607396081&assigned_name=MW-15&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL0607396081&assigned_name=MW-15		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

E67
WSW
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000112933**

Well ID:	T0607302827-MW-B1	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-B1
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607302827&assigned_name=MW-B1&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607302827&assigned_name=MW-B1		

D68
SSE
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000100907**

Well ID:	SL0607396081-MW-17D	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-17D
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL0607396081&assigned_name=MW-17D&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL0607396081&assigned_name=MW-17D		

E69
WSW
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000022122**

Well ID:	T0607302827-MW-19	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-19
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607302827&assigned_name=MW-19&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607302827&assigned_name=MW-19		

E70
WSW
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000096392**

Well ID:	T0607302827-MW-12	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-12
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607302827&assigned_name=MW-12&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607302827&assigned_name=MW-12		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

E71
WSW
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000045462**

Well ID:	T0607301309-CB-02	Well Type:	MONITORING
Source:	EDF	Other Name:	CB-02
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607301309&assigned_name=CB-02&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607301309&assigned_name=CB-02		

E72
WSW
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000103439**

Well ID:	T0607302827-MW-18	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-18
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607302827&assigned_name=MW-18&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607302827&assigned_name=MW-18		

E73
West
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000128955**

Well ID:	T0607302478-MW-2	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-2
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607302478&assigned_name=MW-2&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607302478&assigned_name=MW-2		

E74
West
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000061367**

Well ID:	T0619784179-RW-6	Well Type:	MONITORING
Source:	EDF	Other Name:	RW-6
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0619784179&assigned_name=RW-6&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0619784179&assigned_name=RW-6		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

E75
WSW
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000133458**

Well ID:	T0607302827-MW-17	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-17
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607302827&assigned_name=MW-17&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607302827&assigned_name=MW-17		

E76
WSW
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000056211**

Well ID:	T0607301309-MW-17	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-17
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607301309&assigned_name=MW-17&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607301309&assigned_name=MW-17		

E77
WSW
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000033752**

Well ID:	T0607301309-CB-04	Well Type:	MONITORING
Source:	EDF	Other Name:	CB-04
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607301309&assigned_name=CB-04&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607301309&assigned_name=CB-04		

E78
West
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000065953**

Well ID:	T0607303122-W-6	Well Type:	MONITORING
Source:	EDF	Other Name:	W-6
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607303122&assigned_name=W-6&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607303122&assigned_name=W-6		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

E79
WSW
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000092752**

Well ID:	T0607301309-URS-PPW4	Well Type:	MONITORING
Source:	EDF	Other Name:	URS-PPW4
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607301309&assigned_name=URS-PPW4&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607301309&assigned_name=URS-PPW4		

E80
WSW
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000066040**

Well ID:	T0607301309-URS-CMT1	Well Type:	MONITORING
Source:	EDF	Other Name:	URS-CMT1
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607301309&assigned_name=URS-CMT1&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607301309&assigned_name=URS-CMT1		

E81
WSW
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000056016**

Well ID:	T0607301309-CB-01B	Well Type:	MONITORING
Source:	EDF	Other Name:	CB-01B
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607301309&assigned_name=CB-01B&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607301309&assigned_name=CB-01B		

E82
West
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000004678**

Well ID:	T0607302478-MW-7	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-7
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607302478&assigned_name=MW-7&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607302478&assigned_name=MW-7		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

D83
SSE
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000072002**

Well ID:	SL0607396081-MW-19	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-19
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL0607396081&assigned_name=MW-19&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL0607396081&assigned_name=MW-19		

E84
WSW
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000009727**

Well ID:	T0607302827-MW-B4	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-B4
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607302827&assigned_name=MW-B4&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607302827&assigned_name=MW-B4		

E85
WSW
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000113287**

Well ID:	T0607301309-CB-07	Well Type:	MONITORING
Source:	EDF	Other Name:	CB-07
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607301309&assigned_name=CB-07&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607301309&assigned_name=CB-07		

E86
WSW
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000029815**

Well ID:	T0607301309-CB-10A	Well Type:	MONITORING
Source:	EDF	Other Name:	CB-10A
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607301309&assigned_name=CB-10A&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607301309&assigned_name=CB-10A		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

D87
SSE
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000087945**

Well ID:	SL209154190-P-1	Well Type:	MONITORING
Source:	EDF	Other Name:	P-1
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL209154190&assigned_name=P-1&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL209154190&assigned_name=P-1		

E88
WSW
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000077643**

Well ID:	T0607301309-CB-10B	Well Type:	MONITORING
Source:	EDF	Other Name:	CB-10B
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607301309&assigned_name=CB-10B&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607301309&assigned_name=CB-10B		

E89
WSW
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000049177**

Well ID:	T0607301309-MW-16	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-16
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607301309&assigned_name=MW-16&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607301309&assigned_name=MW-16		

E90
WSW
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000031723**

Well ID:	T0607302827-MW-16	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-16
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607302827&assigned_name=MW-16&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607302827&assigned_name=MW-16		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

E91
WSW
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000034556**

Well ID:	T0607301309-CB-03	Well Type:	MONITORING
Source:	EDF	Other Name:	CB-03
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607301309&assigned_name=CB-03&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607301309&assigned_name=CB-03		

D92
SSE
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000086504**

Well ID:	SL0607396081-MW-2	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-2
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL0607396081&assigned_name=MW-2&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL0607396081&assigned_name=MW-2		

E93
WSW
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000135009**

Well ID:	T0607301309-URS-PPW1	Well Type:	MONITORING
Source:	EDF	Other Name:	URS-PPW1
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607301309&assigned_name=URS-PPW1&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607301309&assigned_name=URS-PPW1		

E94
WSW
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000129756**

Well ID:	T0607301309-URS-PPW3	Well Type:	MONITORING
Source:	EDF	Other Name:	URS-PPW3
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607301309&assigned_name=URS-PPW3&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607301309&assigned_name=URS-PPW3		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

E95
West
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000084770**

Well ID:	T0607302478-MW-11	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-11
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607302478&assigned_name=MW-11&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607302478&assigned_name=MW-11		

E96
WSW
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000131729**

Well ID:	T0607302827-MW-15	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-15
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607302827&assigned_name=MW-15&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607302827&assigned_name=MW-15		

D97
SSE
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000059314**

Well ID:	SL0607396081-MW-1	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-1
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL0607396081&assigned_name=MW-1&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL0607396081&assigned_name=MW-1		

E98
West
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000069064**

Well ID:	T0607302478-MW-4	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-4
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607302478&assigned_name=MW-4&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607302478&assigned_name=MW-4		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

G99
West
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000031291**

Well ID:	T0607302478-URS-MW-2	Well Type:	MONITORING
Source:	EDF	Other Name:	URS-MW-2
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607302478&assigned_name=URS-MW-2&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607302478&assigned_name=URS-MW-2		

G100
West
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000058826**

Well ID:	T0607302478-URS-MW2	Well Type:	MONITORING
Source:	EDF	Other Name:	URS-MW2
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607302478&assigned_name=URS-MW2&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607302478&assigned_name=URS-MW2		

E101
WSW
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000013855**

Well ID:	T0607302827-MW-B3	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-B3
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607302827&assigned_name=MW-B3&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607302827&assigned_name=MW-B3		

E102
WSW
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000059158**

Well ID:	T0607301309-URS-PPW2	Well Type:	MONITORING
Source:	EDF	Other Name:	URS-PPW2
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607301309&assigned_name=URS-PPW2&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607301309&assigned_name=URS-PPW2		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

E103
WSW
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000000531**

Well ID:	T0607301309-CB-05	Well Type:	MONITORING
Source:	EDF	Other Name:	CB-05
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607301309&assigned_name=CB-05&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607301309&assigned_name=CB-05		

E104
West
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000015935**

Well ID:	T0607302478-MW-3	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-3
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607302478&assigned_name=MW-3&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607302478&assigned_name=MW-3		

E105
WSW
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000019555**

Well ID:	T0607302827-MW-B5	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-B5
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607302827&assigned_name=MW-B5&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607302827&assigned_name=MW-B5		

E106
West
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000107594**

Well ID:	T0607302478-MW-6	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-6
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607302478&assigned_name=MW-6&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607302478&assigned_name=MW-6		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

E107
West
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000133980**

Well ID:	T0607302478-MW-1	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-1
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607302478&assigned_name=MW-1&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607302478&assigned_name=MW-1		

E108
West
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000099606**

Well ID:	T0607302478-MW-5	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-5
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607302478&assigned_name=MW-5&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607302478&assigned_name=MW-5		

E109
WSW
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000015671**

Well ID:	T0607301309-CB-01A	Well Type:	MONITORING
Source:	EDF	Other Name:	CB-01A
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607301309&assigned_name=CB-01A&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607301309&assigned_name=CB-01A		

E110
West
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000109716**

Well ID:	T0607302478-DD-13	Well Type:	MONITORING
Source:	EDF	Other Name:	DD-13
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607302478&assigned_name=DD-13&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607302478&assigned_name=DD-13		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

E111
WSW
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000087740**

Well ID:	T0607302827-MW-13	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-13
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607302827&assigned_name=MW-13&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607302827&assigned_name=MW-13		

E112
West
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000132028**

Well ID:	T0619784179-RW-1	Well Type:	MONITORING
Source:	EDF	Other Name:	RW-1
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0619784179&assigned_name=RW-1&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0619784179&assigned_name=RW-1		

E113
WSW
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000082501**

Well ID:	T0607302827-MW-B6	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-B6
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607302827&assigned_name=MW-B6&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607302827&assigned_name=MW-B6		

E114
West
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000018701**

Well ID:	T0607302478-DD-12	Well Type:	MONITORING
Source:	EDF	Other Name:	DD-12
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607302478&assigned_name=DD-12&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607302478&assigned_name=DD-12		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

E115
WSW
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000066185**

Well ID:	T0607303122-W-8	Well Type:	MONITORING
Source:	EDF	Other Name:	W-8
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607303122&assigned_name=W-8&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607303122&assigned_name=W-8		

D116
SSE
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000070036**

Well ID:	SL0607396081-MW-4	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-4
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL0607396081&assigned_name=MW-4&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL0607396081&assigned_name=MW-4		

E117
West
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000115929**

Well ID:	T0607303122-W-9	Well Type:	MONITORING
Source:	EDF	Other Name:	W-9
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607303122&assigned_name=W-9&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607303122&assigned_name=W-9		

E118
West
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000124137**

Well ID:	T0607303122-W-5	Well Type:	MONITORING
Source:	EDF	Other Name:	W-5
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607303122&assigned_name=W-5&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607303122&assigned_name=W-5		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

E119
West
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000137312**

Well ID:	T0607302478-MW-10	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-10
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607302478&assigned_name=MW-10&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607302478&assigned_name=MW-10		

D120
SSE
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000009574**

Well ID:	SL0607396081-MW-20	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-20
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL0607396081&assigned_name=MW-20&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL0607396081&assigned_name=MW-20		

E121
WSW
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000114887**

Well ID:	T0607302827-MW-14	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-14
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607302827&assigned_name=MW-14&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607302827&assigned_name=MW-14		

E122
WSW
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000095516**

Well ID:	T0607301309-MW-14	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-14
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607301309&assigned_name=MW-14&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607301309&assigned_name=MW-14		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

E123
WSW
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000082303**

Well ID:	T0607303122-W-7	Well Type:	MONITORING
Source:	EDF	Other Name:	W-7
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607303122&assigned_name=W-7&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607303122&assigned_name=W-7		

E124
WSW
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000134082**

Well ID:	T0607303122-W-10	Well Type:	MONITORING
Source:	EDF	Other Name:	W-10
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607303122&assigned_name=W-10&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607303122&assigned_name=W-10		

E125
WSW
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000089261**

Well ID:	T0607303122-W-12R	Well Type:	MONITORING
Source:	EDF	Other Name:	W-12R
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607303122&assigned_name=W-12R&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607303122&assigned_name=W-12R		

E126
WSW
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000136217**

Well ID:	T0607303122-W-12	Well Type:	MONITORING
Source:	EDF	Other Name:	W-12
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607303122&assigned_name=W-12&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607303122&assigned_name=W-12		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

G127
West
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000126832**

Well ID:	T0607302478-URS-MW6	Well Type:	MONITORING
Source:	EDF	Other Name:	URS-MW6
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607302478&assigned_name=URS-MW6&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607302478&assigned_name=URS-MW6		

F128
SSE
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000088046**

Well ID:	SL0607396081-MW-14	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-14
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL0607396081&assigned_name=MW-14&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL0607396081&assigned_name=MW-14		

E129
West
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000086698**

Well ID:	T0607303122-URS-MW-3	Well Type:	MONITORING
Source:	EDF	Other Name:	URS-MW-3
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607303122&assigned_name=URS-MW-3&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607303122&assigned_name=URS-MW-3		

E130
West
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000020828**

Well ID:	T0607303122-W-2	Well Type:	MONITORING
Source:	EDF	Other Name:	W-2
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607303122&assigned_name=W-2&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607303122&assigned_name=W-2		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

E131
West
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000056357**

Well ID:	T0607303122-W-3	Well Type:	MONITORING
Source:	EDF	Other Name:	W-3
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607303122&assigned_name=W-3&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607303122&assigned_name=W-3		

E132
West
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000126032**

Well ID:	T0607303122-W-13	Well Type:	MONITORING
Source:	EDF	Other Name:	W-13
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607303122&assigned_name=W-13&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607303122&assigned_name=W-13		

133
WSW
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000048726**

Well ID:	T0607302827-MW-11	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-11
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607302827&assigned_name=MW-11&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607302827&assigned_name=MW-11		

E134
WSW
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000058245**

Well ID:	T0607303122-W-1	Well Type:	MONITORING
Source:	EDF	Other Name:	W-1
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607303122&assigned_name=W-1&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607303122&assigned_name=W-1		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

H135
West
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000008590**

Well ID:	T0607302478-URS-MW1	Well Type:	MONITORING
Source:	EDF	Other Name:	URS-MW1
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607302478&assigned_name=URS-MW1&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607302478&assigned_name=URS-MW1		

H136
West
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000068530**

Well ID:	T0607302478-URS-MW-1	Well Type:	MONITORING
Source:	EDF	Other Name:	URS-MW-1
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607302478&assigned_name=URS-MW-1&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607302478&assigned_name=URS-MW-1		

F137
SSE
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000010826**

Well ID:	SL0607396081-MW-13	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-13
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL0607396081&assigned_name=MW-13&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL0607396081&assigned_name=MW-13		

F138
SSE
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000018395**

Well ID:	SL0607396081-MW-11D	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-11D
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL0607396081&assigned_name=MW-11D&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL0607396081&assigned_name=MW-11D		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

F139
SSE
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000088905**

Well ID:	SL0607396081-MW-22	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-22
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL0607396081&assigned_name=MW-22&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL0607396081&assigned_name=MW-22		

I140
SSE
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000143214**

Well ID:	SL209154190-D-5	Well Type:	MONITORING
Source:	EDF	Other Name:	D-5
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL209154190&assigned_name=D-5&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL209154190&assigned_name=D-5		

G141
West
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000059999**

Well ID:	T0607302478-URS-MW5	Well Type:	MONITORING
Source:	EDF	Other Name:	URS-MW5
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607302478&assigned_name=URS-MW5&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607302478&assigned_name=URS-MW5		

J142
South
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000006292**

Well ID:	T0607302416-MW8	Well Type:	MONITORING
Source:	EDF	Other Name:	MW8
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607302416&assigned_name=MW8&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607302416&assigned_name=MW8		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

G143
West
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000107356**

Well ID:	T0607302478-MW-8	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-8
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607302478&assigned_name=MW-8&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607302478&assigned_name=MW-8		

E144
WSW
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000077728**

Well ID:	T0607303122-W-11	Well Type:	MONITORING
Source:	EDF	Other Name:	W-11
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607303122&assigned_name=W-11&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607303122&assigned_name=W-11		

I145
SSE
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000052265**

Well ID:	SL209154190-P-4	Well Type:	MONITORING
Source:	EDF	Other Name:	P-4
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL209154190&assigned_name=P-4&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL209154190&assigned_name=P-4		

I146
SSE
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000048855**

Well ID:	SL0607396081-MW-21	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-21
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL0607396081&assigned_name=MW-21&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL0607396081&assigned_name=MW-21		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

G147
West
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000010591**

Well ID:	T0607302478-MW-9	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-9
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607302478&assigned_name=MW-9&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607302478&assigned_name=MW-9		

J148
South
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000059941**

Well ID:	T0607302416-MW1	Well Type:	MONITORING
Source:	EDF	Other Name:	MW1
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607302416&assigned_name=MW1&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607302416&assigned_name=MW1		

J149
South
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000079510**

Well ID:	T0607302416-MW2	Well Type:	MONITORING
Source:	EDF	Other Name:	MW2
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607302416&assigned_name=MW2&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607302416&assigned_name=MW2		

J150
South
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000113813**

Well ID:	T0607302416-MW4	Well Type:	MONITORING
Source:	EDF	Other Name:	MW4
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607302416&assigned_name=MW4&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607302416&assigned_name=MW4		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

J151
South
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000019095**

Well ID:	T0607302416-MW5	Well Type:	MONITORING
Source:	EDF	Other Name:	MW5
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607302416&assigned_name=MW5&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607302416&assigned_name=MW5		

J152
South
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000004057**

Well ID:	T0607302416-MW6	Well Type:	MONITORING
Source:	EDF	Other Name:	MW6
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607302416&assigned_name=MW6&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607302416&assigned_name=MW6		

J153
South
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000062067**

Well ID:	T0607302416-MW9	Well Type:	MONITORING
Source:	EDF	Other Name:	MW9
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607302416&assigned_name=MW9&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607302416&assigned_name=MW9		

K154
SSW
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000053679**

Well ID:	T0607302493-MW-3	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-3
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607302493&assigned_name=MW-3&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607302493&assigned_name=MW-3		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

J155
South
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000041824**

Well ID:	T0607302416-MW3	Well Type:	MONITORING
Source:	EDF	Other Name:	MW3
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607302416&assigned_name=MW3&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607302416&assigned_name=MW3		

K156
SSW
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000060495**

Well ID:	T0607302493-MW-1	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-1
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607302493&assigned_name=MW-1&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607302493&assigned_name=MW-1		

K157
SSW
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000076795**

Well ID:	T0607302493-MW-2	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-2
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607302493&assigned_name=MW-2&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607302493&assigned_name=MW-2		

L158
WSW
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000065903**

Well ID:	T0607399218-HP-5	Well Type:	MONITORING
Source:	EDF	Other Name:	HP-5
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607399218&assigned_name=HP-5&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607399218&assigned_name=HP-5		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

L159
WSW
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000116886**

Well ID:	T0607399218-MW-10	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-10
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607399218&assigned_name=MW-10&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607399218&assigned_name=MW-10		

160
South
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000022484**

Well ID:	T0607302416-MW7	Well Type:	MONITORING
Source:	EDF	Other Name:	MW7
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607302416&assigned_name=MW7&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607302416&assigned_name=MW7		

L161
WSW
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000059124**

Well ID:	T0607399218-HP-4	Well Type:	MONITORING
Source:	EDF	Other Name:	HP-4
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607399218&assigned_name=HP-4&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607399218&assigned_name=HP-4		

L162
WSW
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000008573**

Well ID:	T0607399218-MW-1	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-1
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607399218&assigned_name=MW-1&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607399218&assigned_name=MW-1		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

L163
WSW
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000060762**

Well ID:	T0607399218-MW-2	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-2
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607399218&assigned_name=MW-2&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607399218&assigned_name=MW-2		

M164
WSW
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000096482**

Well ID:	T0607399218-MW-9	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-9
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607399218&assigned_name=MW-9&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607399218&assigned_name=MW-9		

L165
WSW
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000104772**

Well ID:	T0607399218-MW-11	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-11
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607399218&assigned_name=MW-11&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607399218&assigned_name=MW-11		

L166
WSW
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000042687**

Well ID:	T0607399218-MW-3	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-3
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607399218&assigned_name=MW-3&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607399218&assigned_name=MW-3		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

L167
WSW
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000053692**

Well ID:	T0607399218-MW-4	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-4
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607399218&assigned_name=MW-4&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607399218&assigned_name=MW-4		

N168
SSE
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000128927**

Well ID:	T10000006374-MW-3	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-3
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T10000006374&assigned_name=MW-3&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T10000006374&assigned_name=MW-3		

N169
SSE
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000020594**

Well ID:	T10000006374-MW-4	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-4
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T10000006374&assigned_name=MW-4&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T10000006374&assigned_name=MW-4		

M170
WSW
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000125713**

Well ID:	T0607399218-MW-5	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-5
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607399218&assigned_name=MW-5&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607399218&assigned_name=MW-5		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

N171
SSE
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000042258**

Well ID:	T10000006374-MW-2	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-2
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T10000006374&assigned_name=MW-2&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T10000006374&assigned_name=MW-2		

N172
SSE
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000104855**

Well ID:	T10000006374-MW-1	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-1
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T10000006374&assigned_name=MW-1&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T10000006374&assigned_name=MW-1		

N173
SSE
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000076686**

Well ID:	T10000006374-MW-5	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-5
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T10000006374&assigned_name=MW-5&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T10000006374&assigned_name=MW-5		

O174
NW
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000090717**

Well ID:	T0607300358-MW-31	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-31
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607300358&assigned_name=MW-31&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607300358&assigned_name=MW-31		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

M175
WSW
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000067827**

Well ID:	T0607399218-MW-6	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-6
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607399218&assigned_name=MW-6&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607399218&assigned_name=MW-6		

O176
NW
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000079627**

Well ID:	T0607300358-MW-21	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-21
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607300358&assigned_name=MW-21&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607300358&assigned_name=MW-21		

O177
NW
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000089827**

Well ID:	T0607300358-MW-30	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-30
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607300358&assigned_name=MW-30&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607300358&assigned_name=MW-30		

O178
NW
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000078245**

Well ID:	T0607300358-MW-14B	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-14B
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607300358&assigned_name=MW-14B&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607300358&assigned_name=MW-14B		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

O179
NW
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000072534**

Well ID:	T0607300358-MW-9	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-9
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607300358&assigned_name=MW-9&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607300358&assigned_name=MW-9		

O180
NW
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000107573**

Well ID:	T0607300358-MW-22	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-22
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607300358&assigned_name=MW-22&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607300358&assigned_name=MW-22		

O181
NW
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000125673**

Well ID:	T0607300358-MW-7	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-7
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607300358&assigned_name=MW-7&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607300358&assigned_name=MW-7		

O182
NW
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000018033**

Well ID:	T0607300358-MW-15	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-15
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607300358&assigned_name=MW-15&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607300358&assigned_name=MW-15		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

O183
NW
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000041180**

Well ID:	T0607300358-MW-25	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-25
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607300358&assigned_name=MW-25&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607300358&assigned_name=MW-25		

O184
NW
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000085538**

Well ID:	T0607300358-MW-8	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-8
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607300358&assigned_name=MW-8&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607300358&assigned_name=MW-8		

O185
NW
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000096679**

Well ID:	T0607300358-MW-19	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-19
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607300358&assigned_name=MW-19&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607300358&assigned_name=MW-19		

O186
NW
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000002153**

Well ID:	T0607300358-MW-23	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-23
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607300358&assigned_name=MW-23&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607300358&assigned_name=MW-23		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

O187
NW
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000126956**

Well ID:	T0607300358-MW-16	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-16
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607300358&assigned_name=MW-16&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607300358&assigned_name=MW-16		

O188
NW
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000064018**

Well ID:	T0607300358-MW-12	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-12
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607300358&assigned_name=MW-12&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607300358&assigned_name=MW-12		

O189
NW
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000095039**

Well ID:	T0607300358-MW-11	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-11
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607300358&assigned_name=MW-11&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607300358&assigned_name=MW-11		

O190
NW
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000111209**

Well ID:	T0607300358-MW-26	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-26
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607300358&assigned_name=MW-26&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607300358&assigned_name=MW-26		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

O191
NW
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000117393**

Well ID:	T0607300358-MW-24	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-24
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607300358&assigned_name=MW-24&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607300358&assigned_name=MW-24		

O192
NW
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000101020**

Well ID:	T0607300358-MW-18	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-18
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607300358&assigned_name=MW-18&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607300358&assigned_name=MW-18		

O193
NW
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000134461**

Well ID:	T0607300358-MW-17	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-17
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607300358&assigned_name=MW-17&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607300358&assigned_name=MW-17		

O194
NW
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000101244**

Well ID:	T0607300358-MW-27	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-27
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607300358&assigned_name=MW-27&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607300358&assigned_name=MW-27		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

O195
NW
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000002168**

Well ID:	T0607300358-MW-32	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-32
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607300358&assigned_name=MW-32&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607300358&assigned_name=MW-32		

196
NW
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000003905**

Well ID:	T0607300358-MW-29	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-29
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607300358&assigned_name=MW-29&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607300358&assigned_name=MW-29		

P197
SW
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000032174**

Well ID:	T0607301979-MW7	Well Type:	MONITORING
Source:	EDF	Other Name:	MW7
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607301979&assigned_name=MW7&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607301979&assigned_name=MW7		

P198
SW
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000117022**

Well ID:	T0607301979-MW6	Well Type:	MONITORING
Source:	EDF	Other Name:	MW6
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607301979&assigned_name=MW6&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607301979&assigned_name=MW6		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

P199
SW
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000100287**

Well ID:	T0607301979-MW3	Well Type:	MONITORING
Source:	EDF	Other Name:	MW3
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607301979&assigned_name=MW3&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607301979&assigned_name=MW3		

P200
SW
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000079997**

Well ID:	T0607301979-MW5	Well Type:	MONITORING
Source:	EDF	Other Name:	MW5
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607301979&assigned_name=MW5&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607301979&assigned_name=MW5		

P201
SW
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000135476**

Well ID:	T0607301979-MW4	Well Type:	MONITORING
Source:	EDF	Other Name:	MW4
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607301979&assigned_name=MW4&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607301979&assigned_name=MW4		

P202
SW
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000110271**

Well ID:	T0607301979-MWA	Well Type:	MONITORING
Source:	EDF	Other Name:	MWA
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607301979&assigned_name=MWA&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607301979&assigned_name=MWA		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

P203
SW
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000013350**

Well ID:	T0607301979-MW2	Well Type:	MONITORING
Source:	EDF	Other Name:	MW2
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607301979&assigned_name=MW2&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607301979&assigned_name=MW2		

P204
SW
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000129710**

Well ID:	T0607301979-MW1	Well Type:	MONITORING
Source:	EDF	Other Name:	MW1
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607301979&assigned_name=MW1&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607301979&assigned_name=MW1		

Q205
SSE
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000003131**

Well ID:	T06019794315-MW-4	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-4
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T06019794315&assigned_name=MW-4&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T06019794315&assigned_name=MW-4		

Q206
SSE
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000061559**

Well ID:	T06019794315-MW-5	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-5
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T06019794315&assigned_name=MW-5&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T06019794315&assigned_name=MW-5		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

Q207
SSE **CA WELLS** **CAEDF0000111586**
1/2 - 1 Mile
Lower

Well ID:	T10000009279-MW-7	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-7
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T10000009279&assigned_name=MW-7&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T10000009279&assigned_name=MW-7		

Q208
SSE **CA WELLS** **CAEDF0000000696**
1/2 - 1 Mile
Lower

Well ID:	T06019794315-MW-6	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-6
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T06019794315&assigned_name=MW-6&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T06019794315&assigned_name=MW-6		

R209
SW **CA WELLS** **CAEDF0000050975**
1/2 - 1 Mile
Lower

Well ID:	T0607302526-MW5	Well Type:	MONITORING
Source:	EDF	Other Name:	MW5
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607302526&assigned_name=MW5&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607302526&assigned_name=MW5		

R210
SW **CA WELLS** **CAEDF0000110587**
1/2 - 1 Mile
Lower

Well ID:	T0607302526-MW3	Well Type:	MONITORING
Source:	EDF	Other Name:	MW3
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607302526&assigned_name=MW3&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607302526&assigned_name=MW3		

Map ID Direction Distance Elevation		Database	EDR ID Number
R211 **SW** **1/2 - 1 Mile** **Lower**		**CA WELLS**	**CAEDF0000069358**

Well ID:	T0607302526-MW6	Well Type:	MONITORING
Source:	EDF	Other Name:	MW6
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607302526&assigned_name=MW6&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607302526&assigned_name=MW6		

R212 **SW** **1/2 - 1 Mile** **Lower**		**CA WELLS**	**CAEDF0000060202**

Well ID:	T0607302526-MW1	Well Type:	MONITORING
Source:	EDF	Other Name:	MW1
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607302526&assigned_name=MW1&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607302526&assigned_name=MW1		

S213 **SW** **1/2 - 1 Mile** **Lower**	Site ID:	Not Reported		**AQUIFLOW**	**38309**
	Groundwater Flow:	NE			
	Shallow Water Depth:	7.5			
	Deep Water Depth:	15			
	Average Water Depth:	Not Reported			
	Date:	07/1990			

R214 **SW** **1/2 - 1 Mile** **Lower**		**CA WELLS**	**CAEDF0000066785**

Well ID:	T0607302526-MW2	Well Type:	MONITORING
Source:	EDF	Other Name:	MW2
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607302526&assigned_name=MW2&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607302526&assigned_name=MW2		

S215 **SW** **1/2 - 1 Mile** **Lower**	Site ID:	9UT0892		**AQUIFLOW**	**34147**
	Groundwater Flow:	E			
	Shallow Water Depth:	Not Reported			
	Deep Water Depth:	Not Reported			
	Average Water Depth:	22.5			
	Date:	01/11/1989			

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

	Database	EDR ID Number
R216 **SW** **1/2 - 1 Mile** **Lower**	**CA WELLS**	**CAEDF0000056573**

Well ID:	T0607302526-MW4	Well Type:	MONITORING
Source:	EDF	Other Name:	MW4
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0607302526&assigned_name=MW4&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0607302526&assigned_name=MW4		

		Database	EDR ID Number
R217 **SW** **1/2 - 1 Mile** **Lower**		**CA WELLS**	**CAEDF0000042737**

Well ID:	T0608106225-MW-3	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-3
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0608106225&assigned_name=MW-3&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0608106225&assigned_name=MW-3		

			Database	EDR ID Number
218 **SSE** **1/2 - 1 Mile** **Lower**	Site ID:	9UT1516	**AQUIFLOW**	**34181**
	Groundwater Flow:	Not Reported		
	Shallow Water Depth:	10		
	Deep Water Depth:	16		
	Average Water Depth:	Not Reported		
	Date:	02/15/1990		

		Database	EDR ID Number
R219 **SW** **1/2 - 1 Mile** **Lower**		**CA WELLS**	**CAEDF0000135093**

Well ID:	T0608106225-MW-5	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-5
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0608106225&assigned_name=MW-5&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0608106225&assigned_name=MW-5		

			Database	EDR ID Number
1G **West** **1/4 - 1/2 Mile** **Lower**	Site ID:	Not Reported	**AQUIFLOW**	**38806**
	Groundwater Flow:	SSE		
	Shallow Water Depth:	Not Reported		
	Deep Water Depth:	Not Reported		
	Average Water Depth:	30		
	Date:	10/15/1993		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation			Database	EDR ID Number
2G **SE** **1/4 - 1/2 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	Not Reported S 6.5 15 Not Reported 08/31/1993	**AQUIFLOW**	**34135**
3G **SSW** **1/4 - 1/2 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	Not Reported Not Reported Not Reported Not Reported 12 05/29/1987	**AQUIFLOW**	**38459**
4G **SW** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	9UT0892 E Not Reported Not Reported 22.5 01/11/1989	**AQUIFLOW**	**34147**
5G **SW** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	Not Reported NE 7.5 15 Not Reported 07/1990	**AQUIFLOW**	**38309**
6G **SSE** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	9UT1516 Not Reported 10 16 Not Reported 02/15/1990	**AQUIFLOW**	**34181**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance

Database EDR ID Number

1
WSW **OIL_GAS** **CAOG14000006684**
1/4 - 1/2 Mile

API #:	0407300014	Well #:	1
Well Status:	Idle	Well Type:	Oil & Gas
Lease Name:	Lease by Davenport Oil & Gas Development Co.		
Field Name:	Any Field	Area Name:	Any Area
GIS Source:	hud	Confidential Well:	N
Directionally Drilled:	N	Spud Date:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

State Database: CA Radon

Radon Test Results

Zipcode	Num Tests	> 4 pCi/L
92069	29	2

Federal EPA Radon Zone for SAN DIEGO County: 3

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 92069

Number of sites tested: 3

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.833 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	Not Reported	Not Reported	Not Reported	Not Reported

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish and Wildlife
Telephone: 916-445-0411

HYDROGEOLOGIC INFORMATION

AQUIFLOW^{R} Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

OTHER STATE DATABASE INFORMATION

Groundwater Ambient Monitoring & Assessment Program
State Water Resources Control Board
Telephone: 916-341-5577
The GAMA Program is Californias comprehensive groundwater quality monitoring program. GAMA collects data by testing the untreated, raw water in different types of wells for naturally-occurring and man-made chemicals. The GAMA data includes Domestic, Monitoring and Municipal well types from the following sources, Department of Water Resources, Department of Heath Services, EDF, Agricultural Lands, Lawrence Livermore National Laboratory, Department of Pesticide Regulation, United States Geological Survey, Groundwater Ambient Monitoring and Assessment Program and Local Groundwater Projects.

Water Well Database
Source: Department of Water Resources
Telephone: 916-651-9648

California Drinking Water Quality Database
Source: Department of Public Health
Telephone: 916-324-2319
The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

California Oil and Gas Well Locations
Source: Dept of Conservation, Geologic Energy Management Division
Telephone: 916-323-1779
Oil and Gas well locations in the state.

California Earthquake Fault Lines
Source: California Division of Mines and Geology
The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

RADON

State Database: CA Radon
Source: Department of Public Health
Telephone: 916-210-8558
Radon Database for California

PHYSICAL SETTING SOURCE RECORDS SEARCHED

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

STREET AND ADDRESS INFORMATION

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APPENDIX F

OTHER DOCUMENTS

A & R Laboratories, Inc.

1650 S. GROVE AVE., SUITE C
ONTARIO, CA 91761
951-779-0310 FAX 951-779-0344
www.arlaboratories.com office@arlaboratories.com

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	2790
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CASE NARRATIVE

Authorized Signature Name / Title (print)	Ken Zheng, President
Signature / Date	Ken Zheng, President 06/17/2021 14:04:59
Laboratory Job No. (Certificate of Analysis No.)	2106-00117
Project Name / No.	MLC - SAN MARCOS C3-8475
Dates Sampled (from/to)	06/15/21 To 06/15/21
Dates Received (from/to)	06/15/21 To 06/15/21
Dates Reported (from/to)	06/17/21 To 6/17/2021
Chains of Custody Received	Yes

Comments:

Subcontracting

Organic Analyses

No analyses sub-contracted

Inorganic Analyses

No analyses sub-contracted

Sample Condition(s)

All samples intact

Positive Results (Organic Compounds)

Sample	Analyte	Result	Qual	Units	RL	Sample	Analyte	Result	Qual	Units	RL
S-3-2.0'	4,4'-DDE	**0.0025**		mg/Kg	0.0020	S-3-2.0'	4,4'-DDT	**0.0049**		mg/Kg	0.0020

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CERTIFICATE OF ANALYSIS

2106-00117

HILLMANN GROUP
STEPHEN BARTLETT
1745 W. ORANGEWOOD AVE.
SUITE 201
ORANGE, CA 92868

Project: MLC - SAN MARCOS

Date Reported	06/17/21
Date Received	06/15/21
Invoice No.	92071
Cust #	H080
Permit Number	
Customer P.O.	C3-8475

Analysis	Result	Qual	Units	Method	DF	RL	Date	Tech
Sample: 001 **S-1-2.0'**					Date & Time Sampled:		06/15/21 @	10:00
Sample Matrix: **Soil**								
[TPH Gasoline (C4-C12)]								
Closed System P&T TPHg Soil	Complete			EPA 5035	1.0		06/16/21	JEN
C4-C12	<0.20		mg/Kg	LUFT GC/MS	1.0	0.20	06/16/21	JEN
[Extractable Hydrocarbons]								
Extraction	Complete			EPA 3550B	1.0		06/16/21	JEN
C13-C22	<10		mg/Kg	EPA 8015M	1.0	10	06/16/21	JEN
C23-C40	<20		mg/Kg	EPA 8015M	1.0	20	06/16/21	JEN
[Surrogate]								
o-Terphenyl (OTP)	75		%REC	EPA 8015M		50-150	06/16/21	JEN
[Metals Title 22 no Hg]								
Metals Acid Digestion	Complete			EPA 3050B	1.0		06/16/21	KZ
Antimony	**2.14**		mg/Kg	EPA 6010B	1.0	1.00	06/16/21	KZ
Arsenic	<1.00		mg/Kg	EPA 6010B	1.0	1.00	06/16/21	KZ
Barium	**233**		mg/Kg	EPA 6010B	1.0	0.500	06/16/21	KZ
Beryllium	<0.500		mg/Kg	EPA 6010B	1.0	0.500	06/16/21	KZ
Cadmium	<0.500		mg/Kg	EPA 6010B	1.0	0.500	06/16/21	KZ
Chromium	**62.9**		mg/Kg	EPA 6010B	1.0	0.500	06/16/21	KZ
Cobalt	**16.5**		mg/Kg	EPA 6010B	1.0	0.500	06/16/21	KZ
Copper	**93.1**		mg/Kg	EPA 6010B	1.0	0.500	06/16/21	KZ
Lead	**3.19**		mg/Kg	EPA 6010B	1.0	0.500	06/16/21	KZ
Molybdenum	<0.500		mg/Kg	EPA 6010B	1.0	0.500	06/16/21	KZ
Nickel	**14.1**		mg/Kg	EPA 6010B	1.0	0.500	06/16/21	KZ
Selenium	<1.00		mg/Kg	EPA 6010B	1.0	1.00	06/16/21	KZ
Silver	<1.00		mg/Kg	EPA 6010B	1.0	1.00	06/16/21	KZ
Thallium	<1.00		mg/Kg	EPA 6010B	1.0	1.00	06/16/21	KZ
Vanadium	**249**		mg/Kg	EPA 6010B	1.0	0.500	06/16/21	KZ
Zinc	**73.9**		mg/Kg	EPA 6010B	1.0	5.00	06/16/21	KZ
[Mercury]								
Mercury Digestion	Complete			EPA 7471A	1.0		06/16/21	KZ
Mercury	<0.20		mg/Kg	EPA 7471A	1.0	0.20	06/16/21	KZ
[Pesticides]								
Ultrasonic Extraction	Complete			EPA 3550	1.0		06/16/21	JEN

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2106-00117

HILLMANN GROUP
STEPHEN BARTLETT
1745 W. ORANGEWOOD AVE.
SUITE 201
ORANGE, CA 92868

Project: MLC - SAN MARCOS

Date Reported	06/17/21
Date Received	06/15/21
Invoice No.	92071
Cust #	H080
Permit Number	
Customer P.O.	C3-8475

Sample: 001 **S-1-2.0'** Date & Time Sampled: 06/15/21 @ 10:00
Sample Matrix: **Soil**
.....continued

Analysis	Result	Qual	Units	Method	DF	RL	Date	Tech
Aldrin	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	06/16/21	JEN
alpha-BHC	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	06/16/21	JEN
beta-BHC	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	06/16/21	JEN
delta-BHC	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	06/16/21	JEN
gamma-BHC	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	06/16/21	JEN
Chlordane	<0.010		mg/Kg	EPA 8081A	1.0	0.010	06/16/21	JEN
4,4'-DDD	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	06/16/21	JEN
4,4'-DDE	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	06/16/21	JEN
4,4'-DDT	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	06/16/21	JEN
Dieldrin	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	06/16/21	JEN
Endosulfan I	<0.00020		mg/Kg	EPA 8081A	1.0	0.0020	06/16/21	JEN
Endosulfan II	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	06/16/21	JEN
Endosulfan Sulfate	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	06/16/21	JEN
Endrin	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	06/16/21	JEN
Endrin Aldehyde	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	06/16/21	JEN
Endrin ketone	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	06/16/21	JEN
Heptachlor	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	06/16/21	JEN
Heptachlor Epoxide	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	06/16/21	JEN
Methoxychlor	<0.010		mg/Kg	EPA 8081A	1.0	0.010	06/16/21	JEN
Toxaphene	<0.050		mg/Kg	EPA 8081A	1.0	0.050	06/16/21	JEN
[Surrogates]								
Tetrachloro-m-xylene	105		%REC	EPA 8081A/8082		50-150	06/16/21	JEN
Decachlorobiphenyl	125		%REC	EPA 8081A/8082		50-150	06/16/21	JEN
[VOCs by GCMS]								
Closed System P&T VOC Soil	Complete			EPA 5035	1.0		06/16/21	JEN
Acetone	<0.10		mg/Kg	EPA 8260B	1.0	0.10	06/16/21	JEN
t-Amyl Methyl Ether (TAME)	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
Benzene	<0.0040		mg/Kg	EPA 8260B	1.0	0.0040	06/16/21	JEN
Bromobenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
Bromochloromethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
Bromodichloromethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN

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CERTIFICATE OF ANALYSIS

2106-00117

HILLMANN GROUP
STEPHEN BARTLETT
1745 W. ORANGEWOOD AVE.
SUITE 201
ORANGE, CA 92868

Project: MLC - SAN MARCOS

Date Reported	06/17/21
Date Received	06/15/21
Invoice No.	92071
Cust #	H080
Permit Number	
Customer P.O.	C3-8475

Sample: 001 **S-1-2.0'** Date & Time Sampled: 06/15/21 @ 10:00
Sample Matrix: **Soil**
.....continued

Analysis	Result	Qual	Units	Method	DF	RL	Date	Tech
Bromoform	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
Bromomethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
t-Butanol (TBA)	<0.0625		mg/Kg	EPA 8260B	1.0	0.0625	06/16/21	JEN
2-Butanone (MEK)	<0.0313		mg/Kg	EPA 8260B	1.0	0.0313	06/16/21	JEN
n-Butylbenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
sec-Butylbenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
tert-Butylbenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
Carbon Disulfide	<0.010		mg/Kg	EPA 8260B	1.0	0.010	06/16/21	JEN
Carbon Tetrachloride	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
Chlorobenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
Chloroethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
Chloroform	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
Chloromethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
2-Chlorotoluene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
4-Chlorotoluene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
Dibromochloromethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
1,2-Dibromoethane (EDB)	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
1,2-Dibromo-3-Chloropropane	<0.010		mg/Kg	EPA 8260B	1.0	0.010	06/16/21	JEN
Dibromomethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
1,2-Dichlorobenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
1,3-Dichlorobenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
1,4-Dichlorobenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
Dichlorodifluoromethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
1,1-Dichloroethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
1,2-Dichloroethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
1,1-Dichloroethene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
cis-1,2-Dichloroethene	<0.0020		mg/Kg	EPA 8260B	1.0	0.0020	06/16/21	JEN
trans-1,2-Dichloroethene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
1,2-Dichloropropane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
1,3-Dichloropropane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
2,2-Dichloropropane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN

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2106-00117

HILLMANN GROUP
STEPHEN BARTLETT
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ORANGE, CA 92868

Project: MLC - SAN MARCOS

Date Reported 06/17/21
Date Received 06/15/21
Invoice No. 92071
Cust # H080
Permit Number
Customer P.O. C3-8475

Sample: 001 **S-1-2.0'** Date & Time Sampled: 06/15/21 @ 10:00
Sample Matrix: **Soil**
.....continued

Analysis	Result	Qual	Units	Method	DF	RL	Date	Tech
1,1-Dichloropropene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
cis-1,3-Dichloropropene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
trans-1,3-Dichloropropene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
Diisopropyl Ether (DiPE)	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
Ethylbenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
Ethyl-t-Butyl Ether (EtBE)	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
Hexachlorobutadiene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
2-Hexanone	<0.0313		mg/Kg	EPA 8260B	1.0	0.0313	06/16/21	JEN
Isopropylbenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
4-Isopropyltoluene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
Methylene Chloride	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
4-Methyl-2-Pentanone (MIBK)	<0.0313		mg/Kg	EPA 8260B	1.0	0.0313	06/16/21	JEN
Methyl-t-butyl Ether (MtBE)	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
Naphthalene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
n-Propylbenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
Styrene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
1,1,1,2-Tetrachloroethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
1,1,2,2-Tetrachloroethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
Tetrachloroethene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
Toluene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
1,2,3-Trichlorobenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
1,2,4-Trichlorobenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
1,1,1-Trichloroethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
1,1,2-Trichloroethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
Trichloroethene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
1,2,3-Trichloropropane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
Trichlorofluoromethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
Trichlorotrifluoroethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
1,2,4-Trimethylbenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
1,3,5-Trimethylbenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
Vinyl Chloride	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN

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Project: MLC - SAN MARCOS

Date Reported	06/17/21
Date Received	06/15/21
Invoice No.	92071
Cust #	H080
Permit Number	
Customer P.O.	C3-8475

Analysis	Result	Qual	Units	Method	DF	RL	Date	Tech
Sample: 001 **S-1-2.0'**					Date & Time Sampled:		06/15/21 @	10:00
Sample Matrix: **Soil**								
.....continued								
m,p-Xylenes	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
o-Xylene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
[VOC Surrogates]								
Dibromofluoromethane	111		%REC	EPA 8260B		70-130	06/16/21	JEN
Toluene-D8	96		%REC	EPA 8260B		70-130	06/16/21	JEN
Bromofluorobenzene	102		%REC	EPA 8260B		70-130	06/16/21	JEN
Sample: 002 **S-2-1.5'**					Date & Time Sampled:		06/15/21 @	10:15
Sample Matrix: **Soil**								
[TPH Gasoline (C4-C12)]								
Closed System P&T TPHg Soil	Complete			EPA 5035	1.0		06/16/21	JEN
C4-C12	<0.20		mg/Kg	LUFT GC/MS	1.0	0.20	06/16/21	JEN
[Extractable Hydrocarbons]								
Extraction	Complete			EPA 3550B	1.0		06/16/21	JEN
C13-C22	<10		mg/Kg	EPA 8015M	1.0	10	06/16/21	JEN
C23-C40	<20		mg/Kg	EPA 8015M	1.0	20	06/16/21	JEN
[Surrogate]								
o-Terphenyl (OTP)	93		%REC	EPA 8015M		50-150	06/16/21	JEN
[Metals Title 22 no Hg]								
Metals Acid Digestion	Complete			EPA 3050B	1.0		06/16/21	KZ
Antimony	<1.00		mg/Kg	EPA 6010B	1.0	1.00	06/16/21	KZ
Arsenic	<1.00		mg/Kg	EPA 6010B	1.0	1.00	06/16/21	KZ
Barium	**266**		mg/Kg	EPA 6010B	1.0	0.500	06/16/21	KZ
Beryllium	<0.500		mg/Kg	EPA 6010B	1.0	0.500	06/16/21	KZ
Cadmium	<0.500		mg/Kg	EPA 6010B	1.0	0.500	06/16/21	KZ
Chromium	**58.4**		mg/Kg	EPA 6010B	1.0	0.500	06/16/21	KZ
Cobalt	**12.7**		mg/Kg	EPA 6010B	1.0	0.500	06/16/21	KZ
Copper	**54.2**		mg/Kg	EPA 6010B	1.0	0.500	06/16/21	KZ
Lead	**3.85**		mg/Kg	EPA 6010B	1.0	0.500	06/16/21	KZ
Molybdenum	<0.500		mg/Kg	EPA 6010B	1.0	0.500	06/16/21	KZ
Nickel	**12.5**		mg/Kg	EPA 6010B	1.0	0.500	06/16/21	KZ

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ONTARIO, CA 91761
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CERTIFICATE OF ANALYSIS

2106-00117

HILLMANN GROUP
STEPHEN BARTLETT
1745 W. ORANGEWOOD AVE.
SUITE 201
ORANGE, CA 92868

Project: MLC - SAN MARCOS

Date Reported	06/17/21
Date Received	06/15/21
Invoice No.	92071
Cust #	H080
Permit Number	
Customer P.O.	C3-8475

Sample: 002 **S-2-1.5'** Date & Time Sampled: 06/15/21 @ 10:15
Sample Matrix: **Soil**
.....continued

Analysis	Result	Qual	Units	Method	DF	RL	Date	Tech
Selenium	<1.00		mg/Kg	EPA 6010B	1.0	1.00	06/16/21	KZ
Silver	<1.00		mg/Kg	EPA 6010B	1.0	1.00	06/16/21	KZ
Thallium	<1.00		mg/Kg	EPA 6010B	1.0	1.00	06/16/21	KZ
Vanadium	**206**		mg/Kg	EPA 6010B	1.0	0.500	06/16/21	KZ
Zinc	**47.2**		mg/Kg	EPA 6010B	1.0	5.00	06/16/21	KZ
[Mercury]								
Mercury Digestion	Complete			EPA 7471A	1.0		06/16/21	KZ
Mercury	<0.20		mg/Kg	EPA 7471A	1.0	0.20	06/16/21	KZ
[Pesticides]								
Ultrasonic Extraction	Complete			EPA 3550	1.0		06/16/21	JEN
Aldrin	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	06/16/21	JEN
alpha-BHC	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	06/16/21	JEN
beta-BHC	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	06/16/21	JEN
delta-BHC	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	06/16/21	JEN
gamma-BHC	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	06/16/21	JEN
Chlordane	<0.010		mg/Kg	EPA 8081A	1.0	0.010	06/16/21	JEN
4,4'-DDD	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	06/16/21	JEN
4,4'-DDE	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	06/16/21	JEN
4,4'-DDT	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	06/16/21	JEN
Dieldrin	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	06/16/21	JEN
Endosulfan I	<0.00020		mg/Kg	EPA 8081A	1.0	0.0020	06/16/21	JEN
Endosulfan II	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	06/16/21	JEN
Endosulfan Sulfate	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	06/16/21	JEN
Endrin	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	06/16/21	JEN
Endrin Aldehyde	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	06/16/21	JEN
Endrin ketone	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	06/16/21	JEN
Heptachlor	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	06/16/21	JEN
Heptachlor Epoxide	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	06/16/21	JEN
Methoxychlor	<0.010		mg/Kg	EPA 8081A	1.0	0.010	06/16/21	JEN
Toxaphene	<0.050		mg/Kg	EPA 8081A	1.0	0.050	06/16/21	JEN
[Surrogates]								

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HILLMANN GROUP
STEPHEN BARTLETT
1745 W. ORANGEWOOD AVE.
SUITE 201
ORANGE, CA 92868

Project: MLC - SAN MARCOS

Date Reported	06/17/21
Date Received	06/15/21
Invoice No.	92071
Cust #	H080
Permit Number	
Customer P.O.	C3-8475

Sample: 002 **S-2-1.5'** Date & Time Sampled: 06/15/21 @ 10:15
Sample Matrix: **Soil**
.....continued

Analysis	Result	Qual	Units	Method	DF	RL	Date	Tech
Tetrachloro-m-xylene	136		%REC	EPA 8081A/8082		50-150	06/16/21	JEN
Decachlorobiphenyl	150		%REC	EPA 8081A/8082		50-150	06/16/21	JEN
[VOCs by GCMS]								
Closed System P&T VOC Soil	Complete			EPA 5035	1.0		06/16/21	JEN
Acetone	<0.10		mg/Kg	EPA 8260B	1.0	0.10	06/16/21	JEN
t-Amyl Methyl Ether (TAME)	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
Benzene	<0.0040		mg/Kg	EPA 8260B	1.0	0.0040	06/16/21	JEN
Bromobenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
Bromochloromethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
Bromodichloromethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
Bromoform	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
Bromomethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
t-Butanol (TBA)	<0.0625		mg/Kg	EPA 8260B	1.0	0.0625	06/16/21	JEN
2-Butanone (MEK)	<0.0313		mg/Kg	EPA 8260B	1.0	0.0313	06/16/21	JEN
n-Butylbenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
sec-Butylbenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
tert-Butylbenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
Carbon Disulfide	<0.010		mg/Kg	EPA 8260B	1.0	0.010	06/16/21	JEN
Carbon Tetrachloride	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
Chlorobenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
Chloroethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
Chloroform	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
Chloromethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
2-Chlorotoluene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
4-Chlorotoluene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
Dibromochloromethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
1,2-Dibromoethane (EDB)	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
1,2-Dibromo-3-Chloropropane	<0.010		mg/Kg	EPA 8260B	1.0	0.010	06/16/21	JEN
Dibromomethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
1,2-Dichlorobenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
1,3-Dichlorobenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN

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STEPHEN BARTLETT
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ORANGE, CA 92868

Project: MLC - SAN MARCOS

Date Reported	06/17/21
Date Received	06/15/21
Invoice No.	92071
Cust #	H080
Permit Number	
Customer P.O.	C3-8475

Sample: 002 **S-2-1.5'** Date & Time Sampled: 06/15/21 @ 10:15
Sample Matrix: **Soil**
.....continued

Analysis	Result	Qual	Units	Method	DF	RL	Date	Tech
1,4-Dichlorobenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
Dichlorodifluoromethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
1,1-Dichloroethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
1,2-Dichloroethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
1,1-Dichloroethene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
cis-1,2-Dichloroethene	<0.0020		mg/Kg	EPA 8260B	1.0	0.0020	06/16/21	JEN
trans-1,2-Dichloroethene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
1,2-Dichloropropane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
1,3-Dichloropropane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
2,2-Dichloropropane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
1,1-Dichloropropene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
cis-1,3-Dichloropropene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
trans-1,3-Dichloropropene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
Diisopropyl Ether (DiPE)	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
Ethylbenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
Ethyl-t-Butyl Ether (EtBE)	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
Hexachlorobutadiene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
2-Hexanone	<0.0313		mg/Kg	EPA 8260B	1.0	0.0313	06/16/21	JEN
Isopropylbenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
4-Isopropyltoluene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
Methylene Chloride	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
4-Methyl-2-Pentanone (MIBK)	<0.0313		mg/Kg	EPA 8260B	1.0	0.0313	06/16/21	JEN
Methyl-t-butyl Ether (MtBE)	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
Naphthalene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
n-Propylbenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
Styrene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
1,1,1,2-Tetrachloroethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
1,1,2,2-Tetrachloroethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
Tetrachloroethene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
Toluene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
1,2,3-Trichlorobenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN

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ORANGE, CA 92868

Project: MLC - SAN MARCOS

Date Reported	06/17/21
Date Received	06/15/21
Invoice No.	92071
Cust #	H080
Permit Number	
Customer P.O.	C3-8475

Analysis	Result	Qual	Units	Method	DF	RL	Date	Tech
Sample: 002 **S-2-1.5'**					Date & Time Sampled:		06/15/21 @	10:15
Sample Matrix: **Soil**								
.....continued								
1,2,4-Trichlorobenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
1,1,1-Trichloroethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
1,1,2-Trichloroethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
Trichloroethene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
1,2,3-Trichloropropane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
Trichlorofluoromethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
Trichlorotrifluoroethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
1,2,4-Trimethylbenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
1,3,5-Trimethylbenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
Vinyl Chloride	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
m,p-Xylenes	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
o-Xylene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
[VOC Surrogates]								
Dibromofluoromethane	115		%REC	EPA 8260B		70-130	06/16/21	JEN
Toluene-D8	95		%REC	EPA 8260B		70-130	06/16/21	JEN
Bromofluorobenzene	101		%REC	EPA 8260B		70-130	06/16/21	JEN
Sample: 003 **S-3-2.0'**					Date & Time Sampled:		06/15/21 @	10:30
Sample Matrix: **Soil**								
[TPH Gasoline (C4-C12)]								
Closed System P&T TPHg Soil	Complete			EPA 5035	1.0		06/16/21	JEN
C4-C12	<0.20		mg/Kg	LUFT GC/MS	1.0	0.20	06/16/21	JEN
[Extractable Hydrocarbons]								
Extraction	Complete			EPA 3550B	1.0		06/16/21	JEN
C13-C22	<10		mg/Kg	EPA 8015M	1.0	10	06/16/21	JEN
C23-C40	<20		mg/Kg	EPA 8015M	1.0	20	06/16/21	JEN
[Surrogate]								
o-Terphenyl (OTP)	75		%REC	EPA 8015M		50-150	06/16/21	JEN
[Metals Title 22 no Hg]								
Metals Acid Digestion	Complete			EPA 3050B	1.0		06/16/21	KZ
Antimony	<1.00		mg/Kg	EPA 6010B	1.0	1.00	06/16/21	KZ

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Project: MLC - SAN MARCOS

Date Reported 06/17/21
Date Received 06/15/21
Invoice No. 92071
Cust # H080
Permit Number
Customer P.O. C3-8475

Sample: 003 **S-3-2.0'** Date & Time Sampled: 06/15/21 @ 10:30
Sample Matrix: **Soil**
.....continued

Analysis	Result	Qual	Units	Method	DF	RL	Date	Tech
Arsenic	<1.00		mg/Kg	EPA 6010B	1.0	1.00	06/16/21	KZ
Barium	**119**		mg/Kg	EPA 6010B	1.0	0.500	06/16/21	KZ
Beryllium	<0.500		mg/Kg	EPA 6010B	1.0	0.500	06/16/21	KZ
Cadmium	<0.500		mg/Kg	EPA 6010B	1.0	0.500	06/16/21	KZ
Chromium	**19.8**		mg/Kg	EPA 6010B	1.0	0.500	06/16/21	KZ
Cobalt	**5.66**		mg/Kg	EPA 6010B	1.0	0.500	06/16/21	KZ
Copper	**16.0**		mg/Kg	EPA 6010B	1.0	0.500	06/16/21	KZ
Lead	**4.15**		mg/Kg	EPA 6010B	1.0	0.500	06/16/21	KZ
Molybdenum	<0.500		mg/Kg	EPA 6010B	1.0	0.500	06/16/21	KZ
Nickel	**7.55**		mg/Kg	EPA 6010B	1.0	0.500	06/16/21	KZ
Selenium	<1.00		mg/Kg	EPA 6010B	1.0	1.00	06/16/21	KZ
Silver	<1.00		mg/Kg	EPA 6010B	1.0	1.00	06/16/21	KZ
Thallium	<1.00		mg/Kg	EPA 6010B	1.0	1.00	06/16/21	KZ
Vanadium	**63.3**		mg/Kg	EPA 6010B	1.0	0.500	06/16/21	KZ
Zinc	**40.8**		mg/Kg	EPA 6010B	1.0	5.00	06/16/21	KZ
[Mercury]								
Mercury Digestion	Complete			EPA 7471A	1.0		06/16/21	KZ
Mercury	<0.20		mg/Kg	EPA 7471A	1.0	0.20	06/16/21	KZ
[Pesticides]								
Ultrasonic Extraction	Complete			EPA 3550	1.0		06/16/21	JEN
Aldrin	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	06/16/21	JEN
alpha-BHC	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	06/16/21	JEN
beta-BHC	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	06/16/21	JEN
delta-BHC	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	06/16/21	JEN
gamma-BHC	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	06/16/21	JEN
Chlordane	<0.010		mg/Kg	EPA 8081A	1.0	0.010	06/16/21	JEN
4,4'-DDD	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	06/16/21	JEN
4,4'-DDE	**0.0025**		mg/Kg	EPA 8081A	1.0	0.0020	06/16/21	JEN
4,4'-DDT	**0.0049**		mg/Kg	EPA 8081A	1.0	0.0020	06/16/21	JEN
Dieldrin	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	06/16/21	JEN
Endosulfan I	<0.00020		mg/Kg	EPA 8081A	1.0	0.0020	06/16/21	JEN

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CERTIFICATE OF ANALYSIS

2106-00117

HILLMANN GROUP
STEPHEN BARTLETT
1745 W. ORANGEWOOD AVE.
SUITE 201
ORANGE, CA 92868

Project: MLC - SAN MARCOS

Date Reported 06/17/21
Date Received 06/15/21
Invoice No. 92071
Cust # H080
Permit Number
Customer P.O. C3-8475

Analysis	Result	Qual	Units	Method	DF	RL	Date	Tech
Sample: 003 **S-3-2.0'**					Date & Time Sampled:		06/15/21 @	10:30
Sample Matrix: **Soil**								
.....continued								
Endosulfan II	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	06/16/21	JEN
Endosulfan Sulfate	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	06/16/21	JEN
Endrin	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	06/16/21	JEN
Endrin Aldehyde	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	06/16/21	JEN
Endrin ketone	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	06/16/21	JEN
Heptachlor	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	06/16/21	JEN
Heptachlor Epoxide	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	06/16/21	JEN
Methoxychlor	<0.010		mg/Kg	EPA 8081A	1.0	0.010	06/16/21	JEN
Toxaphene	<0.050		mg/Kg	EPA 8081A	1.0	0.050	06/16/21	JEN
[Surrogates]								
Tetrachloro-m-xylene	107		%REC	EPA 8081A/8082		50-150	06/16/21	JEN
Decachlorobiphenyl	118		%REC	EPA 8081A/8082		50-150	06/16/21	JEN
[VOCs by GCMS]								
Closed System P&T VOC Soil	Complete			EPA 5035	1.0		06/16/21	JEN
Acetone	<0.10		mg/Kg	EPA 8260B	1.0	0.10	06/16/21	JEN
t-Amyl Methyl Ether (TAME)	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
Benzene	<0.0040		mg/Kg	EPA 8260B	1.0	0.0040	06/16/21	JEN
Bromobenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
Bromochloromethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
Bromodichloromethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
Bromoform	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
Bromomethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
t-Butanol (TBA)	<0.0625		mg/Kg	EPA 8260B	1.0	0.0625	06/16/21	JEN
2-Butanone (MEK)	<0.0313		mg/Kg	EPA 8260B	1.0	0.0313	06/16/21	JEN
n-Butylbenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
sec-Butylbenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
tert-Butylbenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
Carbon Disulfide	<0.010		mg/Kg	EPA 8260B	1.0	0.010	06/16/21	JEN
Carbon Tetrachloride	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
Chlorobenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
Chloroethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN

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CERTIFICATE OF ANALYSIS

2106-00117

HILLMANN GROUP
STEPHEN BARTLETT
1745 W. ORANGEWOOD AVE.
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ORANGE, CA 92868

Project: MLC - SAN MARCOS

Date Reported	06/17/21
Date Received	06/15/21
Invoice No.	92071
Cust #	H080
Permit Number	
Customer P.O.	C3-8475

Sample: 003 **S-3-2.0'** Date & Time Sampled: 06/15/21 @ 10:30
Sample Matrix: **Soil**
.....continued

Analysis	Result	Qual	Units	Method	DF	RL	Date	Tech
Chloroform	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
Chloromethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
2-Chlorotoluene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
4-Chlorotoluene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
Dibromochloromethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
1,2-Dibromoethane (EDB)	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
1,2-Dibromo-3-Chloropropane	<0.010		mg/Kg	EPA 8260B	1.0	0.010	06/16/21	JEN
Dibromomethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
1,2-Dichlorobenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
1,3-Dichlorobenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
1,4-Dichlorobenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
Dichlorodifluoromethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
1,1-Dichloroethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
1,2-Dichloroethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
1,1-Dichloroethene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
cis-1,2-Dichloroethene	<0.0020		mg/Kg	EPA 8260B	1.0	0.0020	06/16/21	JEN
trans-1,2-Dichloroethene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
1,2-Dichloropropane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
1,3-Dichloropropane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
2,2-Dichloropropane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
1,1-Dichloropropene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
cis-1,3-Dichloropropene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
trans-1,3-Dichloropropene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
Diisopropyl Ether (DiPE)	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
Ethylbenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
Ethyl-t-Butyl Ether (EtBE)	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
Hexachlorobutadiene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
2-Hexanone	<0.0313		mg/Kg	EPA 8260B	1.0	0.0313	06/16/21	JEN
Isopropylbenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
4-Isopropyltoluene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
Methylene Chloride	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN

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SUITE 201
ORANGE, CA 92868

Project: MLC - SAN MARCOS

Date Reported	06/17/21
Date Received	06/15/21
Invoice No.	92071
Cust #	H080
Permit Number	
Customer P.O.	C3-8475

Analysis	Result	Qual	Units	Method	DF	RL	Date	Tech
Sample: 003 **S-3-2.0'**					Date & Time Sampled:		06/15/21 @	10:30
Sample Matrix: **Soil**								
.....continued								
4-Methyl-2-Pentanone (MIBK)	<0.0313		mg/Kg	EPA 8260B	1.0	0.0313	06/16/21	JEN
Methyl-t-butyl Ether (MtBE)	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
Naphthalene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
n-Propylbenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
Styrene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
1,1,1,2-Tetrachloroethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
1,1,2,2-Tetrachloroethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
Tetrachloroethene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
Toluene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
1,2,3-Trichlorobenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
1,2,4-Trichlorobenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
1,1,1-Trichloroethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
1,1,2-Trichloroethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
Trichloroethene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
1,2,3-Trichloropropane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
Trichlorofluoromethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
Trichlorotrifluoroethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
1,2,4-Trimethylbenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
1,3,5-Trimethylbenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
Vinyl Chloride	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
m,p-Xylenes	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
o-Xylene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/16/21	JEN
[VOC Surrogates]								
Dibromofluoromethane	130		%REC	EPA 8260B		70-130	06/16/21	JEN
Toluene-D8	84		%REC	EPA 8260B		70-130	06/16/21	JEN
Bromofluorobenzene	83		%REC	EPA 8260B		70-130	06/16/21	JEN
Sample: 004 **S-4-2.0'**					Date & Time Sampled:		06/15/21 @	10:45
Sample Matrix: **Soil**								
[TPH Gasoline (C4-C12)]								
Closed System P&T TPHg Soil	Complete			EPA 5035	1.0		06/16/21	JEN

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Project: MLC - SAN MARCOS

Date Reported	06/17/21
Date Received	06/15/21
Invoice No.	92071
Cust #	H080
Permit Number	
Customer P.O.	C3-8475

Sample: 004 **S-4-2.0'** Date & Time Sampled: 06/15/21 @ 10:45
Sample Matrix: **Soil**
.....continued

Analysis	Result	Qual	Units	Method	DF	RL	Date	Tech
C4-C12	<0.20		mg/Kg	LUFT GC/MS	1.0	0.20	06/16/21	JEN
[Extractable Hydrocarbons]								
Extraction	Complete			EPA 3550B	1.0		06/16/21	JEN
C13-C22	<10		mg/Kg	EPA 8015M	1.0	10	06/16/21	JEN
C23-C40	<20		mg/Kg	EPA 8015M	1.0	20	06/16/21	JEN
[Surrogate]								
o-Terphenyl (OTP)	91		%REC	EPA 8015M		50-150	06/16/21	JEN
[Metals Title 22 no Hg]								
Metals Acid Digestion	Complete			EPA 3050B	1.0		06/16/21	KZ
Antimony	<1.00		mg/Kg	EPA 6010B	1.0	1.00	06/16/21	KZ
Arsenic	<1.00		mg/Kg	EPA 6010B	1.0	1.00	06/16/21	KZ
Barium	**190**		mg/Kg	EPA 6010B	1.0	0.500	06/16/21	KZ
Beryllium	<0.500		mg/Kg	EPA 6010B	1.0	0.500	06/16/21	KZ
Cadmium	<0.500		mg/Kg	EPA 6010B	1.0	0.500	06/16/21	KZ
Chromium	**32.2**		mg/Kg	EPA 6010B	1.0	0.500	06/16/21	KZ
Cobalt	**11.8**		mg/Kg	EPA 6010B	1.0	0.500	06/16/21	KZ
Copper	**35.5**		mg/Kg	EPA 6010B	1.0	0.500	06/16/21	KZ
Lead	**5.27**		mg/Kg	EPA 6010B	1.0	0.500	06/16/21	KZ
Molybdenum	**0.554**		mg/Kg	EPA 6010B	1.0	0.500	06/16/21	KZ
Nickel	**10.2**		mg/Kg	EPA 6010B	1.0	0.500	06/16/21	KZ
Selenium	<1.00		mg/Kg	EPA 6010B	1.0	1.00	06/16/21	KZ
Silver	<1.00		mg/Kg	EPA 6010B	1.0	1.00	06/16/21	KZ
Thallium	<1.00		mg/Kg	EPA 6010B	1.0	1.00	06/16/21	KZ
Vanadium	**109**		mg/Kg	EPA 6010B	1.0	0.500	06/16/21	KZ
Zinc	**173**		mg/Kg	EPA 6010B	1.0	5.00	06/16/21	KZ
[Mercury]								
Mercury Digestion	Complete			EPA 7471A	1.0		06/16/21	KZ
Mercury	<0.20		mg/Kg	EPA 7471A	1.0	0.20	06/16/21	KZ
[Pesticides]								
Ultrasonic Extraction	Complete			EPA 3550	1.0		06/16/21	JEN
Aldrin	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	06/16/21	JEN

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Date Reported	06/17/21
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Invoice No.	92071
Cust #	H080
Permit Number	
Customer P.O.	C3-8475

Sample: 004 **S-4-2.0'** Date & Time Sampled: 06/15/21 @ 10:45
Sample Matrix: **Soil**
.....continued

Analysis	Result	Qual	Units	Method	DF	RL	Date	Tech
alpha-BHC	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	06/16/21	JEN
beta-BHC	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	06/16/21	JEN
delta-BHC	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	06/16/21	JEN
gamma-BHC	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	06/16/21	JEN
Chlordane	<0.010		mg/Kg	EPA 8081A	1.0	0.010	06/16/21	JEN
4,4'-DDD	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	06/16/21	JEN
4,4'-DDE	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	06/16/21	JEN
4,4'-DDT	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	06/16/21	JEN
Dieldrin	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	06/16/21	JEN
Endosulfan I	<0.00020		mg/Kg	EPA 8081A	1.0	0.0020	06/16/21	JEN
Endosulfan II	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	06/16/21	JEN
Endosulfan Sulfate	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	06/16/21	JEN
Endrin	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	06/16/21	JEN
Endrin Aldehyde	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	06/16/21	JEN
Endrin ketone	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	06/16/21	JEN
Heptachlor	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	06/16/21	JEN
Heptachlor Epoxide	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	06/16/21	JEN
Methoxychlor	<0.010		mg/Kg	EPA 8081A	1.0	0.010	06/16/21	JEN
Toxaphene	<0.050		mg/Kg	EPA 8081A	1.0	0.050	06/16/21	JEN
[Surrogates]								
Tetrachloro-m-xylene	113		%REC	EPA 8081A/8082		50-150	06/16/21	JEN
Decachlorobiphenyl	110		%REC	EPA 8081A/8082		50-150	06/16/21	JEN
[VOCs by GCMS]								
Closed System P&T VOC Soil	Complete			EPA 5035	1.0		06/17/21	JEN
Acetone	<0.10		mg/Kg	EPA 8260B	1.0	0.10	06/17/21	JEN
t-Amyl Methyl Ether (TAME)	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/17/21	JEN
Benzene	<0.0040		mg/Kg	EPA 8260B	1.0	0.0040	06/17/21	JEN
Bromobenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/17/21	JEN
Bromochloromethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/17/21	JEN
Bromodichloromethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/17/21	JEN
Bromoform	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/17/21	JEN

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ONTARIO, CA 91761
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CERTIFICATE OF ANALYSIS

2106-00117

HILLMANN GROUP
STEPHEN BARTLETT
1745 W. ORANGEWOOD AVE.
SUITE 201
ORANGE, CA 92868

Project: MLC - SAN MARCOS

Date Reported	06/17/21
Date Received	06/15/21
Invoice No.	92071
Cust #	H080
Permit Number	
Customer P.O.	C3-8475

Sample: 004 **S-4-2.0'** Date & Time Sampled: 06/15/21 @ 10:45
Sample Matrix: **Soil**
.....continued

Analysis	Result	Qual	Units	Method	DF	RL	Date	Tech
Bromomethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/17/21	JEN
t-Butanol (TBA)	<0.0625		mg/Kg	EPA 8260B	1.0	0.0625	06/17/21	JEN
2-Butanone (MEK)	<0.0313		mg/Kg	EPA 8260B	1.0	0.0313	06/17/21	JEN
n-Butylbenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/17/21	JEN
sec-Butylbenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/17/21	JEN
tert-Butylbenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/17/21	JEN
Carbon Disulfide	<0.010		mg/Kg	EPA 8260B	1.0	0.010	06/17/21	JEN
Carbon Tetrachloride	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/17/21	JEN
Chlorobenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/17/21	JEN
Chloroethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/17/21	JEN
Chloroform	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/17/21	JEN
Chloromethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/17/21	JEN
2-Chlorotoluene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/17/21	JEN
4-Chlorotoluene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/17/21	JEN
Dibromochloromethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/17/21	JEN
1,2-Dibromoethane (EDB)	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/17/21	JEN
1,2-Dibromo-3-Chloropropane	<0.010		mg/Kg	EPA 8260B	1.0	0.010	06/17/21	JEN
Dibromomethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/17/21	JEN
1,2-Dichlorobenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/17/21	JEN
1,3-Dichlorobenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/17/21	JEN
1,4-Dichlorobenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/17/21	JEN
Dichlorodifluoromethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/17/21	JEN
1,1-Dichloroethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/17/21	JEN
1,2-Dichloroethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/17/21	JEN
1,1-Dichloroethene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/17/21	JEN
cis-1,2-Dichloroethene	<0.0020		mg/Kg	EPA 8260B	1.0	0.0020	06/17/21	JEN
trans-1,2-Dichloroethene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/17/21	JEN
1,2-Dichloropropane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/17/21	JEN
1,3-Dichloropropane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/17/21	JEN
2,2-Dichloropropane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/17/21	JEN
1,1-Dichloropropene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/17/21	JEN

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CERTIFICATE OF ANALYSIS

2106-00117

HILLMANN GROUP
STEPHEN BARTLETT
1745 W. ORANGEWOOD AVE.
SUITE 201
ORANGE, CA 92868

Project: MLC - SAN MARCOS

Date Reported	06/17/21
Date Received	06/15/21
Invoice No.	92071
Cust #	H080
Permit Number	
Customer P.O.	C3-8475

Sample: 004 **S-4-2.0'** Date & Time Sampled: 06/15/21 @ 10:45
Sample Matrix: **Soil**
.....continued

Analysis	Result	Qual	Units	Method	DF	RL	Date	Tech
cis-1,3-Dichloropropene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/17/21	JEN
trans-1,3-Dichloropropene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/17/21	JEN
Diisopropyl Ether (DiPE)	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/17/21	JEN
Ethylbenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/17/21	JEN
Ethyl-t-Butyl Ether (EtBE)	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/17/21	JEN
Hexachlorobutadiene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/17/21	JEN
2-Hexanone	<0.0313		mg/Kg	EPA 8260B	1.0	0.0313	06/17/21	JEN
Isopropylbenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/17/21	JEN
4-Isopropyltoluene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/17/21	JEN
Methylene Chloride	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/17/21	JEN
4-Methyl-2-Pentanone (MIBK)	<0.0313		mg/Kg	EPA 8260B	1.0	0.0313	06/17/21	JEN
Methyl-t-butyl Ether (MtBE)	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/17/21	JEN
Naphthalene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/17/21	JEN
n-Propylbenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/17/21	JEN
Styrene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/17/21	JEN
1,1,1,2-Tetrachloroethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/17/21	JEN
1,1,2,2-Tetrachloroethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/17/21	JEN
Tetrachloroethene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/17/21	JEN
Toluene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/17/21	JEN
1,2,3-Trichlorobenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/17/21	JEN
1,2,4-Trichlorobenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/17/21	JEN
1,1,1-Trichloroethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/17/21	JEN
1,1,2-Trichloroethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/17/21	JEN
Trichloroethene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/17/21	JEN
1,2,3-Trichloropropane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/17/21	JEN
Trichlorofluoromethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/17/21	JEN
Trichlorotrifluoroethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/17/21	JEN
1,2,4-Trimethylbenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/17/21	JEN
1,3,5-Trimethylbenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/17/21	JEN
Vinyl Chloride	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/17/21	JEN
m,p-Xylenes	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/17/21	JEN

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CERTIFICATE OF ANALYSIS

2106-00117

HILLMANN GROUP
STEPHEN BARTLETT
1745 W. ORANGEWOOD AVE.
SUITE 201
ORANGE, CA 92868

Project: MLC - SAN MARCOS

Date Reported	06/17/21
Date Received	06/15/21
Invoice No.	92071
Cust #	H080
Permit Number	
Customer P.O.	C3-8475

Analysis	Result	Qual	Units	Method	DF	RL	Date	Tech
Sample: 004 **S-4-2.0'**					Date & Time Sampled:		06/15/21 @	10:45
Sample Matrix: **Soil**								
.....continued								
o-Xylene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	06/17/21	JEN
[VOC Surrogates]								
Dibromofluoromethane	109		%REC	EPA 8260B		70-130	06/17/21	JEN
Toluene-D8	97		%REC	EPA 8260B		70-130	06/17/21	JEN
Bromofluorobenzene	101		%REC	EPA 8260B		70-130	06/17/21	JEN

Respectfully Submitted: Ken Zheng

Ken Zheng - Lab Director

QUALIFIERS

B = Detected in the associated Method Blank at a concentration above the routine RL.
B1 = BOD dilution water is over specifications . The reported result may be biased high.
D = Surrogate recoveries are not calculated due to sample dilution.
E = Estimated value; Value exceeds calibration level of instrument.
H = Analyte was prepared and/or analyzed outside of the analytical method holding time
I = Matrix Interference.
J = Analyte concentration detected between RL and MDL.
Q = One or more quality control criteria did not meet specifications. See Comments for further explanation.
S = Customer provided specification limit exceeded.

ABBREVIATIONS

DF = Dilution Factor
RL = Reporting Limit, Adjusted by DF
MDL = Method Detection Limit, Adjusted by DF
Qual = Qualifier
Tech = Technician

As regulatory limits change frequently, A & R Laboratories advises the recipient of this report to confirm such limits with the appropriate federal, state, or local authorities before acting in reliance on the regulatory limits provided.

For any feedback concerning our services, please contact Jenny Jiang, Project Manager at 951.779.0310. You may also contact Ken Zheng, President at office@arlaboratories.com.

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USDA-EPA-NIOSH Testing Food Sanitation Consulting Chemical and Microbiological Analyses and Research

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QUALITY CONTROL DATA REPORT

2106-00117

HILLMANN GROUP
STEPHEN BARTLETT
1745 W. ORANGEWOOD AVE.
SUITE 201
ORANGE, CA 92868

Project: MLC - SAN MARCOS

Date Reported	**06/17/2021**
Date Received	**06/15/2021**
Date Sampled	**06/15/2021**
Invoice No.	**92071**
Customer #	**H080**
Customer P.O.	**C3-8475**

Method # EPA 6010B
QC Reference # 96812 **Date Analyzed:** 6/16/2021 **Technician:** KZ
Samples 001 002 003 004

Results

	LCS %REC	LCS %DUP	LCS %RPD
Antimony	102	103	1
Arsenic	100	102	2
Barium	98	97	1
Beryllium	97	97	0
Cadmium	100	100	0
Chromium	99	96	3
Cobalt	99	102	3
Copper	98	98	0
Lead	100	102	2
Molybdenum	102	101	1
Nickel	101	101	0
Selenium	104	106	2
Silver	140	140	0
Thallium	99	97	2
Vanadium	97	96	1
Zinc	102	103	1

Control Ranges

LCS %REC	LCS %RPD
75 - 125	0 - 20
75 - 125	0 - 20
75 - 125	0 - 20
75 - 125	0 - 20
75 - 125	0 - 20
75 - 125	0 - 20
75 - 125	0 - 20
75 - 125	0 - 20
75 - 125	0 - 20
75 - 125	0 - 20
75 - 125	0 - 20
75 - 125	0 - 20
75 - 125	0 - 20
75 - 125	0 - 20
75 - 125	0 - 20
75 - 125	0 - 20

Method # EPA 7471A
QC Reference # 96815 **Date Analyzed:** 6/16/2021 **Technician:** KZ
Samples 001 002 003 004

Results

	LCS %REC	LCS %DUP	LCS %RPD	SPIKE %REC	SPIKE %DUP	SPIKE %RPD
Mercury	97	103	6	88	94	6

Control Ranges

LCS %REC	LCS %RPD	SPIKE %RPD
75 - 125	0 - 25	0 - 25

Method # EPA 8015M
QC Reference # 96794 **Date Analyzed:** 6/16/2021 **Technician:** JEN
Samples 001 002 003 004

Results

	LCS %REC	SPIKE %REC	SPIKE %DUP	SPIKE %RPD
C13-C22	113	115	116	1
Diesel	113	115	116	1

Control Ranges

LCS %REC	SPIKE %RPD
70 - 130	0 - 25
70 - 130	0 - 25

Method # EPA 8081A
QC Reference # 96796 **Date Analyzed:** 6/16/2021 **Technician:** JEN
Samples 001 002 003 004

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QUALITY CONTROL DATA REPORT

2106-00117

HILLMANN GROUP
STEPHEN BARTLETT

Date Reported 06/17/2021
Date Received 06/15/2021
Date Sampled 06/15/2021

Project: MLC - SAN MARCOS

Method # EPA 8081A
QC Reference # 96796 **Date Analyzed:** 6/16/2021 **Technician:** JEN
Samples 001 002 003 004

Results

	LCS %REC	SPIKE %REC	SPIKE %DUP	SPIKE %RPD
4,4'-DDT	87	89	96	7
Aldrin	86	88	86	2
Dieldrin	92	90	94	4
Endrin	99	93	108	15
gamma-BHC	97	96	96	0
Heptachlor	120	127	126	1

Control Ranges

LCS %REC	SPIKE %RPD
50 - 130	0 - 30
50 - 140	0 - 30
70 - 130	0 - 30
70 - 150	0 - 30
50 - 150	0 - 30
50 - 150	0 - 30

Method # EPA 8081A/8082
QC Reference # 96796 **Date Analyzed:** 6/16/2021 **Technician:** JEN
Samples 001 002 003 004

No QC recoveries reported.

Method # EPA 8260B
QC Reference # 96791 **Date Analyzed:** 6/16/2021 **Technician:** JEN
Samples 001 002 003

Results

	LCS %REC	SPIKE %REC	SPIKE %DUP	SPIKE %RPD
1,1-Dichloroethene	74	92	76	16
Benzene	75	105	111	6
Chlorobenzene	79	109	114	5
Toluene	75	106	114	8
Trichloroethene	79	109	118	9

Control Ranges

LCS %REC	SPIKE %RPD
50 - 150	0 - 30
50 - 150	0 - 30
50 - 150	0 - 30
50 - 150	0 - 30
50 - 150	0 - 30

QC Reference # 96792 **Date Analyzed:** 6/17/2021 **Technician:** JEN
Samples 004

Results

	LCS %REC	LCS %DUP	LCS %RPD
1,1-Dichloroethene	70	70	0
Benzene	97	96	1
Chlorobenzene	103	98	5
Toluene	100	101	1
Trichloroethene	100	96	4

Control Ranges

LCS %REC	LCS %RPD
50 - 150	0 - 30
50 - 150	0 - 30
50 - 150	0 - 30
50 - 150	0 - 30
50 - 150	0 - 30

Method # LUFT GC/MS
QC Reference # 96793 **Date Analyzed:** 6/16/2021 **Technician:** JEN
Samples 001 002 003 004

Results

	LCS %REC	LCS %DUP	LCS %RPD
C4-C12	80	86	6

Control Ranges

LCS %REC	LCS %RPD
70 - 130	0 - 25

No method blank results were above reporting limit

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QUALITY CONTROL DATA REPORT

2106-00117

HILLMANN GROUP
STEPHEN BARTLETT

Date Reported	**06/17/2021**
Date Received	**06/15/2021**
Date Sampled	**06/15/2021**

Project: MLC - SAN MARCOS

Respectfully Submitted: Ken Zheng

Ken Zheng - President

For any feedback concerning our services, please contact Jenny Jiang, Project Manager at 951.779.0310. You may also contact Ken Zheng, President at office@arlaboratories.com.

AR LABORATORIES, Inc.

1650 S. Grove Ave Suite C
Ontario, CA 91761
Voice: 951.779.0310 ● 800.798.9336
Fax: 951.779.0344

Chain of Custody Record

AR Lab Job # 2106-117

www.arlaboratories.com info@arlaboratories.com

RUSH

Page 1 of 1

Project No:	Project Name:
C3-8475	MLC - San Marcos

Project Manager:	Phone:	Fax:
Stephen Barllett	714-634-9500	

Client Name: (Report and Billing)	Address: (Report and Billing)
Hillmann Consulting LLC	1745 W. Orangewood Avenue, Suite 201 Orange, CA 92868

Please Circle Analyses Requested

Centrum ID (Lab use only)	Sample ID (As it should appear on report)	Date sampled	Time sampled	Sample matrix	Site location	Containers: # and type	8015M: Diesel, Fuel Screen, Carbon Chain	8015M: Gas only	8021B: BTEX/MtBE Only	418.1 (TRPH), 413.2, 1664	VOCs	GC or GCMS Volatiles by 5035*	GCMS: 8260B, 8021B, 624, 524.2	GCMS: MtBE Conf. Only, BTEX/Oxygenates Only	GCMS: 8270C, 625	8080: Pesticides, PCBs, Pest/PCB		Metals: Title 22 (CAM), RCRA, PP	pH, TDS, TSS, Conductivity	Flashpoint, Hex Cr		Remarks/Special Instructions
1	S-1-6.0'	6/15/21	1000	Soil	N. stockpile	Glass	X				X					X		X				
2	S-2-1.5'		1015		N. central stockpile		X				X					X		X				
3	S-3-2.0'		1030		S. central stockpile		X				X					X		X				
4	S-4-2.0'		1045		S. stockpile		X				X					X		X				

Turn-Around Time

- ☐ 24 Hr. RUSH*
- ☒ 48 Hr. RUSH*
- ☐ Normal TAT

*Requires PRIOR approval, additional charges apply

Requested due date: _____

1) Relinquished by: (Sampler's Signature)	Date:	Time:	3) Relinquished by:	Date:	Time:
Stephen Barllett	6/15/21			6-15-21	15:10
2) Received by:	Date:	Time:	4) Received by:	Date:	Time:
	6/16/2	1410			
			5) Relinquished by:	Date:	Time:
			6) Received for Laboratory by:	Date: 6/15/21	Time: 1510

The delivery of samples and the signature on this chain of custody form constitutes authorization to perform the analyses specified above under the Terms and Conditions set forth on the back hereof.

To be completed by Laboratory personnel:

Samples chilled? ☒ Yes ☐ No ☐ From Field

Custody seals? ☐ Yes ☒ No

All sample containers intact? ☒ Yes ☐ No

☒ Courier ☐ UPS/Fed Ex ☐ Hand carried

Sample Disposal

- ☐ Client will pick up
- ☐ Return to client
- ☒ Lab disposal

Laboratory Notes:

Sample Locator No.

White Copy - Original (Accompanies Samples) Yellow Copy - Centrum Files Pink Copy - Centrum duplicate Gold Copy - Client Copy

v6.0 1/11 coc-temp-both.xls

Sample Acceptance Checklist

CLIENT: Hillmann Consult. WORK ORDER NUMBER: 2106-00117

Temperature:(Criteria:0.0°C-6.0°C)

Sample Temp.(w/CF) °C(w/CF) 3.8°C

☐ Sample(s) outside temprature criteria: PM contacted by :

☐ Sample(s) outside temprature criteria, but received on ice/chilled on same day of sampling.

☐ Sample(s) received at ambient temprature; placed on ice for transport by courier.

Ambient Temprature ☐ Air ☐ Filter

CUSTODY SEAL:

Cooler ☐ Present and Intact ☐ Present and Not Intact ✓ Not Present

Sample(s) ☐ Present and Intact ☐ Present and Not Intact ✓ Not Present

Sample Condition:	Yes	No	N/A
Was a COC received	✓		
Were sample IDs present?	✓		
Were sampling dates & times present?	✓		
Was a relingquished signature present?	✓		
Were the tests required clearly indicated?	✓		
Were all samples sealed in plastic bags?		✓	
Did all bottle labels agree with COC? (ID, dates and times)	✓		
Were correct containers used for the tests required?	✓		
Was a sufficient amount of samples sent for tests indicated?	✓		
Was there headspace in VOA vials?			✓
Were the containers labeled with correct preservatives?			✓

Explanations/Comments:

Notification:

For discrepancies, how was the Project Manager notified? Verbal

Verbal: PM Initials: _____ Data/Time: _____

Email: Send to: _____ Data/Time: _____

Project Manager's response:

Completed By: _____ Date: 6-15-21

A R Laboratories
1650 S. Grove Ave., Suite C, Ontario, CA 91761
PH: 951-779-0310 Fax: 951-779-0344
Email: office@arlaboratories.com

HILLMANN
CONSULTING

June 7, 2021

San Diego Regional Water Quality Control Board
2375 Northside Drive, Suite 100
San Diego, CA 92108-2700
Phone (619) 516-1990
Fax (619) 516-1994
rb9records@waterboards.ca.gov

RE: Environmental Files:

APN#: 219-121-15-00 and
219-121-15-00

Dear Sir/Madam:

Hillmann Consulting, LLC is conducting an environmental investigation of the above referenced property. We would like to request any information your office has regarding this property such as environmental files (UST, groundwater, wells, etc.). If any records are located, we would like to obtain copies or schedule a file review. If no records are available, please contact me to confirm. Thank you for your assistance.

Sincerely,

Aaron Alvarez
Environmental Project Manager
Hillmann Consulting, LLC
aalvarez@hillmanngroup.com

San Diego Air Pollution Control District

10124 Old Grove Rd, San Diego, CA 92131
www.sdapcd.org
858.586.2600 FAX: 858.586.2601 Email: apcdpermits@sdcounty.ca.gov

PUBLIC RECORDS REQUEST FORM

ATTENTION REQUESTOR: To expedite your request for District records, please fill out this form completely, and identify specifically the type of records you are requesting. Please limit your request to one facility or one site address for each request form filed. Additional forms or pages can be used if requesting information for more than one facility or for records not identified on this form. Requests should reasonably describe identifiable records prepared, owned, used, or retained by the District. District Public Records staff is available to assist you in identifying those records in the District's possession. The District is not required by law to create a new record.

REQUESTOR INFORMATION

NAME: Aaron Alvarez		DATE: 6/7/21
COMPANY: Hillmann Consulting, LLC		
MAILING ADDRESS: 1745 W. Orangewood Ave, Suite 201		
CITY: Orange	STATE: CA	ZIP CODE: 92868
PHONE NUMBER: 714-787-6629	FAX NUMBER:	
EMAIL ADDRESS: aalvarez@hillmannconsulting.com		

REQUESTED RECORDS

☐ Applications (APP)	☒ Complaints (CMP)	☒ Asbestos Notifications/Records (ASB)
☐ Authority to Construct	☒ Site Inspection Reports	☒ Permits to Operate (PTO)
☒ Notices to Comply (NTC)	☒ Source Test Reports	☒ Toxic-Health Risk Assessment (HRA)
☒ Notices of Violation (NOV)	☒ Emissions Inventory	☒ Air monitoring data
☒ Title V Permit	☐ Other (describe below or on additional pages):	

TIME PERIOD OF DOCUMENTS REQUESTED From: 1946 To: Present

REQUESTED ADDRESS INFORMATION (If Applicable)

☐ Equipment Location Address	APN: 219-121-16-00 and 219-121-15-66
☐ Owner Mailing Address	
☐ Billing Address	
SITE I.D. NO. (if known):	APPL. AND/OR PERMIT NO. (if known):

☐ I wish to inspect the requested records. I do not want copies produced at this time.
☒ I request that the SDAPCD contact me prior to copying the requested records if the cost exceeds $20.00.
☐ I would like copies of the requested records.
☐ I hereby agree to reimburse the SDAPCD for the direct cost of duplication and any other applicable charges (See Paragraph 8 of the Instructions for Requesting Records.

Signature of Requestor Aaron Alvarez Date 6/7/21

San Diego Air Pollution Control District
INSTRUCTIONS FOR REQUESTING RECORDS

1. In order to expedite your request, requests for records should be in writing. Requests will be processed in the order received. A form is available on the APCD's web page at http://www.sdapcd.org. Requests may be submitted by facsimile to (858) 586-2601, or by email to apcdpermits@sdcounty.ca.gov.

2. Requests must be for records prepared, owned, used, or retained by the District. Requests should be for clearly identifiable records. If necessary, the District will assist the requestor in making a request that describes reasonably identifiable records. Copies will not be provided if disclosure would infringe upon a copyright, trade secret, or is otherwise exempt in accordance with state law.

3. A search for facility records can only be conducted by one or all of the following:

    i. Facility Name, Address, or Identification Number;
    ii. Facility Application Number, or Permit to Operate Number; or
    iii. Facility Notice of Violation/Notice to Comply Number.

4. You will be notified in writing within ten (10) days whether your request seeks copies of disclosable public records prepared, owned, used, or retained by this agency.

4. If the search for records finds the records voluminous, you will be notified of the approximate number of pages and/or length of time it will take to process your request.

5. If the records you requested have been marked confidential by the source of the record, you will be notified and given the option of continuing with the District's trade secret process.

6. If your request is to review records, rather than receive copies, the District will notify you once the records are gathered, and arrangements will be made for your review.

Direct costs of duplication are the following:

Paper copies: $.20 first page of each separate document plus $.05 per page for subsequent pages.

Scanned copies: $.20 first page of each separate document plus $.02 per page for subsequent pages, plus $10.00 for each CD.

Electronic copies (provided in an electronic format already maintained by the District) may be provided for free if sent electronically, or for the cost of each CD as specified above.

In addition, when records are requested in electronic format, the requestor shall bear the cost of producing a copy of the record, including the cost to construct the record and the cost of programming and computer services necessary to produce a copy of the record when either of the following applies: (1) the District would be required to produce a copy of an electronic record and the record is one that is produced only at otherwise regularly scheduled intervals, or (2) the request would require data compilation, extraction, or programming to produce the record. [Gov. Code Sec. 6253.9(b)] The District will provide an invoice for charges due along with the copied records. These charges are due and payable upon receipt of the invoice and the copied records. Non-payment of invoices could result in a requirement that requests for records be pre-paid in person before releasing the requested documents.

If you have questions pertaining to the submittal of a Public Records Act request, you may contact the Public Records staff at **(858) 586-2600, Monday through Friday, 8:00 a.m. to 5:00 p.m. Our Fax number is (858) 586-2601. Our email address is apcdpermits@sdcounty.ca.gov.**

City of San Marcos
City Clerk Department

1 Civic Center Drive
San Marcos, CA 92069
(760) 744-1050 x3105
Fax (760) 744-9058
www.san-marcos.net

REQUEST FOR PUBLIC RECORDS

[ ]

Every person has the right to inspect and obtain a copy of identifiable public records not exempt from disclosure. The City will make every attempt to provide the record at the time of request. However, compilation or retrieval of documents not immediately accessible by staff will require a written request be submitted to the City Clerk Department for processing. The City may take up to ten (10) days to respond. The cost for copies are:

- **$.25/pg – 8 ½ x 11 (B/W)**
- **$.30/pg - 8 ½ X11 (Color)**
- **$.35/pg - 11 x 17**
- **$.25/pg - Document Imaging/Scanning**
- **$ 0.50/pg – Microfilm 8 ½ x 11 (B/W)**
- **$ 8.00/sheet – Oversized drawings 18 x 24**
- **$11.00/sheet – Oversized drawings larger than 18 x 24**

Copy requests exceeding a cost of $50.00 will require a 50% deposit prior to production of copies. Payment in full is required prior to release of copies.

Date Received by Clerk's Dept:	**Date Required:**	**Name:** Aaron Alvarez

Preferred method for receipt of documents:

In Person _____

By U.S. Mail _____ **(Actual Postage Costs will Apply)**

Via Email: X

Mailing Address: Hillmann Consulting, LLC
1745 W Orangewood Ave
Orange, CA 92868

Telephone: 714-787-6629

Email: aalvarez@hillmannconsulting.com

Description of public record: (List each document, file or record separately)

We would like to request any information your office has regarding any environmental documents, underground storage tanks (USTs) or hazardous materials for the property listed below. If any records are located, we would like to obtain copies or schedule a file review. If no records are available, please contact me to confirm. Thank you for your assistance. APN: 219-121-16-00 and 219-121-15-00, San Marcos, CA

Total # of pages: 8 1/2x11 (B/W) _____ (Color) _____ 1 1x17 _____ Microfilm _____ Drawings:-18x24 _____ Larger _____

Copying Costs: _____ **Date Mailed/Delivered/Picked-up:** _____

Processed By: _____ **Date Completed:** _____

(Office Use Only)

Property Detail Report

For Property Located At :
LAS POSAS RD, SAN MARCOS, CA 92078

Owner Information

Owner Name:	**WPI-LAS POSAS/MISSION LLC 55%/SUN ANDREW SO45**
Mailing Address:	**18300 VON KARMAN AVE #880, IRVINE CA 92612-1043 C034**
Vesting Codes:	**MM / /**

Location Information

Legal Description:	**PAR 3 TR 6351**		
County:	**SAN DIEGO, CA**	APN:	**219-121-16-00**
Census Tract / Block:	**200.26 /**	Alternate APN:	**219-121-10-00**
Township-Range-Sect:		Subdivision:	
Legal Book/Page:	**219-12**	Map Reference:	**16-A5 /**
Legal Lot:		Tract #:	**6351**
Legal Block:		School District:	**SAN MARCOS**
Market Area:		School District Name:	**SAN MARCOS**
Neighbor Code:		Munic/Township:	

Owner Transfer Information

Recording/Sale Date:	**/**	Deed Type:	
Sale Price:		1st Mtg Document #:	
Document #:			

Last Market Sale Information

Recording/Sale Date:	**03/06/2009 / 03/06/2009**	1st Mtg Amount/Type:	**/**
Sale Price:	**$1,950,000**	1st Mtg Int. Rate/Type:	**/**
Sale Type:	**FULL**	1st Mtg Document #:	
Document #:	**113268**	2nd Mtg Amount/Type:	**/**
Deed Type:	**GRANT DEED**	2nd Mtg Int. Rate/Type:	**/**
Transfer Document #:		Price Per SqFt:	
New Construction:		Multi/Split Sale:	**MULTIPLE**
Title Company:	**CHICAGO TITLE CO**		
Lender:			
Seller Name:	**WPI-LAS POSAS OF MISSION LLC**		

Prior Sale Information

Prior Rec/Sale Date:	**04/08/1988 / 03/1988**	Prior Lender:	
Prior Sale Price:	**$200,000**	Prior 1st Mtg Amt/Type:	**/**
Prior Doc Number:	**163489**	Prior 1st Mtg Rate/Type:	**/**
Prior Deed Type:	**GRANT DEED**		

Property Characteristics

Year Built / Eff:	**/**	Total Rooms/Offices		Garage Area:	
Gross Area:		Total Restrooms:		Garage Capacity:	
Building Area:		Roof Type:		Parking Spaces:	
Tot Adj Area:		Roof Material:		Heat Type:	
Above Grade:		Construction:		Air Cond:	
# of Stories:		Foundation:		Pool:	
Other Improvements:	**Building Permit**	Exterior wall:		Quality:	
		Basement Area:		Condition:	

Site Information

Zoning:	**C**	Acres:	**1.48**	County Use:	**VACANT COMMERCIAL (620)**
Lot Area:	**64,469**	Lot Width/Depth:	**x**	State Use:	
Land Use:	**COMMERCIAL ACREAGE**	Commercial Units:		Water Type:	
Site Influence:		Sewer Type:		Building Class:	

Tax Information

Total Value:	**$783,913**	Assessed Year:	**2020**	Property Tax:	**$8,788.08**
Land Value:	**$783,913**	Improved %:		Tax Area:	**13115**
Improvement Value:		Tax Year:	**2020**	Tax Exemption:	
Total Taxable Value:	**$783,913**				

Property Detail Report

For Property Located At :
LAS POSAS RD, SAN MARCOS, CA 92078

Owner Information

Owner Name:	**WPI-LAS POSAS/MISSION LLC 55%/SUN ANDREW SO45**
Mailing Address:	**18300 VON KARMAN AVE #880, IRVINE CA 92612-1043 C034**
Vesting Codes:	**MM / /**

Location Information

Legal Description:	**PAR 2 TR 6351**		
County:	**SAN DIEGO, CA**	APN:	**219-121-15-00**
Census Tract / Block:	**200.26 /**	Alternate APN:	**219-121-11-00**
Township-Range-Sect:		Subdivision:	
Legal Book/Page:	**219-12**	Map Reference:	**16-A5 /**
Legal Lot:		Tract #:	**6351**
Legal Block:		School District:	**SAN MARCOS**
Market Area:		School District Name:	**SAN MARCOS**
Neighbor Code:		Munic/Township:	

Owner Transfer Information

Recording/Sale Date:	**/**	Deed Type:	
Sale Price:		1st Mtg Document #:	
Document #:			

Last Market Sale Information

Recording/Sale Date:	**03/06/2009 / 03/06/2009**	1st Mtg Amount/Type:	**/**
Sale Price:	**$1,950,000**	1st Mtg Int. Rate/Type:	**/**
Sale Type:	**FULL**	1st Mtg Document #:	
Document #:	**113268**	2nd Mtg Amount/Type:	**/**
Deed Type:	**GRANT DEED**	2nd Mtg Int. Rate/Type:	**/**
Transfer Document #:		Price Per SqFt:	
New Construction:		Multi/Split Sale:	**MULTI**
Title Company:	**CHICAGO TITLE CO**		
Lender:			
Seller Name:	**WPI-LAS POSAS OF MISSION LLC**		

Prior Sale Information

Prior Rec/Sale Date:	**04/08/1988 / 03/1988**	Prior Lender:	
Prior Sale Price:	**$200,000**	Prior 1st Mtg Amt/Type:	**/**
Prior Doc Number:	**163489**	Prior 1st Mtg Rate/Type:	**/**
Prior Deed Type:	**GRANT DEED**		

Property Characteristics

Year Built / Eff:	**/**	Total Rooms/Offices		Garage Area:	
Gross Area:		Total Restrooms:		Garage Capacity:	
Building Area:		Roof Type:		Parking Spaces:	
Tot Adj Area:		Roof Material:		Heat Type:	
Above Grade:		Construction:		Air Cond:	
# of Stories:		Foundation:		Pool:	
Other Improvements:	**Building Permit**	Exterior wall:		Quality:	
		Basement Area:		Condition:	

Site Information

Zoning:	**C**	Acres:	**6.06**	County Use:	**VACANT COMMERCIAL (620)**
Lot Area:	**263,974**	Lot Width/Depth:	**x**	State Use:	
Land Use:	**COMMERCIAL ACREAGE**	Commercial Units:		Water Type:	
Site Influence:		Sewer Type:		Building Class:	

Tax Information

Total Value:	**$2,841,696**	Assessed Year:	**2020**	Property Tax:	**$31,860.52**
Land Value:	**$2,841,696**	Improved %:		Tax Area:	**13115**
Improvement Value:		Tax Year:	**2020**	Tax Exemption:	
Total Taxable Value:	**$2,841,696**				

P.U.C.

County of San Diego

J. WILLIAM COX, M.D., Ph.D
DIRECTOR
S[redacted]

DEPARTMENT OF HEALTH SERVICES
ENVIRONMENTAL HEALTH SERVICES

OFFICE OF THE DEPUTY DIRECTOR
P. O. BOX 85261
SAN DIEGO, CA 92186-5261
(619) 338-2211
Fax #: 338-2174

SITE ASSESSMENT AND MITIGATION
P. O. BOX 85261
SAN DIEGO, CA 92186-5261
(619) 338-2222

February 12, 1993

Mr. Warren Krum
1517 Via Pedro
Vista, CA 92084

Dear Mr. Krum:

RE: UNAUTHORIZED RELEASE #T1037/H02919-001
1329 W. MISSION ROAD., SAN MARCOS, CA 92069-1311

The site remediation information submitted to this agency by Nutech Enterprises, Inc. summarizing the site characterization and mitigation activities at the above referenced location has been reviewed. With the provision that the information provided to this agency was accurate and representative of existing conditions, it is the position of this office that no further action is required at this time.

This information has also been discussed with staff of the Regional Water Quality Control Board (RWQCB). Based on the information submitted and current requirements, the RWQCB concurs with the determination of this agency that no further action is required at this time.

Please be advised that this letter does not relieve you of any liability under the California Health and Safety Code or Water Code for past, present, or future operations at the site. Nor does it relieve you of the responsibility to clean up existing, additional or previously unidentified conditions at the site which cause or threaten to cause pollution or nuisance or otherwise pose a threat to water quality or public health.

Additionally, be advised that changes in the present or proposed use of the site may require further site characterization and mitigation activity. It is the property owner's responsibility to notify this agency of any changes in report content, future contamination findings, or site usage.

Thank you for your efforts in resolving this matter. Please contact the Hazardous Materials Management Division, Pamela Villa Clay, at (619) 338-2497, if you require additional assistance.

Sincerely,

CHUCK PRYATEL, Assistant Chief
Environmental Health Services

CP:cl

cc: Corey Walsh, RWQCB

WP\T1037

SITE ASSESSMENT CASE CLOSURE SUMMARY

HMMD FILE NUMBER H02922-001 T83 DATE: 02-11-93
RESPONSIBLE PARTY: Pioneer Mills STAFF: Pamela Villa Clay
CONTACT PERSON: Warren Krum PHONE: 619 338-2497
SITE/FACILITY NAME: Pioneer Mills
SITE/FACILITY ADDRESS: 1329 W. Mission Rd., San Marcos, CA 92069-1311
MAILING ADDRESS: 1517 Via Pedro, Vista, CA 92084

IF YES TO ANY OF THE FOLLOWING, EXPLAIN IN THE COMMENTS SECTION BELOW.

	(DELETE ONE)	
OFF SITE IMPACTS?	YES (NO)	
BENEFICIAL USE GROUND WATER? *	(YES) NO	*COMMENT NOT NECESSARY
GROUND WATER AFFECTED?	(YES) NO	
KNOWN PUBLIC HEALTH THREATS?	YES (NO)	
ADDITIONAL MONITORING REQUIRED?	YES (NO)	
CONSULTANT'S REPORT(S) ON FILE? *	(YES) NO	
FULL DELINEATION ACHIEVED?	(YES) NO	

CONCURRENCE WITH RWQCB STAFF: Yes (J. Munch) DATE: 08-27-92

DISPOSAL AND REMEDIATION

CAUSE AND TYPE OF RELEASE: UST (gasoline/diesel) Unauthorized Release
QTY OF SOIL/PRODUCT DISPOSED: N/A MANIFESTS PROVIDED? N/A
DISPOSAL LOCATION: N/A
CLEANUP LEVELS ESTABLISHED: 100 mg/kg TPH in soil; 1 µg/l benzene in water.

TYPE OF REMEDIATION USED AT SITE: Excavation and above-ground treatment of petroleum hydrocarbon-contaminated soil. Pump and disposal to sanitary sewer.

MAXIMUM CONCENTRATIONS REMAINING IN SOILS ON SITE:

HALOGENATED ORG.	BTXE	VOLATILE ORG.
	< detection limits	

SEMIVOLATILE ORG.	PESTICIDES & PCB's	8015/DHS - TPH
		5 mg/kg

ORGANIC LEAD	418.1 - TRPH	
< 0.1 mg/kg		

ADDITIONAL COMMENTS:

Case orignated on June 8, 1988 following observation of contamination (several holes in tank and stained/odiferous soils; water observed in excavation) during the removal of two underground storage tanks (2000 gallon diesel; 1000 gallon gasoline) under HMMD permit. A total of 980 cubic yards of conatminated soil was excavated, stockpiled, and treated in an above-ground bio-treatment cell. Treated soil was sampled and results (<10 mg/kg TPH; <det. limits for BEX; T: 0.11 and 0.17 µg/kg) were acceptable for use as backfill material (approval 2/91). Final confirmation samples for excavation were obtained May 1991. A total of five monitoring wells were installed (two wells, PM-2 and PM-3 were ordered by HMMD to be destroyed due to improper construction). Water samples from well PM-5 revealed elevated TPH and BTEX values. Groundwater was intermittently pumped from well PM-5 from approx. 8/90 to 6/91. Purge water and pumped water from PM-5 (approx. 248 gallons) were approved by Vallecitos Water District for discharge to the sanitary sewer system. The wells were monitored after pumping ceased on a quarterly-annual basis from December 1991 to September 1992 and laboratory results were less than detection limits (<0.5 µg/l) for BTEX compounds.

Site is currently a vacant dirt lot. Future property use will be light industrial.

JACK MILLER
Director

County of San Diego

DEPARTMENT OF ENVIRONMENTAL HEALTH
P.O. BOX 129261, SAN DIEGO, CA 92112-9261
Phone: (858) 505-6700/1 (800) 253-9933
www.sdcdeh.org

ELIZABETH POZZEBON
Assistant Director

July 12, 2013

Albert and Samy Colucci
1225 East Vista Way
Vista, CA 92084

Las Posas Partners
5505 Cancha De Golf
Rancho Santa Fe, CA 92091

Dear Responsible Parties:

UNAUTHORIZED RELEASE #H25233-001
SAN MARCOS GAS
1290 WEST MISSION ROAD, SAN MARCOS, CA

This letter confirms the completion of a site investigation and corrective action for the underground storage tanks formerly located at the above-described location. Thank you for your cooperation throughout this investigation. Your willingness and promptness in responding to our inquiries concerning the former underground storage tanks is greatly appreciated.

Based on information in the above-referenced file and with the provision that the information provided to this agency was accurate and representative of site conditions, this agency finds that the site investigation and corrective action carried out at your underground storage tanks site is in compliance with the requirements of subdivisions (a) and (b) of Section 25296.10 of the Health and Safety Code and with corrective action regulations adopted pursuant to Section 25299.3 of the Health and Safety Code, and that no further action related to the petroleum releases at the site is required.

Claims for reimbursement of corrective action costs submitted to the Underground Storage Tank Cleanup Fund more than 365 days after the date of this letter or issuance or activation of the Fund's Letter of Commitment, whichever occurs later, will not be reimbursed unless one of the following exceptions applies:

- Claims are submitted pursuant to Section 25299.57, subdivision (k) (reopened UST case); or
- Submission within the timeframe was beyond the claimant's reasonable control, ongoing work is required for closure that will result in the submission of claims beyond that time period, or that under the circumstances of the case, it would be unreasonable or inequitable to impose the 365-day time period.

This notice is issued pursuant to subdivision (g) of Section 25296.10 of the Health and Safety Code. Please contact Tony Sawyer, at (858) 505-6802, if you have questions regarding this matter.

Sincerely,

JACK MILLER, Director
Department of Environmental Health
Site Assessment and Mitigation Program

County of San Diego

GARY W. ERBECK
DIRECTOR

DEPARTMENT OF ENVIRONMENTAL HEALTH
P.O. BOX 129261, SAN DIEGO, CA 92112-9261
(619) 338-2222 FAX (619) 338-2088
1-800-253-9933
www.sdcdeh.org

JACK MILLER
ASSISTANT DIRECTOR

December 30, 2008

Mr. Robert Kresky
EDCO Waste and Recycling Services
224 S. Las Posas Road
San Marcos, CA 92069

Dear Mr. Kresky:

UNAUTHORIZED RELEASE H10646-004
EDCO DISPOSAL CORPORATION
224 S. LAS POSAS RD., SAN MARCOS, CA 92069

This letter confirms the completion of a site investigation and corrective action for the underground storage tanks formerly located at the above-described location. Thank you for your cooperation throughout this investigation. Your willingness and promptness in responding to our inquiries concerning the former underground storage tanks is greatly appreciated.

Based on information in the above-referenced file and with the provision that the information provided to this agency was accurate and representative of site conditions, this agency finds that the site investigation and corrective action carried out at your underground storage tanks site is in compliance with the requirements of subdivisions (a) and (b) of Section 25296.10 of the Health and Safety Code and with corrective action regulations adopted pursuant to Section 25299.3 of the Health and Safety Code and that no further action related to the petroleum release at the site is required.

This notice is issued pursuant to subdivision (g) of Section 25296.10 of the Health and Safety Code. Please contact Danny Martinez, at (619) 338-2456, if you have questions regarding this matter.

Sincerely,

GARY W. ERBECK, Director
Department of Environmental Health
Site Assessment and Mitigation Program

GWE:DM:kd

Enclosure

cc: Julie Chan, Regional Water Quality Control Board
Ron Duff, SWRCB, UST Cleanup Fund Program
Gerald Shiller, Consultant

WP/H10646-004-1208CLO

Case Closure Summary
Leaking Underground Fuel Storage Tank Program

I. AGENCY INFORMATION

DATE: December 24, 2008

Agency Name: COUNTY OF SAN DIEGO, ENVIRONMENTAL HEALTH, SAM	Address: P.O. BOX 129261
City/State/Zip: SAN DIEGO, CA 92112-9261	Phone: (619) 338-2222 FAX: (619) 338-2377
Responsible Staff Person: DANNY MARTINEZ	Title: ENVIRONMENTAL HEALTH SPECIALIST

II. CASE INFORMATION

Site Facility Name: MASHBURN WASTE

Site Facility Address: 224 S LAS POSAS RD, SAN MARCOS, CA 92069-1423

RB LUSTIS Case No: 9UT3726	Local Case No: H10646-004	LOP Case No: N/A
URF Filing Date: 9/9/1998	SWEEPS No: N/A	

Responsible Parties	Address	Phone Number
EDCO WASTE AND RECYLING SERVICES MR. ROBERT KRESKY	224 S LAS POSAS RD SAN MARCOS, CA 92069	760-744-2700
EDWARD AND SANDRA BURR	4936 YERBA SANTA RD. SAN DIEGO, CA 92104	

Tank No.	Size in Gal.	Contents	Status	Date
NA				

III. RELEASE AND SITE CHARACTERIZATION INFORMATION

Cause Release: SUBSTANCE RELEASED FROM UST PRODUCT PIPING	Substance Released: DIESEL	
Site Characterization complete: YES	Date Approved By Oversight Agency: 11/19/2007	
Monitoring Wells Installed? YES	Number: 3	Proper Screened Interval? YES
Highest GW Depth B.G. Surface: 5.3 (MEASURED)	Lowest Depth: 907 (MEASURED)	Flow Direction: SOUTHEAST (MEASURED)

Most Sensitive Current Use: Existing Beneficial Groundwater Use: MUN, AGR, IND
Existing Beneficial Surface Water Use: AGR, REC1,REC2

Are Drinking Water Wells Affected? NO	Aquifer Name: 904.52-Richland Hydrologic Sub Area
Is Surface Water Affected? NO	Nearest SW name: SAN MARCOS CREEK .75 MILES SOUTH

Off-Site Beneficial Use Impacts (addresses/locations): NA

Report(s) on file? YES	Where is Report(s) Filed? COUNTY OF SAN DIEGO, ENVIRONMENTAL HEALTH

TREATMENT AND DISPOSAL OF AFFECTED MATERIAL

Material	Amount (Include Units)	Action (Treatment or Disposal)	Date
PURGE WATER	2 55 GAL DRUM	TREAT OFF-SITE DOME ROCK, QUARTZITE, AZ	03/19/2002
DRUMS (SOIL)	7 55 GAL DRUM	TREAT OFF-SITE DOME ROCK, QUARTZITE, AZ	03/19/2002
DRUMS (SOIL)	2 55 GAL DRUM	TREAT OFF-SITE DOME ROCK, QUARTZITE, AZ	02/21/2007

Case Closure Summary
Leaking Underground Fuel Storage Tank Program

III. RELEASE AND SITE CHARACTERIZATION INFORMATION (Continued) H10646-004

MAXIMUM DOCUMENTED CONTAMINANT CONCENTRATIONS	MAXIMUM	REMAINING
SOIL		
Gasoline	< 10 mg/kg	< 10 mg/kg
Diesel	= 11375 mg/kg	= 11375 mg/kg
Benzene	< 0.05 mg/kg	< 0.05 mg/kg
Toluene	< 0.05 mg/kg	< 0.05 mg/kg
Ethyl benzene	= 0.5 mg/kg	= 0.5 mg/kg
Xylene (individual isomers or total)	= 1.4 mg/kg	= 1.4 mg/kg
WATER		
Diesel	= 800000 µg/l	= 134000 µg/l
Benzene	= 5 µg/l	< 0.6 µg/l
Toluene	= 0.9 µg/l	= 0.9 µg/l
Ethyl benzene	= 90 µg/l	= 4.5 µg/l
Xylene (individual isomers or total)	= 156 µg/l	= 1 µg/l
Methyl-tert-butyl ether (MTBE)	= 570 µg/l	= 79 µg/l
tert-Butyl Alcohol (TBA)	= 270 µg/l	< 6.2 µg/l
tert-Amyl-methyl ether (TAME)	= 65 µg/l	= 1.1 µg/l
Napthalene	= 112 µg/l	= 16 µg/l

Comments:

This case was opened after analytical results for soil samples collected during a product piping/dispenser upgrade indicated diesel contamination. As part of the site assessment, 13 Geoprobe borings were advanced on the property. Laboratory analysis of these samples indicates that soil contamination is located in a 30 by 40 foot area near the westernmost dispensers at a depth between approximately 5 and 10feet below ground surface. The consultant estimated that approximately 100 cubic yards of diesel contaminated soil remain onsite with concentrations exceeding 1000 mg/kg.

Prior to installing permanent groundwater monitoring wells, five soil borings were advanced at locations surrounding the area of highest soil contamination. Temporary wells were constructed and groundwater samples were collected from all five locations. Upon intepreting the analytical data from these temporary wells, three permanent groundwater monitoring wells were installed.

Analytical groundwater data collected from the permanent wells show that groundwater is impacted by the diesel release. Liquid phase hydrocarbon (free product) is intermittently detected in the well nearest the source of the release. Free product removal has been ongoing since August, 2003, and approximately 67 ounces of free product have been removed to date. MTBE has been detected in one of the downgradient wells. However, the consultant states that this contaminant is not associated with the diesel release because this site has never stored gasoline in the USTs. The consultant concludes that the MTBE source may be surface infiltration from an unpaved wash rack area that is located adjacent to the monitoring well where the MTBE has been detected. MTBE analytical data from this well shows a decreasing trend, and the consultant estimates that it will take approximately 3.5 years for MTBE to reach maximum contaminant levels.

A sensitive receptor survey was performed for an area within approximately a half mile from the release. No water supply wells were detected within the area surveyed. Additionally, the local water purveyor (Vallecitos Water District) was contacted and they stated that there are no plans to use the groundwater in this area.

Because groundwater in this area is designated as having beneficial uses, a Corrective Action Plan was prepared. Natural attenuation was selected as the most cost effective cleanup alternative for this release. The selection of this cleanup alternative is based on the Site Conceptual Model (SCM) prepared by the consultant. In this SCM the consultant concludes that the free product is intermittently detected in the most upgradient well, and the gradient is toward the facility. The free product is not mobile as evidenced by non-detect diesel concentrations in the downgradient wells, there are no dissolved VOCs associated with the free product, and the groundwater is not being used in this area.

From the data available from the assessment conducted on this site the consultant concludes that there are no additional risks to humans or the environment associated with this unauthorized release. DEH concurs with the consultant's conclusions.

IV. CLOSURE

Does completed corrective action protect existing beneficial uses per the Regional Board Basin Plan? NO - CONTAMINANT LEVELS EXCEED MCL'S, HOWEVER THESE LEVELS WILL BE MET WITHIN A REASONABLE TIME.

Does completed corrective action protect potential beneficial uses per the Regional Board Basin Plan? NO - CONTAMINANT LEVELS EXCEED MCL'S, HOWEVER THESE LEVELS WILL BE MET WITHIN A REASONABLE TIME.

Does corrective action protect public health for current land use? YES

Case oversight completed based upon the following site use: INDUSTRIAL

Site Management Requirements:
ANY CONTAMINATED SOIL EXCAVATED AS PART OF SUBSURFACE CONSTRUCTION WORK MUST BE MANAGED IN ACCORDANCE WITH THE LEGAL REQUIREMENTS AT THAT TIME.

Case Closure Summary
Leaking Underground Fuel Storage Tank Program

Should corrective action be reviewed if land use changes? YES		
Monitoring Wells Decommissioned: NO	Number Decommissioned: 0	Number Retained: 3 ***
List Actions Taken: NOTICE OF REIMBURSEMENT / LOCAL		
List Enforcement Actions Rescinded: NONE		

V. LOCAL AGENCY REPRESENTATIVE DATA

Name: TONY SAWYER, PG 4345, CHg 40	Title: HYDROGEOLOGIST
Signature: Tony V. Sawyer	Date: 12-24-08

VI. RWQCB NOTIFICATION

Date Submitted to RB: 11/18/2008	RB Response: NO RESPONSE	
RWQCB Staff Name: JULIE CHAN	Title: SENIOR ENGINEERING GEOLOGIST	Date: 12/24/2008

VII. ADDITIONAL COMMENTS, DATA, ETC.

A permit application has been received) for the destruction of the existing monitoring wells on-site. The permit number is LMON 106046.

This document and the related CASE CLOSURE LETTER, shall be retained by the lead agency as part of the official site file.

STATE WATER RESOURCES CONTROL BOARD
GEOTRACKER

PIONEER MILLS (T0607300032) - (MAP)

SIGN UP FOR EMAI

1329 W MISSION RD
SAN MARCOS, CA 920691311
SAN DIEGO COUNTY
LUST CLEANUP SITE (INFO)
COMPLETED - CASE CLOSED AS OF 2/12/1993 - *DEFINITION*
PRINTABLE CASE SUMMARY / CSM REPORT

CUF Claim #:	1738
CUF Priority Assigned:	B
CUF Amount Paid:	$82,789

CLEANUP OVERSIGHT AGENCIES
SAN DIEGO COUNTY LOP *(LEAD)* - *CASE #: H*
SAN DIEGO RWQCB (REGION 9) - *CASE #: 9L*

Summary | Cleanup Action Report | Regulatory Activities | *Environmental Data (ESI)* | Site Maps / Documents | Community Involvement | *Related Cases* | LUST CUF Data

CLICK HERE TO MARK MULTIPLE DOCUMENTS TO DOWNLOAD

* DENOTES A SUBMITTAL WAS AUTO-R

Site Maps (GEO_MAP), Boring Logs (GEO_BORE) and KML / KMZ Files

NO SITE MAP SUBMITTALS FOUND FOR THIS FACILITY.

Site Documents

TITLE	TYPE	SUBMITTED BY	DOCUMENT DATE
H02919-001 CLOSURE DOCUMENTS	CLOSURE/NO FURTHER ACTION LETTER	DIANNE PELLEY (REGULATOR)	2/12/1993

Petition Documents

NO PETITION DOCUMENT SUBMITTALS FOUND FOR THIS FACILITY.

Monitoring Reports

NO MONITORING REPORT SUBMITTALS FOUND FOR THIS FACILITY.

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STATE WATER RESOURCES CONTROL BOARD
GEOTRACKER

SAN MARCOS GAS (T0607383730) - (MAP)

SIGN UP FOR EMAIL ALERTS

1290 W MISSION RD
SAN MARCOS, CA 92069
SAN DIEGO COUNTY
LUST CLEANUP SITE (INFO)
COMPLETED - CASE CLOSED AS OF 7/15/2013 - *DEFINITION*

PRINTABLE CASE SUMMARY / CSM REPORT

CLEANUP OVERSIGHT AGENCIES
SAN DIEGO COUNTY LOP *(LEAD)* - *CASE #: H25233-001*
CASEWORKER: TONY SAWYER
SAN DIEGO RWQCB (REGION 9)

CLOSURE REVIEW - THIS CASE IS NOT READY FOR CLOSURE AS OF 9/24/2009

VIEW ALL POSSIBLE CLOSURE REVIEW VALUES

IMPEDIMENTS TO CLOSURE

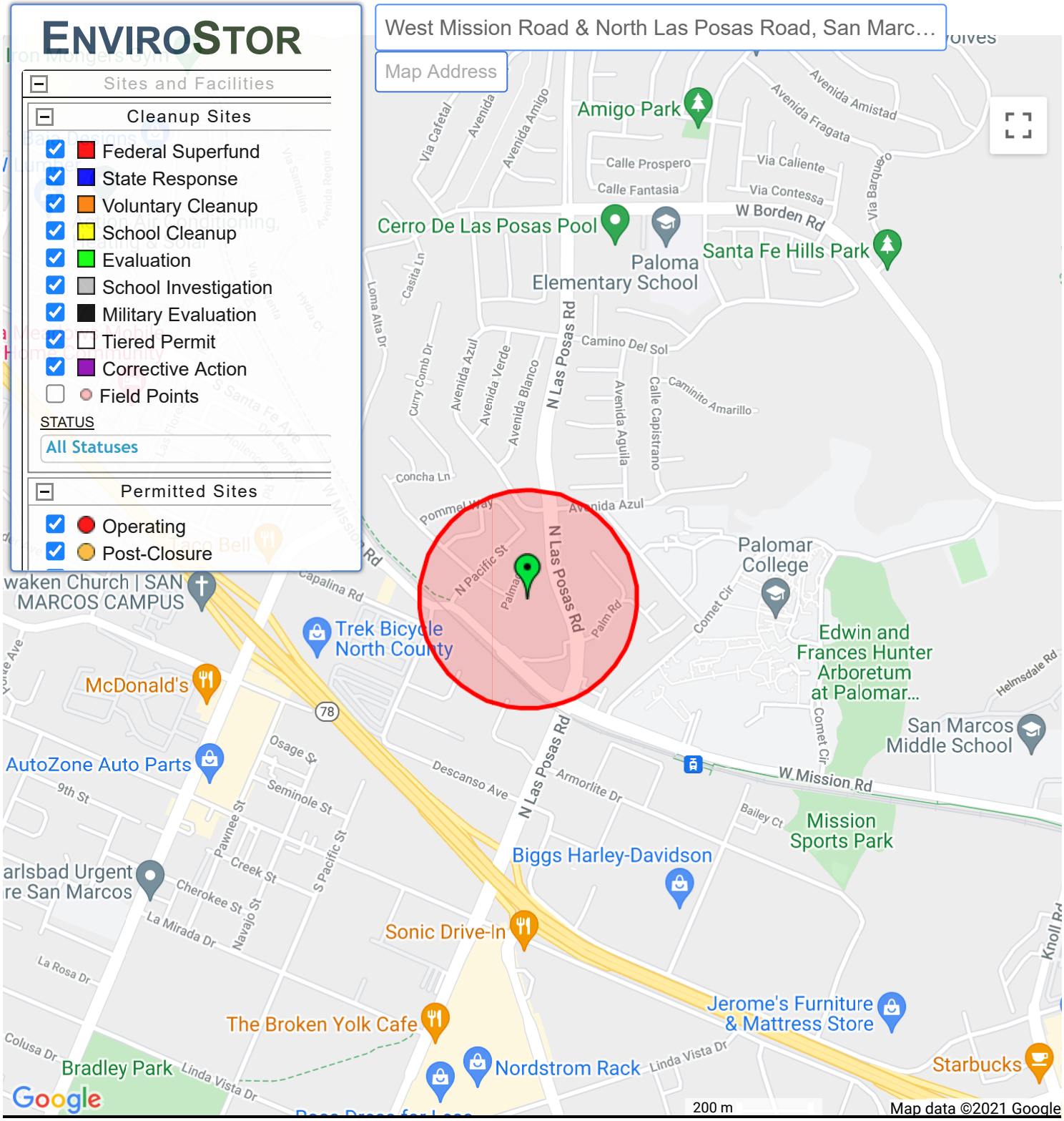
SITE ASSESSMENT INCOMPLETE
- Incomplete Conceptual Site Model (CSM) - *Work in progress*

BENEFITS OF ADDITIONAL WORK
- Complete CSM and Our Understanding of Hydrogeologic Regime and Fate and Transport of Contaminants - *Work in progress*

SENSITIVE RECEPTORS LIKELY TO BE IMPACTED AND TIME FRAME FOR IMPACT

SENSITIVE RECEPTOR	TIME FRAME FOR IMPACT	COMMENTS
Groundwater	Undetermined	Work in progress

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SITES FOUND IN SEARCH RADIUS — 0 SITES LISTED — EXPORT THIS LIST TO EXCEL

PROJECT NAME	STATUS	PROJECT TYPE	ADDRESS	CITY

COUNTY OF SAN DIEGO

COMPLIANCE INSPECTION REPORT

PAGE 1 OF 1 DATE 9/30/03
PERMIT # 137928
TIME START _____ END _____
BUS. CODE K18
SPECIALIST Lopez
INSPECTION CONTACT/TITLE Susan Camilo
PHONE: ( ) _____

BUSINESS NAME Hitachi Home Electronics
ADDRESS 1855 Dornoch Ct
CITY/ZIP San Diego 92154

On the above date, an inspection of your business/facility was conducted in order to determine compliance with the California Health and Safety Code (HSC) Chapters 6.5, 6.7, 6.95; Titles 19, 22 and 23 of the California Code of Regulations (CCR); and the San Diego County Code (SDCC). The following remarks are intended to provide guidance to correct the violations noted on the attached violation report.

Y	N/A		Y	N/A	
☐	☐	**Unified Program Facility Permit current and available**			**Permit Expires on: / / .**
☐	☐	**Hazardous Materials Business Plan available**	☐	☐	**Contingency Plan available**
☐	☐	**Employee Training is adequate**	☐	☐	**Employee Training records available**
☐	☐	**Waste disposal records available for review**	☐	☐	**Waste containers kept closed**
☐	☐	**Emergency contacts current ☐ Updated today**	☐	☐	**Waste containers kept labeled**
☐	☐	**Chemical inventory current ☐ Updated today**	☐	☐	**Waste containers in good condition**

Closure Inspection

- Business is no longer at this site. They have moved to
900 Hitachi Way
Chula Vista, CA 91914

Please Inactivate

☐ **This is an annual certification that the Hazardous Materials Business Plan (inventory, emergency contacts, emergency response plan, and employee training plan) is current and includes all the information required in the H&SC and is maintained at the site where hazardous materials are stored.**

Initials of Business Representative _____

Signature of Business Representative _____ Date Signed _____ Title _____

Department of Environmental Health, Hazardous Materials Division, P.O. Box 129261, San Diego, CA 92112-9261; (619) 338-2222; sdcdeh.org

HITACHI
Inspire the Next

Hitachi Home Electronics (America), Inc.
1855 Dornoch Court
San Diego, CA 92154-7225
619.661.3462 Fax: 619.661.3943
URL: www.susan.carrillo@hhea.hitachi.com

May 13, 2003

RECEIVED
2003 MAY 15 AM 8 08
D.E.H.
MAILROOM

Department of Environmental Health
Hazardous Materials Division
P.O. Box 129261
San Diego, California 92112-9261

Attention: Romina Lopez

Re: Change of Address effective June 1, 2003

Dear Ms. Lopez:

This is to inform you that effective June 1, 2003, Hitachi Home Electronics (America), Inc. will be moving there office location to the following address:

900 Hitachi Way
Chula Vista, CA 91914-3556

Our main telephone number will be: (619) 591-5200, fax number (619) 591-5201. As outlined in the County requirements, we are hereby enclosing a revised copy of the Hazardous Waste Materials Emergency Response Plan for the new building.

Should you have any questions or concerns regarding the above, you can reach me at the above-referenced number.

Very truly yours,

Susan Carrillo, Assistant Manager
Administrative Compliance

/sc
Enclosure

COUNTY OF SAN DIEGO

COMPLIANCE INSPECTION REPORT

PAGE 1 OF __ DATE 1/6/03
PERMIT # 137926
TIME START 12:10 END 2:30
BUS. CODE K18
SPECIALIST R. Lopez
INSPECTION CONTACT/TITLE
Virginia Jones / Senior Sup of Facilities
PHONE: (619) 661-3462
PRSSD 02/12/03 LR FWS

BUSINESS NAME Hitachi Home Electronics
ADDRESS 1855 Dornoch Ct.
CITY/ZIP San Diego, CA 92154

On the above date, an inspection of your business/facility was conducted in order to determine compliance with the California Health and Safety Code (HSC) Chapters 6.5, 6.7, 6.95; Titles 19, 22 and 23 of the California Code of Regulations (CCR); and the San Diego County Code (SDCC). The following remarks are intended to provide guidance to correct the violations noted on the attached violation report.

Y	N/A		Y	N/A	
☑	☐	Unified Facility Permit current and available			Permit Expires on: 11/30/03.
☐	☐	Hazardous Materials Business Plan available	☐	☐	Contingency Plan available
☑	☐	Employee Training is adequate	☑	☐	Employee Training records available
☑	☐	Waste disposal records available for review	☐	☑	Waste containers kept closed
☐	☐	Emergency contacts current ☑ Updated today	☐	☑	Waste containers kept labeled
☑	☐	Chemical inventory current ☐ Updated today	☐	☑	Waste containers in good condition

Routine Inspection

* Facility does not have onsite/available a copy of the Hazardous Materials Business Plan (HMBP). You are required to ~~train~~ keep your a copy onsite at all times. A copy will be provided by the inspector

* You must conduct the training outlined in the HMBP at least once per year.

☐ This is an annual certification that the Hazardous Materials Business Plan (inventory, emergency contacts, emergency response plan, and employee training plan) is current and includes all the information required in the H&SC and is maintained at the site where hazardous materials are stored.

Initials of Business Representative _____

Virginia Jones
Signature of Business Representative

1-6-03
Date Signed

Sr. Supervisor/Facilities
Title

COUNTY OF SAN DIEGO

COMPLIANCE INSPECTION REPORT

PERMIT # 137928
DATE 1/6/03
PAGE 2 OF 2

BUSINESS ADDRESS: 1855 Dornoch Ct. San Diego ZIP: 92154

VIOLATION REPORT: The items checked below refer to specific section numbers of Titles 19 & 22 of the California Code of Regulations (CCR), Chapters 6.5, 6.95 of the Health and Safety Code (HSC), and/or the San Diego County Code (SDCC).

All violations must be corrected. Submit documentation of return to compliance to your Specialist. You may use the Corrective Action Form to document your return to compliance. Your Specialist can provide these forms. Please call (619) 338-2222 or your Specialist if you have any questions.

HAZARDOUS WASTE REQUIREMENTS

RECORDKEEPING

Viol #		VIOL	VIOLATION DESCRIPTION
	☐	V0131	UPF Permit not obtained SDCC. 68.905
	☐	V0132	No EPA Identification Number. 66262.12
	☐	V0133	Manifest copy not sent to DTSC. 66262.23
	☐	V0134	Exception Rpt. not filed with DTSC. 66262.42
	☐	V0135	Waste Manifests/Receipts not on-site for 3 years. 66262.40
	☐	V0136	No records of battery disposal. 66262.81
	☐	V0137	Manifest not properly completed. 66262.23
	☐	V0138	TSDF signed-manifest not on-site. 66262.40
	☐	V0139	Biennial report not sent to DTSC. 66262.41
	☐	V0140	LDR Documentation not available. 66268.7
	☐	V0141	Operating TSDF without authorization. 25201
	☐	V0142	Failed to notify local CUPA of onsite treatment of hazardous waste. 25201
	☐	V0143	Tiered Permitting notification has incomplete or incorrect information. 25201
	☐	V0144	SB14 compliance doc. not available. 25244.19
	☐	V0145	Excluded recyclable materials report not submitted to HMD. 25143.10

STORAGE AND HANDLING

	☐	V0201	Waste container not kept closed. 66265.173
	☐	V0202	Waste container missing/improperly labeled. 66262.34, 25143.9
	☐	V0203	Damaged container not repackaged. 66265.171
	☐	V0204	Waste container not properly managed. 66265.173
	☐	V0205	Waste container in poor condition. 66265.171
	☐	V0206	Ignitable Waste < 50 feet of property line. 66265.176
	☐	V0207	Facility no maintained/operated to minimize possibility of fire, explosion or release. 66265.31
	☐	V0208	Storage area not inspected weekly. 66265.174
	☐	V0209	Waste stored > 90, 180, or 270 days. 66262.34
	☐	V0210	Hazwaste not cleaned up off floor surface. 66262.10b
	☐	V0211	Incompatibles in the same container. 66265.177
	☐	V0212	Incompatibles not stored separately. 66265.177
	☐	V0213	Container incompatible with waste. 66265.172
	☐	V0214	Waste oil contaminated. 25250.7
	☐	V0215	Used oil filters improperly managed. 66266.130
	☐	V0216	Hazardous materials not properly labeled. 25124

DISPOSAL AND TRANSPORTATION

	☐	V0301	Unauth. disposal of waste to:_____. 25189.5
	☐	V0302	Unlawful transportation of hazardous waste. 25163
	☐	V0303	Waste transported without a manifest. 66262.20
	☐	V0304	Waste determination not made. 66262.11

TRAINING, CONTINGENCY PLAN & ER PROCEDURES

Viol #		VIOL	VIOLATION DESCRIPTION
	☐	V0401	Training records unavailable. 66265.16
	☐	V0402	Training program not adequate. 66265.16
	☐	V0403	Facility not designed to minimize release. 66265.31
	☐	V0404	Spill control equip not available. 66265.32
	☐	V0405	Aisle space is obstructed. 66265.35
	☐	V0406	Contingency plan not prepared and/or on file. 66265.51, 66265.53

HAZARDOUS WASTE TANK SYSTEMS

	☐	V1601	Hazwaste tanks w/o P.E. assessment. 66265.191a, 66265.192a
	☐	V1602	P.E. Assessment report not complete. 66265.191g, 66265.192k
	☐	V1603	Hazwste tank system: no secondary containment. 66265.193a
	☐	V1604	Secondary containment not kept empty. 66265.196(b)(c), 66265.194(c)
	☐	V1605	No daily tank inspection/inspect. log 66265.195 (b&c)
	☐	V1606	Improper or absent spill/overfill protection. 66265.194b
	☐	V1607	Improper corrosion protection. 66265.191, 66265 192
	☐	V1608	Integrity assessment not done for tanks without secondary containment system. 66265.191
	☐	V1609	Improper use of hazwaste tank system. 66265.196
	☐	V1610	No PE assessment report-repairs/changes. 66265.196g
	☐	V1611	Improper closure of haz waste tank unit. 67383.3, 66265.197

HAZARDOUS MATERIALS REQUIREMENTS

BUSINESS PLAN REQUIREMENTS

	☐	V1001	UPF permit not obtained for Haz. Materials. 68.905
	☐	V1002	Hazardous Materials Business Plan (HMBP) not established/implemented. 25503.5
	☐	V1003	HMBP not amended to reflect changes25505
	☐	V1004	HMBP not submitted to HMD. 25505
	☐	V1005	Emergency Contacts not provided/current. 25509
	☐	V1006	Inventory is incomplete. 25504
	☐	V1007	Highly toxic gas (TLV≤10 ppm) not disclosed in chemical inventory. 68.1113
	☐	V1008	Annual carcinogen & reproductive toxin list not submitted to HMD 68.1113
	☐	V1009	Site map is not sufficient. 25509
	☐	V1010	Failure to report a release/threatened release. 25507
	☐	V1011	Personnel Training records not available. 19 CCR 2732
	☐	V1012	SPCC Plan required but not prepared. 25270.5 (c)
	☐	V2504	Owner or operator (O/O) Stationary Source (SS) with >TPQ of a regulated substance (RS) did not comply with Chapter 4.5 (CalARP process). 2745.1
	☐	V2553	O/O of a new or modified SS with >TPQ of RS did Not submit RMP. 2735.4, 25535 (d)

Virginia Jones
SIGNATURE OF BUSINESS REPRESENTATIVE

1-6-03
DATE SIGNED

Sr. Supervisor/Facilities
TITLE OF BUSINESS REPRESENTATIVE

137928

Department of Toxic Substances Control

Edwin F. Lowry, Director
5796 Corporate Avenue
Cypress, California 90630

Winston H. Hickox
Agency Secretary
California Environmental
Protection Agency

Gray Davis
Governor

SEP 30 2002

September 24, 2002

Ms. Susan Carrillo
Hitachi Home Electronics of America
1855 Dornoch Ct
San Diego, California 92154-7225

Certified Mail: 7002 0510 0000 3253 9638

EPA ID# CAL000092329

HAZARDOUS WASTE SOURCE REDUCTION AND MANAGEMENT REVIEW ACT OF 1989 (SB-14) SUMMARY PROGRESS REPORT (SPR) – REVIEW OF EXEMPTION CLAIMS

Dear Ms. Carrillo:

The California Department of Toxic Substance Control (DTSC) has received Information and/or a certificate signed by you or your representative indicating that Hitachi Home Electronics of America **is not subject to SB-14 SPR requirements.** However, DTSC's Hazardous Waste Tracking System indicates that your company generated in excess of the threshold quantity of applicable hazardous waste in 1998, and/or generated wastestreams that did not qualify for exemption under SB-14.

Please re-evaluate your determination and provide DTSC, within 60 days of the receipt of this letter, either of the following:

1. A Summary Progress Report as required by California Health and Safety Code, (Health & Safety Code) Section 25244.19(b)(10); or

2. Supporting data and/or other information to justify your exemption claim.

Your response should be sent to:

Department of Toxic Substances Control
5796 Corporate Avenue
Cypress, California 90630
Attn: Mr. Nabil H. Yacoub
Senior Hazardous Substances Scientist

The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption For a list of simple ways you can reduce demand and cut your energy costs, see our Web-site at www.dtsc.ca.gov.

Printed on Recycled Paper

To assist you in this determination, you may wish to review the guidance document: "Summary Progress Report for Complying with SB-14". This guidance document and other SB-14 general information can be obtained by calling DTSC's regional Public and Business Liaisons at (800) 72TOXIC, or through DTSC's website at: www.dtsc.ca.gov/PollutionPrevention/.

Failure to respond to this notice in a timely manner may result in DTSC taking further administrative enforcement action to obtain compliance with SB-14 requirements.

If you have any questions regarding SB-14 compliance, or would like to request a copy of your company's records from DTSC's Hazardous Waste Tracking System, please contact Mr. Nabil H. Yacoub at (714) 484-5389. Thank you for your cooperation in this matter.

Sincerely,

for Stephen W. Lavinger, Chief
Southern California Branch
State Regulatory Programs Division
Department of Toxic Substances Control

COUNTY OF SAN DIEGO

COMPLIANCE INSPECTION REPORT

PAGE 1 OF 2
EST. NO. H 37928
DATE 1/29/01
TIME START 10:00 END 11:45
BUS. CODE K18
SPECIALIST MCCULLOUGH
CONTACT TIM DANAHER
TITLE FACILITY SUPERVISOR
PHONE (619) 661-3489

Procs mgr 2/22/01 file

BUSINESS NAME HITACHI HOME ELECTRONICS
ADDRESS 1855 DORNOCH CT
CITY/ZIP SAN DIEGO 92154

On the above date, an inspection of your business/facility was conducted in order to determine compliance with the California Health and Safety Code (H&S) Chapters 6.5, 6.7, 6.95; Titles 19, 22 and 23 of the California Code of Regulations (CCR); and the San Diego County Code (SDCC). The following remarks are intended to provide guidance to correct the violations noted on the attached violation report.

Office Use Only

FEB 14 2001

ROUTINE INSPECTION

HEALTH PERMIT: on site and valid. Expires 11/30/01

TRAINING RECORDS: On site and reviewed. Training is well documented and held at least once a year.

OBSERVATION: There was no Contingency Plan or Business Plan available for review.
CORRECTIVE ACTION: Provide an Emergency Contingency Plan or Business Plan to HMD and keep a copy on site for review.

REMARKS: No manufacturing done here. Only Haz Waste observed at this time is approx 10 TV (cathode ray) tubes - last pick up 3/29/00. Haz. Waste Hauler changed to Safety Kleen for these CRT's.

x Megan Carrello — Signature of Business Representative
x 1/29/01 — Date Signed
x Legal Asst/Safety Coordinator — Title

Department of Environmental Health, Hazardous Materials Division, P.O. Box 129261, San Diego, CA 92112-9261; (619) 338-2222

DEH:HM-924 (Rev. 2/99) NCR

DISTRIBUTION: WHITE- RETURN TO HMD
YELLOW-BUSINESS RETAINS

County of San Diego
Department of Environmental Health

COUNTY OF SAN DIEGO

EST. NUMBER H 37928

COMPLIANCE INSPECTION REPORT

DATE 1 / 29 / 01

PAGE 2 OF 2

BUSINESS ADDRESS: 1855 DORNOCH CT

VIOLATION REPORT: The items checked below refer to specific section numbers of Titles 19/22/23 of the California Code of Regulations (CCR), Chapters 6.5, 6.7, 6.95 of the Health and Safety Code (HSC), and/or the San Diego County Code (SDCC).

I HAZARDOUS WASTE REQUIREMENTS:

RECORD KEEPING

- [ ] Health Permit not obtained SDCC 68.905 — V0108 W____
- [ ] No EPA Identification Number 66262.12 — V0105 W____
- [ ] Waste Manifests/Receipts not on-site for 3 years 66262.40 — V0118 W____
- [ ] Manifest not properly completed 66262.23 — V0120 W____
- [ ] Manifest copy not sent to DTSC 66262.23 — V0115 W____
- [ ] TSDF signed-manifest not on-site 66262.40 — V0121 W____
- [ ] Biennial report not sent to DTSC 66262.41 — V0122 W____
- [ ] LDR Documentation not available 66268.7 — V0123 W____
- [ ] Exception Rpt. not filed with DTSC 66262.42 — V0116 W____
- [ ] Operating TSDF without authorization 25201 — V0124 W____

STORAGE AND HANDLING

- [ ] Waste stored longer than 90, 180, or 270 days 66262.34 — V0221 W____
- [ ] Failure to clean up hazwaste off of floor surface 66262.10b — V0313 W____
- [ ] Waste container missing/improperly labeled 66262.34 — V0222 W____
- [ ] Haz Materials not properly labeled 25124 — V0223 W____
- [ ] Waste container not kept closed 66265.173 — V0202 W____
- [ ] Waste container in poor condition 66265.171 — V0205 W____
- [ ] Waste container(s) not properly managed 66265.173 — V0210 W____
- [ ] Damaged container not repackaged 66265.171 — V0226 W____
- [ ] Container incompatible with waste 66265.172 — V0207 W____
- [ ] Incompatibles in the same container 66265.177 — V0224 W____
- [ ] Incompatibles not stored separately 66265.177 — V0213 W____
- [ ] Ignitible Waste less than 50 feet 66265.176 — V0214 W____
- [ ] Ignitible Waste not grounded 66265.31 — V0215 W____
- [ ] Storage area not inspected weekly 66265.174 — V0216 W____

DISPOSAL AND TRANSPORTATION

- [ ] Unauth. disposal of waste to _____ 25189.5 — V0313 W____
- [ ] Waste determination not made 66262.11 — V0319 W____
- [ ] Unlawful transport of haz. waste 25163 — V0315 W____
- [ ] Waste transported without manifest 66262.20 — V0316 W____
- [ ] Extremely Haz Waste Permit not obtained 25205.7 — V0317 W____

TRAINING, CONTINGENCY PLAN & EMERGENCY PROCEDURES

- [ ] Training records unavailable 66265.16 — V0405 W____
- [ ] Training program not adequate 66265.16 — V0406 W____
- [ ] Facility not designed to minimize release 66265.31 — V0501 W____
- [ ] Spill control equip not available 66265.32 — V0508 W____
- [ ] Aisle space is obstructed 66265.35 — V0509 W____
- [X] Contingency plan not prepared and/or on file 66265.51, 66265.53 — V0609 W✓

MISCELLANEOUS

- [ ] Waste oil contaminated 25250.7 — V0225 W____
- [ ] Used oil filters improperly managed 66266.130 — V0701 W____
- [ ] Damaged batteries improperly managed 66266.81 — V0702 W____
- [ ] Facility has failed to notify local CUPA and DTSC of onsite treatment of hazardous waste (tiered permitting) — V0125 W____
- [ ] Onsite treatment of waste without authorization 25201 — V0125 W____

II UNDERGROUND STORAGE TANK (UST) REQUIREMENTS:

GENERAL UST REQUIREMENTS

- [ ] Health Permit not obtained 68.1005, 25284 — V3002 T____
- [ ] Repair/modify/close permit not obtained 68.1005 — V3007 T____
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- [ ] Operating permit conditions violated 2712 — V3011 T____
- [ ] Failed to notify HMMD of changes 25284 — V3012 T____
- [ ] No owner/operator agreement 25284 — V3005 T____
- [ ] No records of financial coverage 25292.2 — V3013 T____
- [ ] No maint/monit/calib records available 2712(b), 2641(j) — V3001 T____
- [ ] Monitoring Equip. not tested annually 2630, 2641 — V3003 T____

MONITORING REQUIREMENTS (SINGLE WALL)

- [ ] Leak Detection Method does not meet performance standards 2643 — V3014 T____
- [ ] Integrity test not conducted 25292 — V3015 T____
- [ ] Copy of tank test not submitted to HMMD within 30 days 2643 — V3016 T____
- [ ] Manual tank gauging (<2000 gal) 2645 not done properly — V3017 T____
- [ ] Reconciliation not done properly 2646 — V3018 T____
- [ ] Reconciliation not approved for facility 2646 — V3019 T____
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- [ ] No written emergency response plan 2641 — V3027 T____
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MONITORING REQUIREMENTS (DOUBLE WALL)

- [ ] Monitoring system not functional 2632 — V3026 T____
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RELEASE REPORTING

- [ ] Failure to report an unauthorized release 25295 — V3009 T____
- [ ] Release record log not available 2651, 2650 — V3030 T____
- [ ] No leak report/investigation/action 2652 — V3031 T____

CLOSURE

- [ ] Temporary closure req. not completed 2671 — V3006 T____
- [ ] Unused tank not properly closed 25298 — V3032 T____
- [ ] Permanent closure req. not completed 2672 — V3033 T____
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III HAZARDOUS MATERIALS BUSINESS PLAN REQUIREMENTS:

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- [ ] Health Permit not obtained SDCC 68.1105 — V2001 W____
- [X] Business Plan not established/implemented 25503.5 — V2002 W____
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- [ ] Business Plan not amended 25505 — V2003 W____
- [ ] Personnel Training Records not available 19 CCR 2732 — V2302 W____

RELEASE REPORTING

- [ ] Failure to report a release/threatened release 25507 — V2008 W____

BUSINESS PLAN ELEMENTS

- [ ] Emergency Response Plan inadequate 25504 — V2201 W____
- [ ] Emergency Contacts not provided/current 25509 — V2203 W____
- [ ] Personnel Training Program inadequate 25504 — V2301 W____
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- [ ] Acutely Haz. Mat. not registered 25533 — V2009 W____

ALL VIOLATIONS MUST BE CORRECTED. PLEASE CALL (619) 338-2222 OR YOUR INSPECTOR IF YOU HAVE ANY QUESTIONS.

Darrell Darrillo — 1/29/01 — Legal Asst. / Safety Coordinator

ESTABLISHMENT REPRESENTATIVE — DATE SIGNED — TITLE

Department of Environmental Health, Hazardous Materials Management Division, P.O. Box 129261, San Diego, CA 92112-9261

DISTRIBUTION: WHITE-RETURN TO HMMD
YELLOW-BUSINESS RETAINS

DEH:HM-923 (Rev. 1/98) NCR

New!

COUNTY OF SAN DIEGO

New Page 1 of 2

EST. NO. H 37982 H37978

DATE 8-28-98

TIME START 1015 END 1155

BUS. CODE K18

SPECIALIST MARSHA COOK

CONTACT TIM DANAHER

TITLE GENERAL MAINTENANCE & SAFETY

PHONE 661-3489.

COMPLIANCE INSPECTION REPORT

BUSINESS NAME HITACHI HOME ELECTRONICS

ADDRESS 1855 DORNOCH COURT

CITY/ZIP SAN DIEGO 92173

On the above date an inspection of your business/facility was conducted in order to determine compliance with the California Health and Safety Code (H&S) Chapters 6.5, 6.7, 6.95; Titles 19, 22 and 23 of the California Code of Regulations (CCR); and the San Diego County Code (SDCC). The following remarks are intended to provide guidance to correct the violations noted on the attached violation report.

Office Use Only

AUG 31 1998

STATUS VERIFICATION CONDUCTED 8-28-98.

*FACILITY IS AN OFFICE & WAREHOUSE COMPLEX WHICH SUPPORTS MANUFACTURING IN TIJUANA.

*OBSERVED CATHODE RAY TUBES ARE DISPOSED FROM THIS FACILITY ON HAZARDOUS WASTE MANIFESTS AS CA. WASTE CODE 181. MANIFESTS ON SITE WERE REVIEWED. NO TREATMENT STORAGE & DISPOSAL FACILITY MANIFESTS WERE AVAILABLE.

SIGNED REPRESENTATIVE IMMEDIATELY CONTACTED THE HAULER & REQUESTED A FACSIMILE OF THE SIGNED MANIFESTS.

*FACILITIES WHICH GENERATE HAZARDOUS WASTE MUST OBTAIN THE HEALTH PERMIT.

*FACILITY MUST ALSO PREPARE A HAZARDOUS MATERIALS BUSINESS PLAN & SUBMIT A COPY TO HMMD.

*FACILITY E.P.A. I.D. NUMBER IS CAL000 092 329.

TO COMPLY, COMPLETE THE QUESTIONNAIRE AND HAZARDOUS MATERIALS BUSINESS PLAN. KEEP A COPY ON-SITE & SUBMIT A COPY TO H.M.M.D. WITHIN 30 DAYS. PERMIT WILL BE PROVIDED AFTER BILLING & FEES ARE PAID. BILL WILL BE MAILED.

Tim Danaher 8-28-98 Gen Maint. & Safety

Signature of Business Representative | Date Signed | Title

Department of Environmental Health, Hazardous Materials Management Division, P.O. Box 129261, San Diego, CA, 92112-9261

(619) 338-2222

DEH:HM-924 (Rev. 2/98) NCR

DISTRIBUTION: WHITE-RETURN TO HMMD
YELLOW-BUSINESS RETAINS

County of San Diego
Department of Environmental Health

COUNTY OF SAN DIEGO

COMPLIANCE INSPECTION REPORT

EST. NUMBER H ~~37982~~ 37923 New New

DATE 8/28/98

PAGE 2 OF 2

BUSINESS ADDRESS: HITACHI HOME ELECTRONICS, 1855 DORNOCH, S.D. 92173

VIOLATION REPORT: The items checked below refer to specific section numbers of Titles 19/22/23 of the California Code of Regulations (CCR), Chapters 6.5, 6.7, 6.95 of the Health and Safety Code (HSC), and/or the San Diego County Code (SDCC).

I HAZARDOUS WASTE REQUIREMENTS:

RECORD KEEPING

- [X] Health Permit not obtained SDCC 68.905 — V0108 W
- [ ] No EPA Identification Number 66262.12 — V0105 W
- [ ] Waste Manifests/Receipts not on-site for 3 years 66262.40 — V0118 W
- [ ] Manifest not properly completed 66262.23 — V0120 W
- [ ] Manifest copy not sent to DTSC 66262.23 — V0115 W
- [ ] TSDF signed-manifest not on-site 66262.40 — V0121 W
- [ ] Biennial report not sent to DTSC 66262.41 — V0122 W
- [ ] LDR Documentation not available 66268.7 — V0123 W
- [ ] Exception Rpt. not filed with DTSC 66262.42 — V0116 W
- [ ] Operating TSDF without authorization 25201 — V0124 W

STORAGE AND HANDLING

- [ ] Waste stored longer than 90, 180, or 270 days 66262.34 — V0221 W
- [ ] Failure to clean up hazwaste off of floor surface 66262.10b — V0313 W
- [ ] Waste container missing/improperly labeled 66262.34 — V0222 W
- [ ] Haz Materials not properly labeled 25124 — V0223 W
- [ ] Waste container not kept closed 66265.173 — V0202 W
- [ ] Waste container in poor condition 66265.171 — V0205 W
- [ ] Waste container(s) not properly managed 66265.173 — V0210 W
- [ ] Damaged container not repackaged 66265.171 — V0226 W
- [ ] Container incompatible with waste 66265.172 — V0207 W
- [ ] Incompatibles in the same container 66265.177 — V0224 W
- [ ] Incompatibles not stored separately 66265.177 — V0213 W
- [ ] Ignitible Waste less than 50 feet 66265.176 — V0214 W
- [ ] Ignitible Waste not grounded 66265.31 — V0215 W
- [ ] Storage area not inspected weekly 66265.174 — V0216 W

DISPOSAL AND TRANSPORTATION

- [ ] Unauth. disposal of waste to _____ 25189.5 — V0313 W
- [ ] Waste determination not made 66262.11 — V0319 W
- [ ] Unlawful transport of haz. waste 25163 — V0315 W
- [ ] Waste transported without manifest 66262.20 — V0316 W
- [ ] Extremely Haz Waste Permit not obtained 25205.7 — V0317 W

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Tina M. Davis — 8-28-98 — Gen Maint. & Safety

ESTABLISHMENT REPRESENTATIVE — DATE SIGNED — TITLE

Department of Environmental Health, Hazardous Materials Management Division, P. O. Box ~~85261~~, San Diego, CA ~~92186-5261~~ 129261 92112-9261

DISTRIBUTION: WHITE-RETURN TO HMMD
YELLOW-BUSINESS RETAINS

DEH:HM-923 (Rev. 10/96) NCR

H 37928

S.V. & Inspection conducted 8/[illegible]/98 M. Cook

COUNTY OF SAN DIEGO
DEPARTMENT OF ENVIRONMENTAL HEALTH

FOR OFFICE USE ONLY

P. O. BOX 85261, SAN DIEGO, CA 92186-5261 PHONE: 619-338-2222

H

ESTAB NUMBER	CENSUS TR/INC CODE	BUS CODE	UNITS	ANNUAL FEE	EXPIR DATE (MO-DAY)
H 37982					
2	21	28	31	35	41

SIC-1	SIC-2	FIRE	WATER	SEWER	ZONING	MAP ON FILE	STATUS	ASSESSOR'S PARCEL NO.
	K 18							
45	49	53	55	57	59	61	62	64

PLEASE COMPLETE THE FOLLOWING SECTION

ESTABLISHMENT OWNER NAME: Hitachi Home Electronics

(AREA) OWNER PHONE: 619 - 661 3492

71 / 104

ESTABLISHMENT ADDRESS:
STREET NUMBER: 1955 | DIRECTION: | STREET NAME: Dornoch Court | BLDG/SUITE:

114 / 125 / 127 / 147

CITY: San Diego | STATE: CA | ZIP CODE: 92173 - | (AREA) BUSINESS PHONE: 619 - 661 3492

151 / 166 / 168 / 177

SECOND NAME OR NAME OF MANAGEMENT COMPANY:

187

MAILING ADDRESS (IF DIFFERENT FROM ESTABLISHMENT ADDRESS):
STREET NUMBER | DIRECTION | STREET NAME | BLDG/SUITE

217 / 228 / 230 / 250

CITY | STATE | ZIP CODE

254 / 269 / 271

ESTABLISHMENT NAME:

284

GAS STATION (YES = 1, OTHER = 2):

314

REASON FOR APPLICATION: 1 (1 - NEW, 2 - RE-OPEN, 3 - OWNER CHANGE)

315

NUMBER OF EMPLOYEES:

IF OTHER, LIST TYPE OF BUSINESS:

NAME OF PREVIOUS OWNER

316

DATE BUS ASSUMED

346

CONTACT PERSON: TIM DANAHER

352

98 MAR 16 PM 1:23

***** ALL APPLICANTS PLEASE COMPLETE APPROPRIATE SUPPLEMENTARY FORMS *****

I DECLARE UNDER PENALTY OF PERJURY THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF THE STATEMENTS MADE HEREIN ARE CORRECT AND TRUE. I HEREBY CONSENT TO ALL NECESSARY INSPECTIONS MADE PURSUANT TO LAW AND INCIDENTAL TO THE ISSUANCE OF THIS PERMIT AND THE OPERATION OF THIS BUSINESS.

SIGNATURE Steve Stewart DATE 9 March '98

MEDICAL WASTE SUMMARY

Complete the following information regarding the handling of hazardous wastes at your business or service based upon your answers to SECTION A. Check one statement.

☐ This business or facility does generate medical waste that requires a permit from the San Diego County Department of Environmental Health.

☒ I have determined that this business or service does not generate medical waste requiring permits from the San Diego County Department of Environmental Health?

I declare under penalty of perjury that to the best of my knowledge and belief the statements made herein are correct and true. I consent to all necessary inspections allowed by law and incidental to the issuance of required permit(s) and the operation of this business.

Signature Steve Stewart Title DIRECTOR

Date 9 March 1998 Phone 619-661-3492

Type of Business CONSUMER ELECTRONICS (TV & Projection TV Manufacturing)

Please complete the business information on the reverse of this page and return this questionnaire to the San Diego County Department of Environmental Health in the pre-addressed return envelope or mail using the following address.

DEPARTMENT OF ENVIRONMENTAL HEALTH
HAZARDOUS MATERIALS MANAGEMENT DIVISION
P. O. BOX 85261
SAN DIEGO, CA 92186-5261

If a San Diego County Medical Waste Management Permit is required for your business or service, a representative of this Department will conduct an inspection of your business or facility.

Request # _____

County of San Diego

DEPARTMENT OF ENVIRONMENTAL HEALTH
P.O. BOX 129261, SAN DIEGO, CA 92112-9261
(858) 505-6700 FAX (858) 505-6848
www.sdcdeh.org

PUBLIC RECORDS REQUEST FOR THE SITE ASSESSMENT AND MITIGATION (SAM) PROGRAM AND HAZARDOUS MATERIALS DIVISION (HMD)

Requestor Name: Aaron Alvarez **E-Mail:** aalvarez@hillmannconsulting.com

Phone: (714) 787-6629 **FAX:** ( )

Company Name: Hillmann Consulting, LLC

Mailing Address: 1745 W. Orangewood Ave, Suite 201, Orange, CA 92868

(You may attach a business card/overprint with business card if preferred)

Additional information may be accessed from the DEH website, www.sdcdeh.org. Fax or email your completed form to the Public Records Program at (858) 505-6848 or PublicRecords.DEH@sdcounty.ca.gov. The following information is required. Separate forms are needed for each address or parcel number.

_____ **or** 219-121-16-00

Exact Address (Street, City and Zip Code) Assessor Parcel Number

Optional information (establishment permit number, business name, etc.): _____

Please indicate the purpose of your search by checking all that apply:

- [X] Contaminated Property Investigation(s) (SAM Cases)
- [X] Monitoring Well Files
- [X] SAM Closure Letter/Report
- [X] Hazardous Materials Permit & Underground Storage Tank Files (HMD/UST)
- [ ] Other (specify):_____

OFFICE USE ONLY BELOW THIS LINE

Files reviewed by: _____ of _____ Date: _____

Files copied for: _____ of _____ Date: _____

Request cancelled by: _____ Date: _____

Photocopies _____ Cost _____ E-mailed / picked up / mailed on _____ By _____

A search for DEH records checked above has been conducted and the following apply:

- [ ] SAM files for the permit number(s) listed below are available.

#_____ #_____ #_____ #_____ #_____

- [ ] HMD/UST files for the permit number(s) listed below are available.

#_____ #_____ #_____ #_____ #_____

- [ ] LMWP files for the permit number(s) listed below are available.

#_____ #_____ #_____ #_____ #_____

- [ ] No SAM/HMD/UST records were found / purged for the address/APN you requested.

_____ _____

Signature - DEH Representative Date

DEH complies fully with the California Public Records Act and the Federal Freedom of Information Act. Please be advised that photocopy and/or scanned file fees may apply.

Request # _____

County of San Diego

DEPARTMENT OF ENVIRONMENTAL HEALTH
P.O. BOX 129261, SAN DIEGO, CA 92112-9261
(858) 505-6700 FAX (858) 505-6848
www.sdcdeh.org

PUBLIC RECORDS REQUEST FOR THE SITE ASSESSMENT AND MITIGATION (SAM) PROGRAM AND HAZARDOUS MATERIALS DIVISION (HMD)

Requestor Name: Aaron Alvarez **E-Mail:** aalvarez@hillmannconsulting.com

Phone: (714) 787-6629 **FAX:** ( )

Company Name: Hillmann Consulting, LLC

Mailing Address: 1745 W. Orangewood Ave, Suite 201, Orange, CA 92868

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_____ **or** 219-121-15-00

Exact Address (Street, City and Zip Code) Assessor Parcel Number

Optional information (establishment permit number, business name, etc.): _____

Please indicate the purpose of your search by checking all that apply:

- [X] Contaminated Property Investigation(s) (SAM Cases)
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_____ _____

Signature - DEH Representative Date

DEH complies fully with the California Public Records Act and the Federal Freedom of Information Act. Please be advised that photocopy and/or scanned file fees may apply.

Case Closure Summary
Leaking Underground Fuel Storage Tank Program

I. AGENCY INFORMATION

DATE: July 12, 2013

Agency Name: County of San Diego, Environmental Health, SAM	Address: P.O. Box 129261
City/State/Zip: San Diego, CA 92112-9261	Phone: (858) 505-6802
Responsible Staff Person: Tony V. Sawyer	Title: Hydrogeologist

II. CASE INFORMATION

Site Facility Name: San Marcos Gas		
Site Facility Address: 1290 West Mission Road, San Marcos, CA 92069		
RB LUSTIS Case No: N/A	Local Case No: H25233-001	LOP Case No: N/A
URF Filing Date: 4/15/03	SWEEPS No: N/A	

Responsible Parties	Address	Phone Number
Brad Napier	Las Posas Partners, 5505 Cancha De Golf, Rancho Santa Fe, CA 92091	
Albert and Samy Colucci	1255 East Vista Way, Vista, CA 92084	

Tank No.	Size in Gal.	Contents	Status	Date
N/A – piping upgrade only				

III. RELEASE AND SITE CHARACTERIZATION INFORMATION

Cause of Release: Leak at fitting	Substance Released: Gasoline	
Site Characterization complete? Yes	Date Approved By Oversight Agency: 1-20-12	
Monitoring Wells Installed? No	Number: 0	Proper Screened Interval? N/A
Highest GW Depth B.G. Surface: Unknown	Lowest Depth:Unknown	Flow Direction: Unknown

Most Sensitive Current Use: Existing Beneficial Groundwater Use: MUN, IND, AGR
Existing Beneficial Surface Water Use: AGR, REC1, REC2, WARM, WILD, and Potential MUN

Are Drinking Water Wells Affected? No	Aquifer Name: Richland HAS, Carlsbad Hydrologic Unit 904.52
Is Surface Water Affected? No	Nearest SW name: San Marcos Creek (intermittent, >5000 feet south of site)
Off-Site Beneficial Use Impacts (addresses/locations): None	
Report(s) on file? Yes	Where is Report(s) Filed? County of San Diego, Environmental Health

III. RELEASE AND SITE CHARACTERIZATION INFORMATION (Continued)

TREATMENT AND DISPOSAL OF AFFECTED MATERIAL

Material	Amount (Include Units)	Action (Treatment or Disposal)	Date
Soil (over-excavation)	Unknown	Disposed at landfill in San Diego, CA	3/17/03
Piping	250 feet	Disposed at landfill in San Diego, CA	3/17/03

Case Closure Summary
Leaking Underground Fuel Storage Tank Program

MAXIMUM DOCUMENTED CONTAMINANT CONCENTRATIONS	MAXIMUM	REMAINING
SOIL (mg/kg)		
Total Petroleum Hydrocarbons (Gasoline)	125	ND(<0.2)
Total Petroleum Hydrocarbons (Diesel)	24.9	24.9
Benzene	ND(<0.1)	ND(<0.001)
Ethylbenzene	0.5	0.005
Toluene	0.31	ND(<0.001)
Total Xylenes (o, p & x isomers)	3.5	0.026
Methyl-tert-butyl ether (MTBE)	0.47	0.009
Tert-butyl alcohol (TBA)	<0.25	0.067

Comments:
This case was opened following the discovery of a potential unauthorized release from the UST piping at the time of piping upgrade. Analysis of soil samples collected at the upgrade revealed TPH concentrations of up to 125 mg/kg in the soil. Minor over-excavation work was performed during the piping upgrade operation. A subsequent phase of site assessment found that the soil contamination was very limited in extent and the majority of it was removed by over-excavating in the piping trench area. Groundwater underlies the site at a depth of 20 or more feet.

Based upon the available information, DEH concurs with the consultant's conclusion that the minor amount of remaining soil contamination underlying this active gasoline station does not present a threat to public health and the environment and that it is appropriate to close this case.

IV. CLOSURE

Does completed corrective action protect existing beneficial uses per the Regional Board Basin Plan? Yes. Contaminant concentrations in the soil do not present a potential threat to groundwater.

Does completed corrective action protect potential beneficial uses per the Regional Board Basin Plan? Yes. Contaminant concentrations in the soil do not present a potential threat to groundwater.

Does corrective action protect public health for current land use? Yes
Case oversight completed based upon the following site use: Commercial – retail facility

Site Management Requirements:
Any Contaminated Soil Excavated As Part Of Subsurface Construction Work Must Be Managed In Accordance With The Legal Requirements At That Time.

Should corrective action be reviewed if land use changes? Yes

Monitoring Wells Decommissioned: N/A	Number Decommissioned: N/A	Number Retained: N/A

List Actions Taken: Notice Of Reimbursement/Local

List Enforcement Actions Rescinded: NONE

V. LOCAL AGENCY REPRESENTATIVE DATA

Name: Tony V. Sawyer, PG #4345, CHg #40	Title: Hydrogeologist
Signature: Tony V. Sawyer	Date: 7-12-13

VI. RWQCB NOTIFICATION

Date Submitted to RB: N/A – Soils Only Case	RB Response: N/A – Soils Only Case	
RWQCB Staff Name: N/A – Soils Only Case	Title: N/A – Soils Only Case	Date:

VII. ADDITIONAL COMMENTS, DATA, ETC.

This document and the related CASE CLOSURE LETTER, shall be retained by the lead agency as part of the official site file.

APPENDIX G

PROJECT PERSONNEL QUALIFICATIONS

HILLMANN
CONSULTING

Shilpa Sunil

Environmental
Project Manager

EDUCATION:

M.S. Environmental Engineering
University of California, Irvine

B.S. Environmental Engineering
University of Mysore (SJCE), Mysore, India

CERTIFICATIONS:

OSHA/ 10-hr Certification

CEQA Certification

YEARS OF EXPERIENCE:

With Hillmann: 1 years

Total: 9 years

PROFESSIONAL EXPERIENCE:

Ms. Sunil is an Environmental Professional with 9 years of experience in Environmental Engineering. Ms. Sunil is experienced in supporting several areas of Hillmann's practice including coordination of projects, project scope creation, investigatory projects, and corrective plan implementation.

As an Environmental Project Manager, Ms. Sunil has experience writing reports for site remediation for commercial property owners and preparing respective groundwater monitoring reports. She also writes Phase I and Phase II Environmental Site Assessments and Investigation reports as well as Supplemental Site Investigation Reports. She has experience working in a variety of buildings including multifamily residential properties, commercial office buildings, retail shopping centers, gasoline service stations, hotels, dry cleaning plants, auto repair shops, industrial buildings, aerospace manufacturers, plating facilities, and various manufacturing operations.

Representative experience includes:

Environmental Engineer, John L. Hunter and Associates, Inc: From 2015 to 2017, Ms. Sunil worked as an Environmental Engineer for John L. Hunter and Associates. Her responsibilities included reviewing Water Quality Management Plans, grading & drainage plans and conducting site verification inspections. She reviewed Standard Urban Storm Water Mitigation Plans; utilized SWRCB SMARTS database, assisted in Industrial Waste Plan review. She performed detailed review of grading plans, design specifications, hydro modifications analysis, and Storm Water Best Management Practice (BMP) calculations. She assisted with annual report preparation as part of NPDES permit requirements. Additionally, Ms. Sunil was responsible for reviewing work of private Professional Engineers for compliance with City standards and she assisted in determining engineering requirements for new developments.

Engineering Tech II, Orange County Public Works- OC Engineering: From July 2013 to December 2014, Ms. Sunil worked as an Engineer for Orange County Public Works. In this position, she reviewed permits requests, provided support of capital improvement and maintenance projects, and integrated environmental values into capital improvement projects by verifying the implementation of the federal National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA).

Staff Aid II, Orange County Public Works- OC Road, Capital Projects: From July 2012- July 2013, Ms. Sunil served as a Staff Aid for Orange County. In this position, she was responsible for the preparation of Water Quality Management Plans and Micro Station Drafting. She provided detailed review of grading plans, design specifications, hydro modification analysis, and Storm Water Best Management Practice Calculations. She assisted with annual report preparation as part of NPDES permit requirements.

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Staff Aid II, Orange County Road, Traffic Engineering: From March 2010 to July 2012, Ms. Sunil was a Staff Aid for the Orange County Road and Traffic Engineering team. She performed traffic investigation, assisted the traffic committee and aided in work order preparation. She analyzed traffic flows, parking issues, and intersection capacities. Ms. Sunil provided written and verbal responses to residents of unincorporated Orange County.

Assistant Engineer, RBF Consulting, Irvine, CA: From August 2007 to January 2010, Ms. Sunil was an Assistant Engineer at RBF Consulting where she conducted comprehensive evaluations of watersheds including National Pollution Discharge Elimination Systems (NPDES) compliance, incorporated BMPs, assisted public and private sector clients with NPDES compliance services, and prepared and reviewed Storm Water Pollution Prevention Plans and Water Quality Management Plans.

HILLMANN
CONSULTING

J. Ryan Terwilliger

Operational Manager, West Coast

EDUCATION:

B.S. Environmental Science, University of Southern California, Los Angeles, CA

CERTIFICATION:

Cal-OSHA Certified Asbestos Consultant
CDPH Accredited Lead Inspector/Assessor/ Project Monitor

CA Certified Site Surveillance Technician

OSHA 40 - Hr HAZWOPER

YEARS OF EXPERIENCE:

With Hillmann: 4 years

Total: 8 years

PROFESSIONAL EXPERIENCE:

Mr. Terwilliger is responsible for business operations, fiscal management and field staff management for Hillmann's California Office. He also performs asbestos surveys and investigations to identify asbestos and lead materials associated with occupational hazards. He supervises work practices and controls in accordance with job specifications, current EPA, OSHA and State Regulations for Asbestos remediation projects in commercial, industrial and multi-family residential buildings. Mr. Terwilliger performs IAQ, mold and moisture investigations in commercial, industrial and residential facilities nationwide. He also performs awareness training for asbestos, lead and microbial agents. Mr. Terwilliger provides litigation support consultation.

Representative Experience Includes:

Tishman Speyer Properties, Various locations: Hillmann has provided the complete environmental program for Tishman Speyer's properties since 1987. Our services include environmental health and safety, industrial hygiene, phase I environmental site assessments, asbestos surveys, air monitoring, bid administration, O&M programs and indoor air quality programs on various commercial, industrial and multi-family residential properties. Mr. Terwilliger is an Environmental Scientist on this contract, conducting on-site environmental services including phase I site assessments and NPDES water quality testing.

Westfield – Environmental Program, Various locations: Since 2000, Hillmann has been providing an environmental program encompassing environmental health and safety, Phase I environmental site assessments, asbestos and lead surveys, air monitoring, bid administration and O&M programs, industrial hygiene and indoor air quality programs, and hazardous materials assessments on their mall properties throughout the county. Mr. Terwilliger is an Environmental Scientist on this contract performing industrial hygiene services that include indoor air quality monitoring, Phase I environmental site assessments, asbestos and lead surveys.

Brookfield Office Properties, Various sites, CA: Hillmann has been providing hazardous materials surveys, development abatement specifications, and managing the oversight activities during the abatement at various Brookfield owned sites throughout California. Mr. Terwilliger functions as a Project Manager for this contract.

California Department of Transportation, Central Valley and Northern CA: Hillmann has been performing asbestos and Lead-based Paint Surveys for the California Department of Transportation. Performed comprehensive asbestos containing materials and lead-based paint surveys of residential and commercial buildings that were slated for demolition and generated report of findings in order to aid the Department of Transportation (DOT) in facilitating the road improvement programs and building renovations throughout the

HILLMANN CONSULTING

Central Valley area. Also during the abatement of asbestos from DOT owned buildings, provided contractor oversight and air monitoring services for regulatory compliance.

Verizon, Various Sites, CA. Hillmann conducted hazardous materials surveys, development abatement specifications, and project monitoring during abatement at various Verizon owned sites throughout California. Mr. Terwilliger functioned as the Project Manager.

Public Storage, Los Angeles, CA: Hillman preformed comprehensive asbestos, lead-based paint and universal waste materials survey of commercial and industrial buildings throughout Southern California. Hazardous materials surveys were conducted prior to renovation for the storage units. Mr. Terwilliger developed abatement specifications and managed the abatement activities during the renovations of the buildings. He functioned as the Project Manager on this contract.

Appendix G
Drainage Study

PRELIMINARY DRAINAGE STUDY
For
GRAN VISTA

Preparation/Revision Date:

August 25, 2021/ February 17,2022

APN: 219-121-1500
219-121-1600

W.O. 3087-0007

Prepared for:
WPI-Las Posas/Mission, LLC
Contact: Andrew Sun
18300 Von Karman Ave., Suite 880
San Diego, CA. 92612
Telephone:
(949) 943-8550 x850

Prepared by:
Alisa S. Vialpando, RCE #47945
Hunsaker & Associates San Diego, Inc.
9707 Waples Street
San Diego, CA 92121
Telephone: (858) 558-4500

Hunsaker & Associates
San Diego, Inc.



Alisa S. Vialpando, R.C.E. #47945
President

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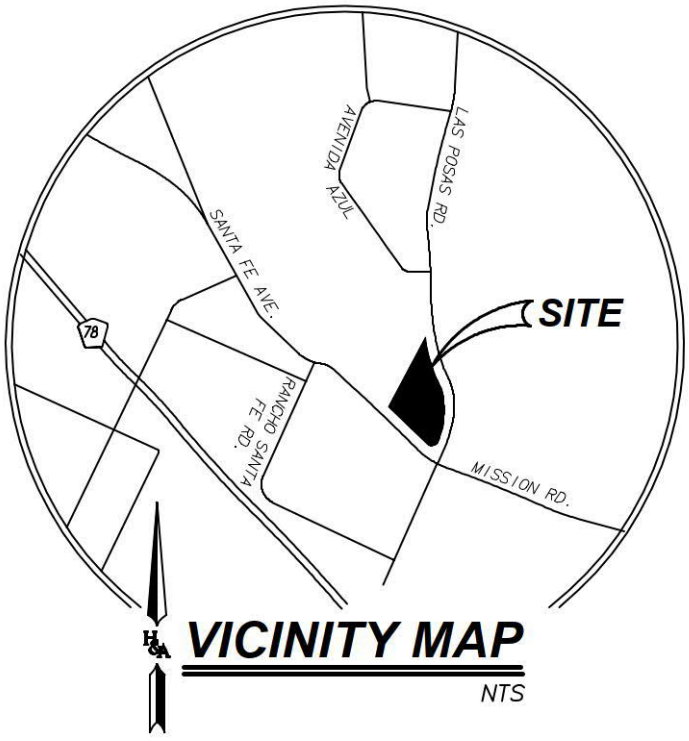
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CHAPTER 1 EXECUTIVE SUMMARY

1.1 Introduction

Gran Vista project is located at the northwest intersection of North Las Posas Road and West Mission Road in the City of San Marcos, California (See the Vicinity Map below). The *Gran Vista* proposes 120 three story, townhome units (Occupancy: R3 Townhome/U; Construction Type V-B) with a maximum permitted density of 15.7 units per acre. The site will also include common recreational spaces, underground vaults, sidewalks, access road and private driveways.

The project is bound by a drainage channel and single-family neighborhoods to the north and west, North Las Posas Road to the east, and West Mission Road and a commercial parcel to the south. The commercial parcel has been developed with a single-story CVS building and associated pharmacy drive through and surface parking. *The project* and the CVS parcel share two common access points: (1) a driveway at the signalized intersection of North Las Posas Road and Palm Road and (2) a driveway on West Mission Road that allow left-in and right-in/right-out traffic movements. Both driveways have been improved with enhanced paving and landscaping.



This drainage report will quantify the proposed runoff for the 100-year frequency storm event and provide calculations demonstrating that the post-developed flows will not exceed the capacity of the existing downstream drainage facilities. Proposed facilities include storm drain, curb inlets, catch basins, water quality/ flow control (hydromodification) and detention underground vaults. The proposed two Vaults for

Gran Vista project will not only act as peak flow attenuation but also address water quality and hydromodification concerns. A separate report has been prepared which details the proposed treatment and flow control features for the *Gran Vista* project. Refer to the *Stormwater Quality Management Plan (SWQMP) for Gran Vista* prepared by Hunsaker & Associates San Diego, Inc. (August 2021).

Per FEMA Map Panel 06073C0789H effective date 05/16/2012, the project site is mostly located outside any FEMA 100-year floodplain zone. However, a small portion of slope grading, an underground vault and connecting to an existing storm drain southwest of the site are proposed within Zone X, which is defined as areas determined to be outside the 0.2% annual chance floodplain. In addition, a very minimal slope grading is proposed southwest of the site, along the northeast edge of Mission Rd, within Zone AE which is defined as areas that have a 1% probability of flooding every year. The Base flood elevation along the northern edge of Mission Rd (which is approximately at 565.63 ft per the Las Posas LOMR 12-09-1988P eff 2013), is actually not reaching to the top of the regraded slope 570 ft. The minimal slope grading and filling won't have any impact on the WSE. the LOMR or CLOMR will be required for the project. However, a HEC-RAS Hydraulic analysis is provided for the portion where filling is proposed within Zone AE to compare between the Base Flood Elevation in the existing and proposed conditions (for the small portion south of the site along the Mission Road edge. Please see Chapter 6 for the HEC-RAS analysis and results.

Sections 401 and 404 of the Clean Water Act are not applicable to the site since the property does not have waters of the U.S. onsite and since the project does not intend to discharge dredged or filled material into waters of the United States.

As mentioned above, water quality study has separately been prepared for this site to address potential stormwater pollutants, site design, and proposed structural BMPs for water quality and hydromodification compliance. Refer to the *Stormwater Quality Management Plan (SWQMP) for Gran Vista* prepared by Hunsaker & Associates San Diego, Inc. (August 2021).

Per County of San Diego drainage criteria, the Modified Rational Method can be used to determine peak design flowrates when the contributing drainage area is less than 1.0 square mile. Since the total watershed area discharging from the site is less than 1.0 square mile, the AES-2015 computer software was used to model the runoff response per the Modified Rational Method. Methodology used for the computation of design rainfall events, runoff coefficients, and rainfall intensity values are consistent with criteria set forth in the "County of San Diego 2003 Hydrology Manual." A more detailed explanation of methodology used for this analysis is listed in Chapter 2 of this report

1.2 Summary of Existing Conditions

In existing condition, the 7.6-ac Gran Vista project site consists of two-mass graded pads. The pad located in the northerly portion of the planning is elevated above North Las Posas Road and is higher than the remaining portion of the planning area. The

lower pad, located in the southerly portion of the site, is elevated above West Mission Road. Vegetation on the site is limited to grasses and small shrubs. A few trees are located along the periphery of the site, adjacent to the channel and North Las Posas Road.

The runoff from the project site, in its existing conditions, flows from the north and the east to the southwest corner where it is routed via an existing 12" CMP riser to a 12" existing corrugated metal pipe. After comingling with the total flow from the commercial parcel south of the project, total flow is conveyed to the storm channel west via 12" pipe. The storm channel ultimately discharges into Posas Creek south. Per the Hydrology & Hydraulic Study for CVS Pharmacy prepared by Excel Engineering and dated February 9, 2009, the 100 year peak flow from the 8.474 acres is 6.75 cfs.

However, the site in its pre-development conditions consists approximately of 8.68 acres of watershed area with a total flow of 11.09 cfs at the discharge point into the storm channel west of the site (i.e. 12" storm drain). Please refer to the Hydrology & Hydraulic Study for CVS Pharmacy prepared by Excel Engineering and dated February 9, 2009 in Chapter 3

TABLE 1 - Summary of Pre-development Q100

Attachment*	Node Number on Exhibit	Discharge Location	Drainage Area (ac)	Tc (min)	100-Year Peak Flow (cfs)
H Pre-development	3	southwest corner	8.681	19	11.09

* Per the Hydrology & Hydraulic Study for CVS Pharmacy prepared by Excel Engineering and dated February 9, 2009

P6 = 3.3 inch
Runoff factor C = 0.35 (assuming Soil Type D for the entire site)

1.3 Summary of Developed Conditions

The post-developed condition of the site will consist of 120 three story, townhome units (Occupancy: R3 Townhome/U; Construction Type V-B) with a maximum permitted density of 15.7 units per acre, streets and associated utilities including a storm drain system necessary to convey site runoff through the project area. In addition, two underground vaults located southwest and southeast of the site will be constructed for hydromodification, and peak flow detention purposes. The vaults will be used as upstream storage units to store the 1.5 DCV and release in an appropriate flow rate to the volume based modular wetland units downstream of the vaults to address water quality requirements. One flow based modular wetland was proposed south of the site to replace the sand filter and address the water quality requirement for the Existing Drive. For additional discussion and sizing calculations for the treatment unit, please

reference the *Stormwater Quality Management Plan (SWQMP) for Gran Vista* prepared by Hunsaker & Associates San Diego, Inc. (August 2021).

The stormwater runoff will be collected by inlets, and routed towards the vaults. The vaults will come with an internal riser which will have a low orifice that has been sized to drawdown the water quality volume (1.5 DCV) in 36 hrs, and an internal weir to separate the water quality flows form the rest of the HMP and peak flows.
The rest of the riser's orifices have been sized to moderate discharge flows to comply with flow-control (HMP) requirements and at the same time allow peak flows to exit the vault in a rate that doesn't exceed the capacity of the existing downstream drainage facilities.

Runoff coefficients of 0.71 has been used based on High Density Residential Land use of 24.0 DU\A or less (the site's maximum permitted density is 15.7 units per acre), and soil type D was assumed for the entire site for simplicity and being more conservative.

Per the County of San Diego rainfall isopluvial maps, the design 100-year rainfall depth for the project site is 3.3 inch.

The Proposed Condition Hydrology Map (Exhibit 1) in Chapter 7 shows the developed site with its subareas to each inlet, or catch basin location. Table-2 below summarizes the Q100 Unmitigated flow at the POC.

TABLE 2 - Summary of Unmitigated Developed Flows

Exhibit	Node Number on Exhibit	Discharge Location	Drainage Area (ac)	Tc (min)	100-Year Peak Flow (cfs)
1	108	Vault 2 east	4.0	10.86	15.12
1	204	Vault 1 West	1.9	9.07	8.07
1	1	Discharge into storm channel at southwest corner of the site	8.3	11.65	24.58

Due to the increased flow associated with the development of *Gran Vista*, peak flow attenuation will be achieved by the proposed vaults. The risers within the vaults will be sized and include orifices along their height necessary to achieve outlet flow less than the pre-development flow shown on Table 1 above. The resultant discharge at Node 1 will continue downstream and confluence with Posas Creek and then to Lake San Marcos. Since this project is subject to comply with hydromodification requirements, the

design of all vaults have been coordinated with those calculations which are part of the *SWQMP for Gran Vista*.

.

Table-3 below summarizes the Q100 Mitigated flow at Node 1.

TABLE 3 - Summary of Mitigated Developed Flows

Exhibit	Node Number on Exhibit	Discharge Location	Drainage Area (ac)	Tc (min)	100-Year Peak Flow (cfs)
1	108	Vault 2 east	4.0	18.6	6.68
1	204	Vault 1 West	1.9	17.07	2.94
1	1	Discharge into storm channel at southwest corner of the site	8.3	19.83	11.18

1.4 Summary of Results

Conveyance of the Q100 runoff flows through the Gran Vista site required storm drain system to route flows to the underground storage vaults and MWS units to address water quality, hydromodification and peak flow attenuation. The 12”pipe at the discharge location will be replaced with a 24” pipe 9see chapter 6 for the capacity calculations for the proposed 24’ pipe at the discharge location).

Design for the storm drain system and hydraulic calculations will be conducted as part of the final engineering drainage study.

Two permanent detention underground vaults were included in the design of the site for hydromodification, peak flow attenuation, and to provide the required storage for the water quality design captured volume. The two vaults and two Modular Wetland units address the water quality requirements. Per the hydrologic and detention analysis conducted as part of this study, the detention analysis for all vaults is included in Chapter 5 of this report. The table below summarizes the flow reductions at the discharge location.

The flow from the site is attenuated to make sure that the post-developed flows will not exceed the capacity of the existing downstream drainage facilities (post development flows compared to the pre-development flows at the point of compliance southeast corner of the project (POC-1/ Node 1). See table 4 below

TABLE 4 – Pre-development Condition vs. Post-development Condition

Discharge Location	Pre-development Condition Area (ac)	Post-development Condition Area (ac)	Pre-development: 100-Year Peak Flow (cfs)	Post-development: 100-Year Peak Flow (cfs)	Q100 Flow Difference (cfs)
southeast corner	8.681	8.3	11.09	11.18	0.09

Conclusion

The proposed development of *Gran Vista* can be roughly graded and improved with storm drain to accommodate the ultimate expected flows from development. In addition, with the proposed drainage facilities such as curb inlets, storm drain, water quality, flow control and detention vaults, runoff can be mitigated to accepted San Diego County standards.

The proposed project will not substantially alter the existing drainage pattern of the site. There will be a slight increase in the peak discharge from the site. The increase is negligible, at 0.8%, and will not impact downstream properties or drainage facilities.

1.5 References

San Diego County Hydrology Manual, County of San Diego Department of Public Works Flood Control Division, June 2003.

San Diego County Hydraulic Design Manual, County of San Diego Department of Public Works Flood Control Division, September 2014

San Diego County Drainage Design Manual, County of San Diego Department of Public Works Flood Control Division, July 2005

County of San Diego San Diego SUSMP, County of San Diego, January 2011

Standard Drawings, City of San Diego, 2012.

Erosion and Sediment Control Handbook, Goldman, Jackson, Bursztynsky, 1986

Stormwater Quality Management Plan for Gran Vista, Hunsaker & Associates San Diego, Inc., August 2021.

CHAPTER 2
METHODOLOGY

2-1 Modified Rational Method Hydrologic Analysis

Computer Software Package – AES-2015

Design Storm - 100- year return interval

Land Use – High Density Residential

Soil Type – Per the NRCS Web Soil Survey, the site soil consists of Hydrologic soil group C and D. For simplicity and to be more conservative, Group D was assumed for the entire Site. Group D soils have very slow infiltration rates when thoroughly wetted. Consisting chiefly of clay soils with a high swelling potential, soils with a high permanent water table, soils with clay pan or clay layer at or near the surface, and shallow soils over nearly impervious materials, Group D soils have a very slow rate of water transmission.

Runoff Coefficient - In accordance with the County of San Diego standards, runoff coefficients were based on land use, and Soil Type per San Diego County Hydrology Manual.
For proposed conditions, Runoff coefficients of 0.71 has been used based on High Density Residential Land use of 24.0 DU\A or less (the site's maximum permitted density is 15.7 units per acre)

Rainfall Intensity- The rainfall intensity is determined per the San Diego County Hydrology Manual based on 6-hour precipitation amounts and calculated time of concentrations. Six-hour precipitations are taken from the San Diego County Hydrology Manual isopluvials. P6=3.3 inch

Method of Analysis – The Rational Method is the most widely used hydrologic model for estimating peak runoff rates. Applied to small urban and semi-urban areas with drainage areas less than 1.0 square miles, the Rational Method relates storm rainfall intensity, a runoff coefficient, and drainage area to peak runoff rate. This relationship is expressed by the equation:

Q = CIA, where:

- Q = The peak runoff rate in cubic feet per second at the point of analysis.
- C = A runoff coefficient representing the area - averaged ratio of runoff to rainfall intensity.
- I = The time-averaged rainfall intensity in inches per hour corresponding to the time of concentration.
- A = The drainage basin area in acres.

To perform a node-link study, the total watershed area is divided into subareas which discharge at designated nodes.

The procedure for the subarea summation model is as follows:

(1) Subdivide the watershed into subareas with the initial subarea being less than 10 acres in size (generally 1 lot will do), and subsequent subareas gradually increasing in size. Assign upstream and downstream nodal numbers to each subarea to correlate calculations to the watershed map.

(2) Estimate an initial T_c by using the appropriate nomograph or overland flow velocity estimation.

(3) Using the initial T_c, determine the corresponding values of I. Then Q = CIA.

(4) Using Q, estimate the travel time between this node and the next by Manning's equation as applied to the particular channel or conduit linking the two nodes. Then, repeat the calculation for Q based on the revised intensity (which is a function of the revised time of concentration)

The nodes are joined together by links, which may be street gutter flows, drainage swales, drainage ditches, pipe flow, or various channel flows. The AES-2003 computer subarea menu is as follows:

SUBAREA HYDROLOGIC PROCESS

1. Confluence analysis at node.
2. Initial subarea analysis (including time of concentration calculation).
3. Pipeflow travel time (computer estimated).
4. Pipeflow travel time (user specified).
5. Trapezoidal channel travel time.
6. Street flow analysis through subarea.
7. User - specified information at node.
8. Addition of subarea runoff to main line.
9. V-gutter flow through area.
10. Copy main stream data to memory bank
11. Confluence main stream data with a memory bank
12. Clear a memory bank

At the confluence point of two or more basins, the following procedure is used to combine peak flow rates to account for differences in the basin's times of concentration. This adjustment is based on the assumption that each basin's hydrographs are triangular in shape.

(1). If the collection streams have the same times of concentration, then the Q values are directly summed,

$Q_p = Q_a + Q_b$; $T_p = T_a = T_b$

(2). If the collection streams have different times of concentration, the smaller of the tributary Q values may be adjusted as follows:

(i). The most frequent case is where the collection stream with the longer time of concentration has the larger Q. The smaller Q value is adjusted by the ratio of rainfall intensities.

$Q_p = Q_a + Q_b \ (I_a/I_b)$; $T_p = T_a$

(ii). In some cases, the collection stream with the shorter time of concentration has the larger Q. Then the smaller Q is adjusted by a ratio of the T values.

$Q_p = Q_b + Q_a \ (T_b/T_a)$; $T_p = T_b$

Underground storm drains are analyzed in a similar way. Flow data obtained from the surface model for inlets and collection points are input into the nodes representing those structures. Design grades and lengths are used to compute the capacity of the storm drains and to model the downstream travel times.

2-3 Hydraulic Model Analysis

In order to provide adequate flood control, increases in peak flow rates at the outfall location for this site were mitigated using the proposed Vaults.

The hydrology calculations discussed above provide peak flowrates for the vaults' inflow, which are entered into a separate program called RickRatHydro. The RickratHydro was used to produce an inflow hydrograph for the project drainage areas to each vault, based on the area, time of concentration, P6 value, runoff coefficient, and peak flow rate.

Mitigation within the each vault was modeled using SWMM 5.1. The Hydrograph that was generated from RickRatHydro was used as an input data for the inflows to the storage unit in the SWMM model. The riser was modeled using stage discharge table (Rating Curve in SWMM), and the volume was modeled using the storage stage table 9Storage Curve). The initial depth within the vaults was set at the depth that is associated with the water quality volume.

To approve that regarding the slope within the floodway will not have any impact on the WSE and will not change the BFE, HEC-RAS analysis was provided for the existing conditions and proposed conditions. For the existing conditions, the HEC-RAS analysis for the cross sections 1200 and 1100 per the Las Posas LOMR 12-09-1988P eff 2013 was used. The said results were compared to the output from the HEC-RAS analysis for the cross sections at the same locations in the proposed conditions

San Diego County Hydrology Parameters

2.3 Selection of Hydrologic Method and Design Criteria

Design Frequency – The flood frequency for determining the design storm discharge is 50 years for drainage that is upstream of any major roadway and 100 years frequency for all design storms at a major roadway, crossing the major roadway and thereafter. The 50-year storm flows shall be contained within the pipe and not encroach into the travel lane. For the 100-year storm this includes allowing one lane of a four-lane road (four or more lanes) to be used for conveyance without encroaching onto private property outside the dedicated street right-of-way. Natural channels that remain natural within private property are excluded from the right-of-way guideline.

Design Method – The choice of method to determine flows (discharge) shall be based on the size of the watershed area. For an area 0 to approximately 1 square mile the Rational Method or the Modified Rational Method shall be used. For watershed areas larger than 1 square mile the NRCS hydrologic method shall be used. Please check with the governing agency for any variations to these guidelines.

SECTION 3
RATIONAL METHOD AND MODIFIED RATIONAL METHOD

3.1 THE RATIONAL METHOD

The Rational Method (RM) is a mathematical formula used to determine the maximum runoff rate from a given rainfall. It has particular application in urban storm drainage, where it is used to estimate peak runoff rates from small urban and rural watersheds for the design of storm drains and small drainage structures. The RM is recommended for analyzing the runoff response from drainage areas up to approximately 1 square mile in size. It should not be used in instances where there is a junction of independent drainage systems or for drainage areas greater than approximately 1 square mile in size. In these instances, the Modified Rational Method (MRM) should be used for junctions of independent drainage systems in watersheds up to approximately 1 square mile in size (see Section 3.4); or the NRCS Hydrologic Method should be used for watersheds greater than approximately 1 square mile in size (see Section 4).

The RM can be applied using any design storm frequency (e.g., 100-year, 50-year, 10-year, etc.). The local agency determines the design storm frequency that must be used based on the type of project and specific local requirements. A discussion of design storm frequency is provided in Section 2.3 of this manual. A procedure has been developed that converts the 6-hour and 24-hour precipitation isopluvial map data to an Intensity-Duration curve that can be used for the rainfall intensity in the RM formula as shown in Figure 3-1. The RM is applicable to a 6-hour storm duration because the procedure uses Intensity-Duration Design Charts that are based on a 6-hour storm duration.

3.1.1 Rational Method Formula

The RM formula estimates the peak rate of runoff at any location in a watershed as a function of the drainage area (A), runoff coefficient (C), and rainfall intensity (I) for a duration equal to the time of concentration (T_c), which is the time required for water to

flow from the most remote point of the basin to the location being analyzed. The RM formula is expressed as follows:

$$Q = CIA$$

Where: Q = peak discharge, in cubic feet per second (cfs)

C = runoff coefficient, proportion of the rainfall that runs off the surface (no units)

I = average rainfall intensity for a duration equal to the T_c for the area, in inches per hour (Note: If the computed T_c is less than 5 minutes, use 5 minutes for computing the peak discharge, Q)

A = drainage area contributing to the design location, in acres

Combining the units for the expression CIA yields:

$$\left(\frac{1\,\text{acre}\times\text{inch}}{\text{hour}}\right)\left(\frac{43{,}560\,\text{ft}^2}{\text{acre}}\right)\left(\frac{1\,\text{foot}}{12\,\text{inches}}\right)\left(\frac{1\,\text{hour}}{3{,}600\,\text{seconds}}\right) \Rightarrow 1.008\,\text{cfs}$$

For practical purposes the unit conversion coefficient difference of 0.8% can be ignored.

The RM formula is based on the assumption that for constant rainfall intensity, the peak discharge rate at a point will occur when the raindrop that falls at the most upstream point in the tributary drainage basin arrives at the point of interest.

Unlike the MRM (discussed in Section 3.4) or the NRCS hydrologic method (discussed in Section 4), the RM does not create hydrographs and therefore does not add separate subarea hydrographs at collection points. Instead, the RM develops peak discharges in the main line by increasing the T_c as flow travels downstream.

Characteristics of, or assumptions inherent to, the RM are listed below:

- The discharge flow rate resulting from any I is maximum when the I lasts as long as or longer than the T_c.

- The storm frequency of peak discharges is the same as that of I for the given T_c.

- The fraction of rainfall that becomes runoff (or the runoff coefficient, C) is independent of I or precipitation zone number (PZN) condition (PZN Condition is discussed in Section 4.1.2.4).

- The peak rate of runoff is the only information produced by using the RM.

3.1.2 Runoff Coefficient

Table 3-1 lists the estimated runoff coefficients for urban areas. The concepts related to the runoff coefficient were evaluated in a report entitled *Evaluation, Rational Method "C" Values* (Hill, 2002) that was reviewed by the Hydrology Manual Committee. The Report is available at San Diego County Department of Public Works, Flood Control Section and on the San Diego County Department of Public Works web page.

The runoff coefficients are based on land use and soil type. Soil type can be determined from the soil type map provided in Appendix A. An appropriate runoff coefficient (C) for each type of land use in the subarea should be selected from this table and multiplied by the percentage of the total area (A) included in that class. The sum of the products for all land uses is the weighted runoff coefficient (Σ[CA]). Good engineering judgment should be used when applying the values presented in Table 3-1, as adjustments to these values may be appropriate based on site-specific characteristics. In any event, the impervious percentage (% Impervious) as given in the table, for any area, shall govern the selected value for C. The runoff coefficient can also be calculated for an area based on soil type and impervious percentage using the following formula:

$$C = 0.90 \times (\% \text{ Impervious}) + C_p \times (1 - \% \text{ Impervious})$$

Where: C_p = Pervious Coefficient Runoff Value for the soil type (shown in Table 3-1 as Undisturbed Natural Terrain/Permanent Open Space, 0% Impervious). Soil type can be determined from the soil type map provided in Appendix A.

The values in Table 3-1 are typical for most urban areas. However, if the basin contains rural or agricultural land use, parks, golf courses, or other types of nonurban land use that are expected to be permanent, the appropriate value should be selected based upon the soil and cover and approved by the local agency.

3.1.3 Rainfall Intensity

The rainfall intensity (I) is the rainfall in inches per hour (in/hr) for a duration equal to the T_c for a selected storm frequency. Once a particular storm frequency has been selected for design and a T_c calculated for the drainage area, the rainfall intensity can be determined from the Intensity-Duration Design Chart (Figure 3-1). The 6-hour storm rainfall amount (P_6) and the 24-hour storm rainfall amount (P_{24}) for the selected storm frequency are also needed for calculation of I. P_6 and P_{24} can be read from the isopluvial maps provided in Appendix B. An Intensity-Duration Design Chart applicable to all areas within San Diego County is provided as Figure 3-1. Figure 3-2 provides an example of use of the Intensity-Duration Design Chart. Intensity can also be calculated using the following equation:

$$I = 7.44\, P_6\, D^{-0.645}$$

Where: P_6 = adjusted 6-hour storm rainfall amount (see discussion below)
D = duration in minutes (use T_c)

Note: This equation applies only to the 6-hour storm rainfall amount (i.e., P_6 cannot be changed to P_{24} to calculate a 24-hour intensity using this equation).

The Intensity-Duration Design Chart and the equation are for the 6-hour storm rainfall amount. In general, P_6 for the selected frequency should be between 45% and 65% of P_{24} for the selected frequency. If P_6 is not within 45% to 65% of P_{24}, P_6 should be increased or decreased as necessary to meet this criteria. The isopluvial lines are based on precipitation gauge data. At the time that the isopluvial lines were created, the majority of precipitation gauges in San Diego County were read daily, and these readings yielded 24-hour precipitation data. Some 6-hour data were available from the few recording gauges distributed throughout the County at that time; however, some 6-hour data were extrapolated. Therefore, the 24-hour precipitation data for San Diego County are considered to be more reliable.

3.1.4 Time of Concentration

The Time of Concentration (T_c) is the time required for runoff to flow from the most remote part of the drainage area to the point of interest. The T_c is composed of two components: initial time of concentration (T_i) and travel time (T_t). Methods of computation for T_i and T_t are discussed below. The T_i is the time required for runoff to travel across the surface of the most remote subarea in the study, or "initial subarea." Guidelines for designating the initial subarea are provided within the discussion of computation of T_i. The T_t is the time required for the runoff to flow in a watercourse (e.g., swale, channel, gutter, pipe) or series of watercourses from the initial subarea to the point of interest. For the RM, the T_c at any point within the drainage area is given by:

$$T_c = T_i + T_t$$

Methods of calculation differ for natural watersheds (nonurbanized) and for urban drainage systems. When analyzing storm drain systems, the designer must consider the possibility that an existing natural watershed may become urbanized during the useful life of the storm drain system. Future land uses must be used for T_c and runoff calculations, and can be determined from the local Community General Plan.

3.1.4.1 Initial Time of Concentration

The initial time of concentration is typically based on sheet flow at the upstream end of a drainage basin. The Overland Time of Flow (Figure 3-3) is approximated by an equation developed by the Federal Aviation Agency (FAA) for analyzing flow on runaways (FAA, 1970). The usual runway configuration consists of a crown, like most freeways, with sloping pavement that directs flow to either side of the runway. This type of flow is uniform in the direction perpendicular to the velocity and is very shallow. Since these depths are ¼ of an inch (more or less) in magnitude, the relative roughness is high. Some higher relative roughness values for overland flow are presented in Table 3.5 of the *HEC-1 Flood Hydrograph Package User's Manual* (USACE, 1990).

The sheet flow that is predicted by the FAA equation is limited to conditions that are similar to runway topography. Some considerations that limit the extent to which the FAA equation applies are identified below:

- Urban Areas – This "runway type" runoff includes:
  1) Flat roofs, sloping at 1% ±
  2) Parking lots at the extreme upstream drainage basin boundary (at the "ridge" of a catchment area).
     Even a parking lot is limited in the amounts of sheet flow. Parked or moving vehicles would "break-up" the sheet flow, concentrating runoff into streams that are not characteristic of sheet flow.
  3) Driveways are constructed at the upstream end of catchment areas in some developments. However, if flow from a roof is directed to a driveway through a downspout or other conveyance mechanism, flow would be concentrated.
  4) Flat slopes are prone to meandering flow that tends to be disrupted by minor irregularities and obstructions. Maximum Overland Flow lengths are shorter for the flatter slopes (see Table 3-2).

- Rural or Natural Areas - The FAA equation is applicable to these conditions since (.5% to 10%) slopes that are uniform in width of flow have slow velocities consistent with the equation. Irregularities in terrain limit the length of application.
  1) Most hills and ridge lines have a relatively flat area near the drainage divide. However, with flat slopes of .5% ±, minor irregularities would cause flow to concentrate into streams.
  2) Parks, lawns and other vegetated areas would have slow velocities that are consistent with the FAA Equation.

The concepts related to the initial time of concentration were evaluated in a report entitled *Initial Time of Concentration, Analysis of Parameters* (Hill, 2002) that was reviewed by the Hydrology Manual Committee. The Report is available at San Diego County Department of Public Works, Flood Control Section and on the San Diego County Department of Public Works web page.

Note that the Initial Time of Concentration should be reflective of the general land-use at the upstream end of a drainage basin. A single lot with an area of two or less acres does not have a significant effect where the drainage basin area is 20 to 600 acres.

Table 3-2 provides limits of the length (Maximum Length (L_M)) of sheet flow to be used in hydrology studies. Initial T_i values based on average C values for the Land Use Element are also included. These values can be used in planning and design applications as described below. Exceptions may be approved by the "Regulating Agency" when submitted with a detailed study.

Table 3-2

MAXIMUM OVERLAND FLOW LENGTH (L_M) & INITIAL TIME OF CONCENTRATION (T_i)

Element*	DU/	.5%		1%		2%		3%		5%		10%	
	Acre	L_M	T_i	L_M	T_i	L_M	T_i	L_M	T_i	L_M	T_i	L_M	T_i
Natural		50	13.2	70	12.5	85	10.9	100	10.3	100	8.7	100	6.9
LDR	1	50	12.2	70	11.5	85	10.0	100	9.5	100	8.0	100	6.4
LDR	2	50	11.3	70	10.5	85	9.2	100	8.8	100	7.4	100	5.8
LDR	2.9	50	10.7	70	10.0	85	8.8	95	8.1	100	7.0	100	5.6
MDR	4.3	50	10.2	70	9.6	80	8.1	95	7.8	100	6.7	100	5.3
MDR	7.3	50	9.2	65	8.4	80	7.4	95	7.0	100	6.0	100	4.8
MDR	10.9	50	8.7	65	7.9	80	6.9	90	6.4	100	5.7	100	4.5
MDR	14.5	50	8.2	65	7.4	80	6.5	90	6.0	100	5.4	100	4.3
HDR	24	50	6.7	65	6.1	75	5.1	90	4.9	95	4.3	100	3.5
HDR	43	50	5.3	65	4.7	75	4.0	85	3.8	95	3.4	100	2.7
N. Com		50	5.3	60	4.5	75	4.0	85	3.8	95	3.4	100	2.7
G. Com		50	4.7	60	4.1	75	3.6	85	3.4	90	2.9	100	2.4
O.P./Com		50	4.2	60	3.7	70	3.1	80	2.9	90	2.6	100	2.2
Limited I.		50	4.2	60	3.7	70	3.1	80	2.9	90	2.6	100	2.2
General I.		50	3.7	60	3.2	70	2.7	80	2.6	90	2.3	100	1.9

*See Table 3-1 for more detailed description

3.1.4.1A Planning Considerations

The purpose of most hydrology studies is to develop flood flow values for areas that are not at the upstream end of the basin. Another example is the Master Plan, which is usually completed before the actual detailed design of lots, streets, etc. are accomplished. In these situations it is necessary that the initial time of concentration be determined without detailed information about flow patterns.

To provide guidance for the initial time of concentration design parameters, Table 3-2 includes the Land Use Elements and other variables related to the Time of Concentration. The table development included a review of the typical "layout" of the different Land Use Elements and related flow patterns and consideration of the extent of the sheet flow regimen, the effect of ponding, the significance to the drainage basin, downstream effects, etc.

3.1.4.1B Computation Criteria

(a) Developed Drainage Areas With Overland Flow - T_i may be obtained directly from the chart, "Rational Formula – Overland Time of Flow Nomograph," shown in Figure 3-3 or from Table 3-2. This chart is based on the Federal Aviation Agency (FAA) equation (FAA, 1970). For the short rain durations (<15 minutes) involved, intensities are high but the depth of flooding is limited and much of the runoff is stored temporarily in the overland flow and in shallow ponded areas. In developed areas, overland flow is limited to lengths given in Table 3-2. Beyond these distances, flow tends to become concentrated into streets, gutters, swales, ditches, etc.

(b) Natural Or Rural Watersheds – These areas usually have an initial subarea at the upstream end with sheet flow. The sheet flow length is limited to 50 to 100 feet as specified in Table 3-2. The Overland Time of Flow Nomograph, Figure 3-3, can be used to obtain T_i. The initial time of concentration can excessively affect the magnitude of flow further downstream in the drainage basin. For instance, variations in the initial time of concentration for an initial subarea of one acre can change the flow further downstream where the area is 400 acres by 100%. Therefore, the initial time of concentration is limited (see Table 3-2).

The Rational Method procedure included in the original Hydrology Manual (1971) and Design and Procedure Manual (1968) included a 10 minute value to be added to the initial time of concentration developed through the Kirpich Formula (see Figure 3-4) for a natural watershed. That procedure is superceded by the procedure above to use Table 3-2 or Figure 3-3 to determine T_i for the appropriate sheet flow length of the initial subarea. The values for natural watersheds given in Table 3-2 vary from 13 to 7 minutes, depending on slope. If the total length of the initial subarea is greater than the maximum length allowable based on Table 3-2, add the travel time based on the Kirpich formula for the remaining length of the initial subarea.

3.1.4.2 Travel Time

The T_t is the time required for the runoff to flow in a watercourse (e.g., swale, channel, gutter, pipe) or series of watercourses from the initial subarea to the point of interest. The T_t is computed by dividing the length of the flow path by the computed flow velocity. Since the velocity normally changes as a result of each change in flow rate or slope, such as at an inlet or grade break, the total T_t must be computed as the sum of the T_t's for each section of the flow path. Use Figure 3-6 to estimate time of travel for street gutter flow. Velocity in a channel can be estimated by using the nomograph shown in Figure 3-7 (Manning's Equation Nomograph).

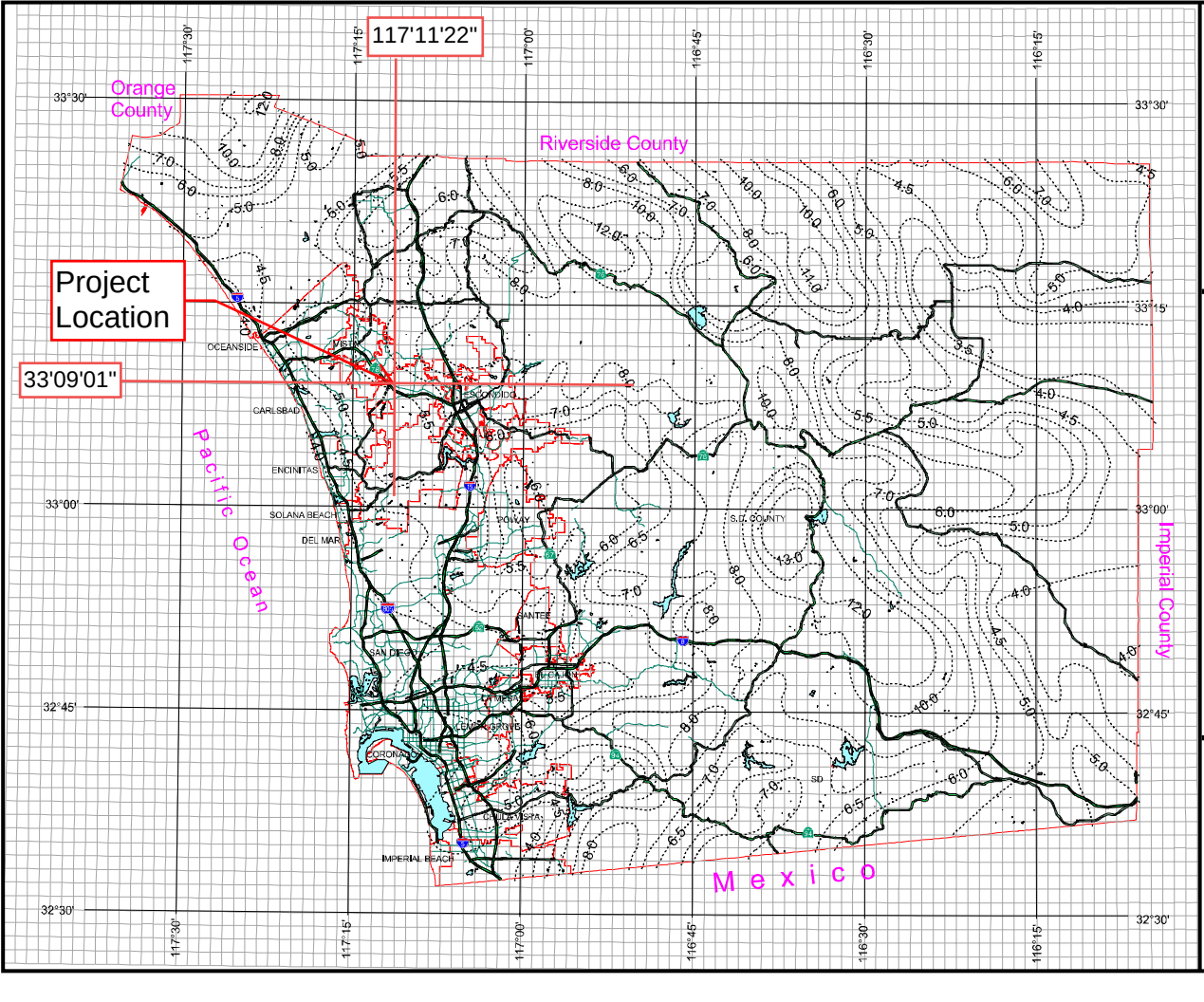
(a) Natural Watersheds – This includes rural, ranch, and agricultural areas with natural channels. Obtain T_t directly from the Kirpich nomograph in Figure 3-4 or from the equation. This nomograph requires values for length and change in elevation along the effective slope line for the subarea. See Figure 3-5 for a representation of the effective slope line.

This nomograph is based on the Kirpich formula, which was developed with data from agricultural watersheds ranging from 1.25 to 112 acres in area, 350 to 4,000 feet in length, and 2.7 to 8.8% slope (Kirpich, 1940). A maximum length of 4,000 feet should be used for the subarea length. Typically, as the flow length increases, the depth of flow will increase, and therefore it is considered a concentration of flow at points beyond lengths listed in Figure 3-2. However, because the Kirpich formula has been shown to be applicable for watersheds up to 4,000 feet in length (Kirpich, 1940), a subarea may be designated with a length up to 4,000 feet provided the topography and slope of the natural channel are generally uniform.

Justification needs to be included with this calculation showing that the watershed will remain natural forever. Examples include areas located in the Multiple Species Conservation Plan (MSCP), areas designated as open space or rural in a community's General Plan, and Cleveland National Forest.

(b) Urban Watersheds - Flow through a closed conduit where no additional flow can enter the system during the travel, length, velocity and T_t are determined using the peak flow in the conduit. In cases where the conduit is not closed and additional flow from a contributing subarea is added to the total flow during travel (e.g., street flow in a gutter), calculation of velocity and T_t is performed using an assumed average flow based on the total area (including upstream subareas) contributing to the point of interest. The Manning equation is usually used to determine velocity. Discharges for small watersheds typically range from 2 to 3 cfs per acre, depending on land use, drainage area, and slope and rainfall intensity.

Note: The MRM should be used to calculate the peak discharge when there is a junction from independent subareas into the drainage system.



County of San Diego Hydrology Manual

Rainfall Isopluvials

100 Year Rainfall Event - 24 Hours

Isopluvial (inches)

P24 = 5.60 in

DPW GIS

SanGIS

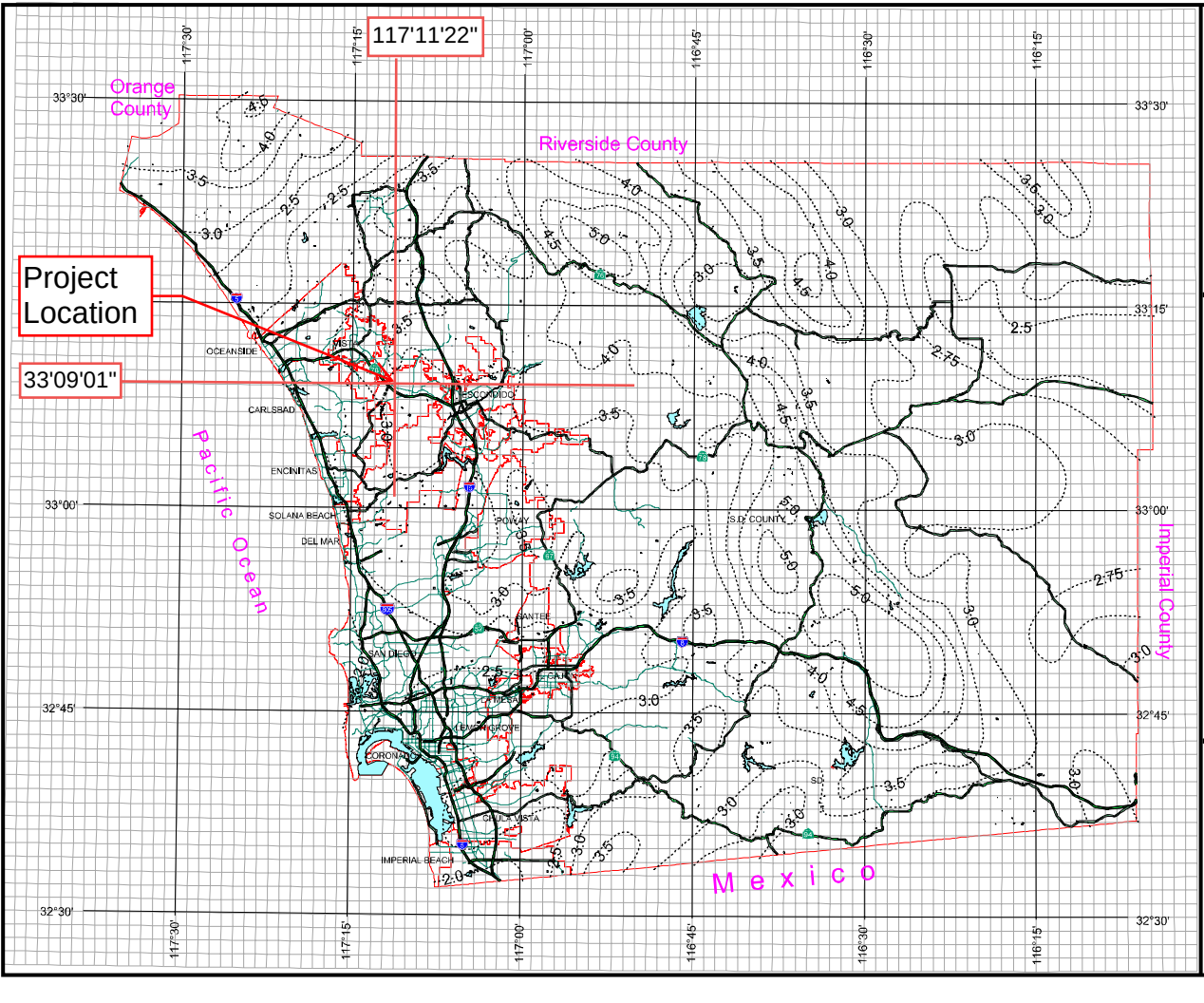
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N W E S

3 0 3 Miles



County of San Diego Hydrology Manual

Rainfall Isopluvials

100 Year Rainfall Event - 6 Hours

Isopluvial (inches)

P6 = 3.30 in

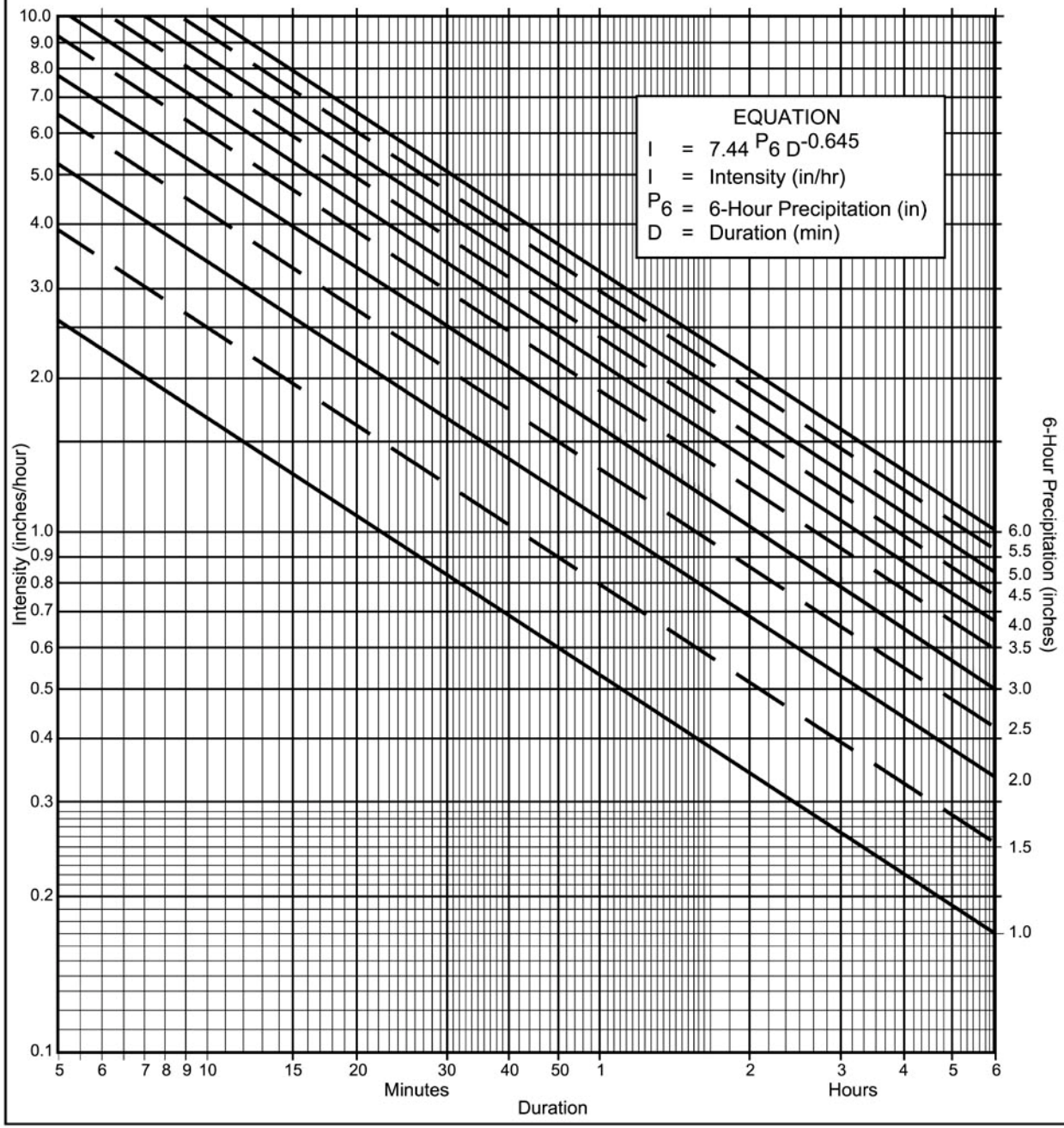
DPW GIS

SanGIS

N W E S

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3 0 3 Miles



Directions for Application:

(1) From precipitation maps determine 6 hr and 24 hr amounts for the selected frequency. These maps are included in the County Hydrology Manual (10, 50, and 100 yr maps included in the Design and Procedure Manual).

(2) Adjust 6 hr precipitation (if necessary) so that it is within the range of 45% to 65% of the 24 hr precipitation (not applicaple to Desert).

(3) Plot 6 hr precipitation on the right side of the chart.

(4) Draw a line through the point parallel to the plotted lines.

(5) This line is the intensity-duration curve for the location being analyzed.

Application Form:

(a) Selected frequency _____ year

(b) P_6 = 3.30 in., P_{24} = 5.60, $\frac{P_6}{P_{24}} = \frac{3.30}{5.60}$ %(2) 59%

(c) Adjusted $P_6^{(2)}$ = 3.30 in.

(d) t_x = _____ min.

(e) I = _____ in./hr.

Note: This chart replaces the Intensity-Duration-Frequency curves used since 1965.

P6	1	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6
Duration	I	I	I	I	I	I	I	I	I	I	I
5	2.63	3.95	5.27	6.59	7.90	9.22	10.54	11.86	13.17	14.49	15.81
7	2.12	3.18	4.24	5.30	6.36	7.42	8.48	9.54	10.60	11.66	12.72
10	1.68	2.53	3.37	4.21	5.05	5.90	6.74	7.58	8.42	9.27	10.11
15	1.30	1.95	2.59	3.24	3.89	4.54	5.19	5.84	6.49	7.13	7.78
20	1.08	1.62	2.15	2.69	3.23	3.77	4.31	4.85	5.39	5.93	6.46
25	0.93	1.40	1.87	2.33	2.80	3.27	3.73	4.20	4.67	5.13	5.60
30	0.83	1.24	1.66	2.07	2.49	2.90	3.32	3.73	4.15	4.56	4.98
40	0.69	1.03	1.38	1.72	2.07	2.41	2.76	3.10	3.45	3.79	4.13
50	0.60	0.90	1.19	1.49	1.79	2.09	2.39	2.69	2.98	3.28	3.58
60	0.53	0.80	1.06	1.33	1.59	1.86	2.12	2.39	2.65	2.92	3.18
90	0.41	0.61	0.82	1.02	1.23	1.43	1.63	1.84	2.04	2.25	2.45
120	0.34	0.51	0.68	0.85	1.02	1.19	1.36	1.53	1.70	1.87	2.04
150	0.29	0.44	0.59	0.73	0.88	1.03	1.18	1.32	1.47	1.62	1.76
180	0.26	0.39	0.52	0.65	0.78	0.91	1.04	1.18	1.31	1.44	1.57
240	0.22	0.33	0.43	0.54	0.65	0.76	0.87	0.98	1.08	1.19	1.30
300	0.19	0.28	0.38	0.47	0.56	0.66	0.75	0.85	0.94	1.03	1.13
360	0.17	0.25	0.33	0.42	0.50	0.58	0.67	0.75	0.84	0.92	1.00

Intensity-Duration Design Chart - Template

FIGURE 3-1

Table 3-1
RUNOFF COEFFICIENTS FOR URBAN AREAS

Pre-development

Land Use		Runoff Coefficient "C"				
			Soil Type			
NRCS Elements	County Elements	% IMPER.	A	B	C	D
Undisturbed Natural Terrain (Natural)	Permanent Open Space	0*	0.20	0.25	0.30	0.35
Low Density Residential (LDR)	Residential, 1.0 DU/A or less	10	0.27	0.32	0.36	0.41
Low Density Residential (LDR)	Residential, 2.0 DU/A or less	20	0.34	0.38	0.42	0.46
Low Density Residential (LDR)	Residential, 2.9 DU/A or less	25	0.38	0.41	0.45	0.49
Medium Density Residential (MDR)	Residential, 4.3 DU/A or less	30	0.41	0.45	0.48	0.52
Medium Density Residential (MDR)	Residential, 7.3 DU/A or less	40	0.48	0.51	0.54	0.57
Medium Density Residential (MDR)	Residential, 10.9 DU/A or less	45	0.52	0.54	0.57	0.60
Medium Density Residential (MDR)	Residential, 14.5 DU/A or less	50	0.55	0.58	0.60	0.63
High Density Residential (HDR)	Residential, 24.0 DU/A or less	65	0.66	0.67	0.69	0.71
High Density Residential (HDR)	Residential, 43.0 DU/A or less	80	0.76	0.77	0.78	0.79
Commercial/Industrial (N. Com)	Neighborhood Commercial	80	0.76	0.77	0.78	0.79
Commercial/Industrial (G. Com)	General Commercial	85	0.80	0.80	0.81	0.82
Commercial/Industrial (O.P. Com)	Office Professional/Commercial	90	0.83	0.84	0.84	0.85
Commercial/Industrial (Limited I.)	Limited Industrial	90	0.83	0.84	0.84	0.85
Commercial/Industrial (General I.)	General Industrial	95	0.87	0.87	0.87	0.87

Post Development for Las Posas Site

*The values associated with 0% impervious may be used for direct calculation of the runoff coefficient as described in Section 3.1.2 (representing the pervious runoff coefficient, Cp, for the soil type), or for areas that will remain undisturbed in perpetuity. Justification must be given that the area will remain natural forever (e.g., the area is located in Cleveland National Forest).
DU/A = dwelling units per acre
NRCS = National Resources Conservation Service

Post development for the Commercial site south
Per HYDROLOGY& HYDRAULIC STUDY FOR CVS PHARMACY prepared by Excel engineering

CHAPTER 3
HYDROLOGIC ANALYSIS PRE DEVELOPMENT CONDITINS

PRE DEVELOPMENT CONDITINS
100 – Year Design Storm

PER THE HYDROLOGY& HYDRAULIC STUDY FOR CVS PHARMACY PREPARED BY EXCEL ENGINEERING, DATED JULY 2009

ATTACHMENT H
EXISTING CONDITIONS Q100 CALCULATIONS

SEE CHAPTER 8 FOR EXISTING CONDITIONS DRAINAGE EXHIBIT

```
              San Diego County Rational Hydrology Program

CIVILCADD/CIVILDESIGN Engineering Software,(c)1991-2004 Version 7.4

Rational method hydrology  program based on
San Diego County Flood Control Division 2003 hydrology manual
       Rational Hydrology Study        Date: 02/08/09
--------------------------------------------------------------------------
08030 CVS PHARMACY
PRE DEVELOPMENT 100 YR STORM
NODE 1 TO 3

--------------------------------------------------------------------------
 *********   Hydrology Study Control Information **********

--------------------------------------------------------------------------


Program License Serial Number 4012

--------------------------------------------------------------------------
Rational hydrology study storm event year is   100.0
English (in-lb) input data Units used

Map data precipitation entered:
6 hour,  precipitation(inches) =  3.300
24 hour precipitation(inches) =  5.700
P6/P24 =    57.9%
San Diego hydrology manual 'C' values used


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station        1.000 to Point/Station        2.000
**** INITIAL AREA EVALUATION ****
__________________________________________________________________________
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 1.000
[UNDISTURBED NATURAL TERRAIN                ]
(Permanent Open Space   )
Impervious value, Ai = 0.000
Sub-Area C Value = 0.350
Initial subarea total flow distance  =   50.000(Ft.)
Highest elevation =  577.200(Ft.)
Lowest elevation =  576.500(Ft.)
Elevation difference =    0.700(Ft.) Slope =  1.400 %
INITIAL AREA TIME OF CONCENTRATION CALCULATIONS:
The maximum overland flow distance is 70.00 (Ft)
for the top area slope value of   1.40 %, in a development type of
 Permanent Open Space
In Accordance With Table 3-2
Initial Area Time of Concentration =  12.50 minutes
 (for slope value of   1.00 %)
Rainfall intensity (I) =      4.815(In/Hr) for a   100.0 year storm
Effective runoff coefficient used for area (Q=KCIA) is C = 0.350
Subarea runoff =      0.184(CFS)
Total initial stream area =        0.109(Ac.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station        2.000 to Point/Station        3.000
**** IRREGULAR CHANNEL FLOW TRAVEL TIME ****
__________________________________________________________________________
Estimated mean flow rate at midpoint of channel =      5.671(CFS)
Depth of flow =   0.295(Ft.), Average velocity =   1.842(Ft/s)
       ******* Irregular Channel Data ***********
--------------------------------------------------------------
Information entered for subchannel number 1 :
Point number      'X' coordinate     'Y' coordinate
       1              0.00              2.40
```

```
       2             50.00              0.00
       3            100.00              1.00
Manning's 'N' friction factor =   0.026
-----------------------------------------------------------------
Sub-Channel flow  =      5.672(CFS)
  '     '       flow top width =     20.884(Ft.)
  '     '    velocity=    1.842(Ft/s)
  '     '       area =      3.079(Sq.Ft)
  '     '       Froude number =     0.846

Upstream point elevation =   576.500(Ft.)
Downstream point elevation =   566.600(Ft.)
Flow length =   741.600(Ft.)
Travel time  =    6.71 min.
Time of concentration =   19.21 min.
Depth of flow =   0.295(Ft.)
Average velocity =   1.842(Ft/s)
Total irregular channel flow =     5.671(CFS)
Irregular channel normal depth above invert elev. =   0.295(Ft.)
Average velocity of channel(s) =   1.842(Ft/s)
 Adding area flow to channel
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 1.000
[UNDISTURBED NATURAL TERRAIN                ]
(Permanent Open Space   )
Impervious value, Ai = 0.000
Sub-Area C Value = 0.350
Rainfall intensity =      3.649(In/Hr) for a   100.0 year storm
Effective runoff coefficient used for total area
(Q=KCIA) is C = 0.350  CA =      3.038
Subarea runoff =     10.904(CFS) for      8.572(Ac.)
Total runoff =     11.088(CFS)       Total area =       8.681(Ac.)
Depth of flow =   0.379(Ft.), Average velocity =   2.178(Ft/s)
End of computations, total study area =           8.681 (Ac.)
```

ATTACHMENT I
EXISTING + PROJECT CONDITIONS Q100 CALCULATIONS

EXISTING CONDITION CALCULATIONS FROM EXCEL ENGINEERING DRAINAGE STUDY USED FOR FLOWS OF POST-DEVELOPED CALCULATIONS AT NODE 20 AND 25

```
               San Diego County Rational Hydrology Program

CIVILCADD/CIVILDESIGN Engineering Software,(c)1991-2004 Version 7.4

Rational method hydrology  program based on
San Diego County Flood Control Division 2003 hydrology manual
       Rational Hydrology Study        Date: 02/09/09
--------------------------------------------------------------------------
08030 CVS PHARMACY
100 YEAR STORM EVENT
RUNOFF FLOW FROM EXISTING AND DRIVE AISLE
NODES 1-2-25, 4-5-25, AND 18-19-25
--------------------------------------------------------------------------
 *********   Hydrology Study Control Information **********

--------------------------------------------------------------------------


Program License Serial Number 4012

--------------------------------------------------------------------------
Rational hydrology study storm event year is   100.0
English (in-lb) input data Units used

Map data precipitation entered:
6 hour,  precipitation(inches) =  3.300
24 hour precipitation(inches) =  5.700
P6/P24 =    57.9%
San Diego hydrology manual 'C' values used


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station        1.000 to Point/Station        2.000
**** INITIAL AREA EVALUATION ****

__________________________________________________________________________
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 1.000
[UNDISTURBED NATURAL TERRAIN                ]
(Permanent Open Space   )
Impervious value, Ai = 0.000
Sub-Area C Value = 0.350
Initial subarea total flow distance  =   50.000(Ft.)
Highest elevation =  577.200(Ft.)
Lowest elevation =  576.500(Ft.)
Elevation difference =    0.700(Ft.) Slope =  1.400 %
Top of Initial Area Slope adjusted by User to  1.473 %
INITIAL AREA TIME OF CONCENTRATION CALCULATIONS:
The maximum overland flow distance is 70.00 (Ft)
for the top area slope value of   1.47 %, in a development type of
 Permanent Open Space
In Accordance With Table 3-2
Initial Area Time of Concentration =  12.50 minutes
 (for slope value of   1.00 %)
Rainfall intensity (I) =      4.815(In/Hr) for a   100.0 year storm
Effective runoff coefficient used for area (Q=KCIA) is C = 0.350
Subarea runoff =      0.184(CFS)
Total initial stream area =        0.109(Ac.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station        2.000 to Point/Station       25.000
**** IRREGULAR CHANNEL FLOW TRAVEL TIME ****
__________________________________________________________________________
Estimated mean flow rate at midpoint of channel =      4.011(CFS)
Depth of flow =   0.259(Ft.), Average velocity =   1.689(Ft/s)
       ******* Irregular Channel Data ***********
--------------------------------------------------------------
Information entered for subchannel number 1 :
```

```
Point number      'X' coordinate     'Y' coordinate
       1              0.00              2.40
       2             50.00              0.00
       3            100.00              1.00
Manning's 'N' friction factor =   0.026
-----------------------------------------------------------------
Sub-Channel flow  =      4.011(CFS)
  '     '       flow top width =     18.341(Ft.)
  '     '    velocity=    1.689(Ft/s)
  '     '       area =      2.374(Sq.Ft)
  '     '       Froude number =     0.827

Upstream point elevation =   576.500(Ft.)
Downstream point elevation =   566.600(Ft.)
Flow length =   741.600(Ft.)
Travel time  =    7.32 min.
Time of concentration =   19.82 min.
Depth of flow =   0.259(Ft.)
Average velocity =   1.689(Ft/s)
Total irregular channel flow =     4.011(CFS)
Irregular channel normal depth above invert elev. =   0.259(Ft.)
Average velocity of channel(s) =   1.689(Ft/s)
 Adding area flow to channel
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 1.000
[UNDISTURBED NATURAL TERRAIN                ]
(Permanent Open Space   )
Impervious value, Ai = 0.000
Sub-Area C Value = 0.350
Rainfall intensity =      3.577(In/Hr) for a   100.0 year storm
Effective runoff coefficient used for total area
(Q=KCIA) is C = 0.350  CA =      2.176
Subarea runoff =      7.601(CFS) for      6.109(Ac.)
Total runoff =      7.784(CFS)       Total area =       6.218(Ac.)
Depth of flow =   0.332(Ft.), Average velocity =   1.994(Ft/s)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       25.000 to Point/Station       25.000
**** CONFLUENCE OF MINOR STREAMS ****
________________________________________________________________________
Along Main Stream number: 1 in normal stream number 1
Stream flow area =      6.218(Ac.)
Runoff from this stream =      7.784(CFS)
Time of concentration =   19.82 min.
Rainfall intensity =     3.577(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station        4.000 to Point/Station        5.000
**** INITIAL AREA EVALUATION ****
________________________________________________________________________
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 1.000
[COMMERCIAL area type                       ]
(Neighborhod Commercial )
Impervious value, Ai = 0.800
Sub-Area C Value = 0.790
Initial subarea total flow distance  =   50.000(Ft.)
Highest elevation =  576.560(Ft.)
Lowest elevation =  575.900(Ft.)
Elevation difference =    0.660(Ft.) Slope =  1.320 %
INITIAL AREA TIME OF CONCENTRATION CALCULATIONS:
The maximum overland flow distance is 60.00 (Ft)
for the top area slope value of   1.32 %, in a development type of
 Neighborhod Commercial
In Accordance With Table 3-2
Initial Area Time of Concentration =   4.50 minutes
```

```
 (for slope value of   1.00 %)
Calculated TC of    4.500 minutes is less than 5 minutes,
 resetting TC to 5.0 minutes for rainfall intensity calculations
Rainfall intensity (I) =      8.695(In/Hr) for a   100.0 year storm
Effective runoff coefficient used for area (Q=KCIA) is C = 0.790
Subarea runoff =      0.398(CFS)
Total initial stream area =        0.058(Ac.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station        5.000 to Point/Station       25.000
**** IRREGULAR CHANNEL FLOW TRAVEL TIME ****
________________________________________________________________________
Estimated mean flow rate at midpoint of channel =      1.520(CFS)
Depth of flow =   0.206(Ft.), Average velocity =   2.434(Ft/s)
       ******* Irregular Channel Data ***********
------------------------------------------------------------------
Information entered for subchannel number 1 :
Point number      'X' coordinate     'Y' coordinate
       1              0.00              0.84
       2             24.00              0.00
       3             24.50              0.50
Manning's 'N' friction factor =   0.018
------------------------------------------------------------------
Sub-Channel flow  =      1.520(CFS)
  '     '       flow top width =      6.077(Ft.)
  '     '    velocity=    2.434(Ft/s)

  '     '       area =      0.624(Sq.Ft)
  '     '       Froude number =     1.338

Upstream point elevation =   575.900(Ft.)
Downstream point elevation =   569.880(Ft.)
Flow length =   327.000(Ft.)
Travel time  =    2.24 min.
Time of concentration =    6.74 min.
Depth of flow =   0.206(Ft.)
Average velocity =   2.434(Ft/s)
Total irregular channel flow =     1.520(CFS)
Irregular channel normal depth above invert elev. =   0.206(Ft.)
Average velocity of channel(s) =   2.434(Ft/s)
 Adding area flow to channel
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 1.000
[COMMERCIAL area type                        ]
(Neighborhod Commercial )
Impervious value, Ai = 0.800
Sub-Area C Value = 0.790
Rainfall intensity =      7.172(In/Hr) for a   100.0 year storm
Effective runoff coefficient used for total area
(Q=KCIA) is C = 0.790  CA =      0.358
Subarea runoff =      2.168(CFS) for      0.395(Ac.)
Total runoff =      2.567(CFS)        Total area =       0.453(Ac.)
Depth of flow =   0.250(Ft.), Average velocity =   2.774(Ft/s)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       25.000 to Point/Station       25.000
**** CONFLUENCE OF MINOR STREAMS ****
________________________________________________________________________
Along Main Stream number: 1 in normal stream number 2
Stream flow area =      0.453(Ac.)
Runoff from this stream =      2.567(CFS)
Time of concentration =    6.74 min.
Rainfall intensity =     7.172(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       18.000 to Point/Station       19.000
**** INITIAL AREA EVALUATION ****
```

```
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 1.000
[COMMERCIAL area type                        ]
(Neighborhod Commercial )
Impervious value, Ai = 0.800
Sub-Area C Value = 0.790
Initial subarea total flow distance  =   32.600(Ft.)
Highest elevation =  581.280(Ft.)
Lowest elevation =  579.100(Ft.)
Elevation difference =    2.180(Ft.) Slope =  6.687 %
INITIAL AREA TIME OF CONCENTRATION CALCULATIONS:
The maximum overland flow distance is 95.00 (Ft)
for the top area slope value of   6.69 %, in a development type of
 Neighborhod Commercial
In Accordance With Table 3-2
Initial Area Time of Concentration =   3.40 minutes
 (for slope value of   5.00 %)
Calculated TC of    3.400 minutes is less than 5 minutes,
 resetting TC to 5.0 minutes for rainfall intensity calculations
Rainfall intensity (I) =      8.695(In/Hr) for a   100.0 year storm
Effective runoff coefficient used for area (Q=KCIA) is C = 0.790
Subarea runoff =      0.096(CFS)
Total initial stream area =        0.014(Ac.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       19.000 to Point/Station       25.000
**** IRREGULAR CHANNEL FLOW TRAVEL TIME ****
------------------------------------------------------------------------
Estimated mean flow rate at midpoint of channel =      0.206(CFS)
Depth of flow =   0.072(Ft.), Average velocity =   2.566(Ft/s)
       ******* Irregular Channel Data ***********
-------------------------------------------------------------
Information entered for subchannel number 1 :
Point number      'X' coordinate     'Y' coordinate
       1              0.00              1.44
       2             26.70              0.44
       3             39.50              0.00
       4             44.50              2.57
Manning's 'N' friction factor =   0.018
-------------------------------------------------------------
Sub-Channel flow  =      0.206(CFS)
  '     '       flow top width =      2.233(Ft.)
  '     '    velocity=    2.566(Ft/s)
  '     '       area =      0.080(Sq.Ft)
  '     '       Froude number =     2.385

Upstream point elevation =   579.100(Ft.)
Downstream point elevation =   575.240(Ft.)
Flow length =    46.900(Ft.)
Travel time  =    0.30 min.
Time of concentration =    3.70 min.
Depth of flow =   0.072(Ft.)
Average velocity =   2.566(Ft/s)
Total irregular channel flow =     0.206(CFS)
Irregular channel normal depth above invert elev. =   0.072(Ft.)
Average velocity of channel(s) =   2.566(Ft/s)
 Adding area flow to channel
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 1.000
[COMMERCIAL area type                        ]
(Neighborhod Commercial )
Impervious value, Ai = 0.800
Sub-Area C Value = 0.790
Rainfall intensity =      8.695(In/Hr) for a   100.0 year storm
Effective runoff coefficient used for total area
(Q=KCIA) is C = 0.790  CA =      0.036
```

```
Subarea runoff =      0.220(CFS) for      0.032(Ac.)
Total runoff =      0.316(CFS)       Total area =       0.046(Ac.)
Depth of flow =   0.084(Ft.), Average velocity =   2.856(Ft/s)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       25.000 to Point/Station       25.000
**** CONFLUENCE OF MINOR STREAMS ****
______________________________________________________________________________
Along Main Stream number: 1 in normal stream number 3
Stream flow area =      0.046(Ac.)
Runoff from this stream =      0.316(CFS)

Time of concentration =    3.70 min.
Rainfall intensity =     8.695(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                (In/Hr)


1        7.784     19.82               3.577
2        2.567      6.74               7.172
3        0.316      3.70               8.695
Qmax(1) =
          1.000 *    1.000 *     7.784) +
          0.499 *    1.000 *     2.567) +
          0.411 *    1.000 *     0.316) + =       9.194
Qmax(2) =
          1.000 *    0.340 *     7.784) +
          1.000 *    1.000 *     2.567) +
          0.825 *    1.000 *     0.316) + =       5.475
Qmax(3) =
          1.000 *    0.187 *     7.784) +
          1.000 *    0.550 *     2.567) +
          1.000 *    1.000 *     0.316) + =       3.182

Total of 3 streams to confluence:
Flow rates before confluence point:
       7.784       2.567       0.316
Maximum flow rates at confluence using above data:
        9.194        5.475        3.182
Area of streams before confluence:
        6.218        0.453        0.046
Results of confluence:
Total flow rate =      9.194(CFS)
Time of concentration =    19.816 min.
Effective stream area after confluence =      6.717(Ac.)
End of computations, total study area =          6.717 (Ac.)
```

```
               San Diego County Rational Hydrology Program

CIVILCADD/CIVILDESIGN Engineering Software,(c)1991-2004 Version 7.4

Rational method hydrology  program based on
San Diego County Flood Control Division 2003 hydrology manual
       Rational Hydrology Study        Date: 02/09/09
--------------------------------------------------------------------------
08030 CVS PHARMACY
EXISTING + DEVELOPED CONDITIONS, FINAL FLOW CALC
100 YEAR STORM EVENT
MANUAL INPUT ON NODES 10,22,AND 25
--------------------------------------------------------------------------
 *********   Hydrology Study Control Information **********

--------------------------------------------------------------------------

Program License Serial Number 4012

--------------------------------------------------------------------------
Rational hydrology study storm event year is   100.0
English (in-lb) input data Units used

Map data precipitation entered:
6 hour,  precipitation(inches) =  3.300
24 hour precipitation(inches) =  5.700
P6/P24 =    57.9%
San Diego hydrology manual 'C' values used

++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       22.000 to Point/Station       22.000
**** USER DEFINED FLOW INFORMATION AT A POINT ****
____________________________________________________________________________
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 1.000

[COMMERCIAL area type                        ]
(Neighborhod Commercial )
Impervious value, Ai = 0.800
Sub-Area C Value = 0.790
Rainfall intensity (I) =      3.249(In/Hr) for a   100.0 year storm
User specified values are as follows:
TC =  23.00 min.  Rain intensity =       3.25(In/Hr)
Total area =        0.257(Ac.)  Total runoff =     0.659(CFS)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       22.000 to Point/Station       20.000
**** PIPEFLOW TRAVEL TIME (User specified size) ****
____________________________________________________________________________
Upstream point/station elevation =   564.020(Ft.)
Downstream point/station elevation =   563.950(Ft.)
Pipe length  =    15.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =     0.659(CFS)
Given pipe size =     12.00(In.)
Calculated individual pipe flow  =     0.659(CFS)
Normal flow depth in pipe =    4.27(In.)
Flow top width inside pipe =   11.49(In.)
Critical Depth =    4.05(In.)
Pipe flow velocity =      2.63(Ft/s)
Travel time through pipe =    0.09 min.
Time of concentration (TC) =    23.09 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       20.000 to Point/Station       20.000
**** CONFLUENCE OF MINOR STREAMS ****
____________________________________________________________________________
```

```
Along Main Stream number: 1 in normal stream number 1
Stream flow area =      0.257(Ac.)
Runoff from this stream =      0.659(CFS)
Time of concentration =   23.09 min.
Rainfall intensity =     3.241(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       10.000 to Point/Station       10.000
**** USER DEFINED FLOW INFORMATION AT A POINT ****
________________________________________________________________________
User specified 'C' value of 0.600 given for subarea
Rainfall intensity (I) =      1.969(In/Hr) for a   100.0 year storm
User specified values are as follows:
TC =  50.00 min.  Rain intensity =       1.97(In/Hr)
Total area =        1.500(Ac.)  Total runoff =     1.780(CFS)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++

Process from Point/Station       10.000 to Point/Station       20.000
**** PIPEFLOW TRAVEL TIME (User specified size) ****
________________________________________________________________________
Upstream point/station elevation =   564.700(Ft.)
Downstream point/station elevation =   563.950(Ft.)
Pipe length  =   150.00(Ft.)   Manning's N = 0.013
No. of pipes = 2  Required pipe flow  =     1.780(CFS)
Given pipe size =      8.00(In.)
NOTE: Normal flow is pressure flow in user selected pipe size.
The approximate hydraulic grade line above the pipe invert is
     0.215(Ft.)  at the headworks or inlet of the pipe(s)
 Pipe friction loss =      0.813(Ft.)
 Minor friction loss =      0.151(Ft.)       K-factor =   1.50
Pipe flow velocity =      2.55(Ft/s)
Travel time through pipe =    0.98 min.
Time of concentration (TC) =    50.98 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       20.000 to Point/Station       20.000
**** CONFLUENCE OF MINOR STREAMS ****
________________________________________________________________________
Along Main Stream number: 1 in normal stream number 2
Stream flow area =      1.500(Ac.)
Runoff from this stream =      1.780(CFS)
Time of concentration =   50.98 min.
Rainfall intensity =     1.945(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                  (In/Hr)


1        0.659     23.09               3.241
2        1.780     50.98               1.945
Qmax(1) =
          1.000 *    1.000 *     0.659) +
          1.000 *    0.453 *     1.780) + =       1.465
Qmax(2) =
          0.600 *    1.000 *     0.659) +
          1.000 *    1.000 *     1.780) + =     2.175

Total of 2 streams to confluence:
Flow rates before confluence point:
       0.659       1.780
Maximum flow rates at confluence using above data:
        1.465        2.175
Area of streams before confluence:
        0.257        1.500
Results of confluence:
Total flow rate =      2.175(CFS)
```

```
Time of concentration =    50.981 min.
Effective stream area after confluence =      1.757(Ac.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       20.000 to Point/Station        3.000
**** PIPEFLOW TRAVEL TIME (User specified size) ****
______________________________________________________________________________
Upstream point/station elevation =   563.900(Ft.)
Downstream point/station elevation =   562.840(Ft.)
Pipe length  =   205.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =     2.175(CFS)
Given pipe size =     12.00(In.)
Calculated individual pipe flow  =     2.175(CFS)
Normal flow depth in pipe =    8.50(In.)
Flow top width inside pipe =   10.91(In.)
Critical Depth =    7.57(In.)
Pipe flow velocity =      3.66(Ft/s)
Travel time through pipe =    0.93 min.
Time of concentration (TC) =    51.91 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station        3.000 to Point/Station        3.000
**** CONFLUENCE OF MAIN STREAMS ****
______________________________________________________________________________
The following data inside Main Stream is listed:
In Main Stream number: 1
Stream flow area =      1.757(Ac.)
Runoff from this stream =      2.175(CFS)
Time of concentration =   51.91 min.
Rainfall intensity =     1.922(In/Hr)
Program is now starting with Main Stream No. 2


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       25.000 to Point/Station       25.000
**** USER DEFINED FLOW INFORMATION AT A POINT ****
______________________________________________________________________________
User specified 'C' value of 0.410 given for subarea
Rainfall intensity (I) =      1.751(In/Hr) for a   100.0 year storm
User specified values are as follows:
TC =  60.00 min.  Rain intensity =       1.75(In/Hr)
Total area =        6.717(Ac.)  Total runoff =     4.770(CFS)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       25.000 to Point/Station        3.000
**** PIPEFLOW TRAVEL TIME (User specified size) ****
______________________________________________________________________________
Upstream point/station elevation =   564.630(Ft.)
Downstream point/station elevation =   562.840(Ft.)
Pipe length  =    47.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =     4.770(CFS)
Given pipe size =     12.00(In.)
Calculated individual pipe flow  =     4.770(CFS)
Normal flow depth in pipe =    7.30(In.)
Flow top width inside pipe =   11.71(In.)
Critical Depth =   10.85(In.)
Pipe flow velocity =      9.54(Ft/s)
Travel time through pipe =    0.08 min.
Time of concentration (TC) =    60.08 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station        3.000 to Point/Station        3.000
**** CONFLUENCE OF MAIN STREAMS ****
______________________________________________________________________________
The following data inside Main Stream is listed:
In Main Stream number: 2
Stream flow area =      6.717(Ac.)
```

```
Runoff from this stream =      4.770(CFS)
Time of concentration =   60.08 min.
Rainfall intensity =     1.749(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                (In/Hr)


1        2.175     51.91               1.922
2        4.770     60.08               1.749
Qmax(1) =
          1.000 *    1.000 *     2.175) +
          1.000 *    0.864 *     4.770) + =       6.297
Qmax(2) =
          0.910 *    1.000 *     2.175) +
          1.000 *    1.000 *     4.770) + =       6.750

Total of 2 main streams to confluence:
Flow rates before confluence point:
       2.175       4.770
Maximum flow rates at confluence using above data:
        6.297        6.750
Area of streams before confluence:
        1.757        6.717


Results of confluence:
Total flow rate =      6.750(CFS)
Time of concentration =    60.082 min.
Effective stream area after confluence  =      8.474(Ac.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station        3.000 to Point/Station       26.000
**** PIPEFLOW TRAVEL TIME (User specified size) ****
________________________________________________________________________
Upstream point/station elevation =   562.840(Ft.)
Downstream point/station elevation =   561.820(Ft.)
Pipe length  =    25.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =     6.750(CFS)
Given pipe size =     12.00(In.)
Calculated individual pipe flow  =     6.750(CFS)
Normal flow depth in pipe =    9.23(In.)
Flow top width inside pipe =   10.11(In.)
Critical depth could not be calculated.
Pipe flow velocity =     10.42(Ft/s)
Travel time through pipe =    0.04 min.
Time of concentration (TC) =    60.12 min.
End of computations, total study area =           8.474 (Ac.)
```

CHAPTER 4
HYDROLOGIC ANALYSIS

Developed Condition

Developed Condition
100 – Year Design Storm

```
**************************************************************************

            RATIONAL METHOD HYDROLOGY COMPUTER PROGRAM PACKAGE
            Reference: SAN DIEGO COUNTY FLOOD CONTROL DISTRICT
                         2003,1985,1981 HYDROLOGY MANUAL
          (c) Copyright 1982-2015 Advanced Engineering Software (aes)
              Ver. 22.0 Release Date: 07/01/2015  License ID 1239

                          Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* Las Posas                                                             *
* 100-Year Proposed                                                     *
* DLN 1482, W.O. #0025-0364                                             *
 ************************************************************************

  FILE NAME: R:\1482\AES\100.DAT
  TIME/DATE OF STUDY: 13:37 02/15/2022
--------------------------------------------------------------------------
  USER SPECIFIED HYDROLOGY AND HYDRAULIC MODEL INFORMATION:
--------------------------------------------------------------------------
  2003 SAN DIEGO MANUAL CRITERIA

  USER SPECIFIED STORM EVENT(YEAR) = 100.00
  6-HOUR DURATION PRECIPITATION (INCHES) =   3.300
  SPECIFIED MINIMUM PIPE SIZE(INCH) =  18.00
  SPECIFIED PERCENT OF GRADIENTS(DECIMAL) TO USE FOR FRICTION SLOPE = 0.95
  SAN DIEGO HYDROLOGY MANUAL "C"-VALUES USED FOR RATIONAL METHOD
  NOTE: USE MODIFIED RATIONAL METHOD PROCEDURES FOR CONFLUENCE ANALYSIS
  *USER-DEFINED STREET-SECTIONS FOR COUPLED PIPEFLOW AND STREETFLOW MODEL*
     HALF-  CROWN TO   STREET-CROSSFALL:   CURB  GUTTER-GEOMETRIES:  MANNING
     WIDTH  CROSSFALL  IN-  / OUT-/PARK-  HEIGHT  WIDTH  LIP   HIKE  FACTOR
NO.   (FT)     (FT)    SIDE / SIDE/ WAY    (FT)    (FT)  (FT)  (FT)    (n)
===  =====  =========  ================  ======  ===== ====== ===== =======
  1   16.0      8.0    0.020/0.020/0.020   0.50    2.00 0.0313 0.125 0.0150
  2   12.0      6.0    0.020/0.020/0.020   0.50    1.50 0.0313 0.125 0.0130
  3   12.0      6.0    0.020/0.020/ ---    0.33    1.50 0.0208 0.083 0.0150

  GLOBAL STREET FLOW-DEPTH CONSTRAINTS:
    1. Relative Flow-Depth =  0.00 FEET
       as (Maximum Allowable Street Flow Depth) - (Top-of-Curb)
    2. (Depth)*(Velocity) Constraint =  6.0 (FT*FT/S)
  *SIZE PIPE WITH A FLOW CAPACITY GREATER THAN
   OR EQUAL TO THE UPSTREAM TRIBUTARY PIPE.*

**************************************************************************
  FLOW PROCESS FROM NODE    100.00 TO NODE    102.00 IS CODE =  21
--------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
==========================================================================
  *USER SPECIFIED(SUBAREA):
  RESIDENTIAL (24. DU/AC OR LESS) RUNOFF COEFFICIENT = .7100
  S.C.S. CURVE NUMBER (AMC II) =   0
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   100.00
  UPSTREAM ELEVATION(FEET) =    584.50
  DOWNSTREAM ELEVATION(FEET) =    583.50
  ELEVATION DIFFERENCE(FEET) =      1.00
  SUBAREA OVERLAND TIME OF FLOW(MIN.) =    5.660
  WARNING: INITIAL SUBAREA FLOW PATH LENGTH IS GREATER THAN
           THE MAXIMUM OVERLAND FLOW LENGTH =    65.00
           (Reference: Table 3-1B of Hydrology Manual)
           THE MAXIMUM OVERLAND FLOW LENGTH IS USED IN Tc CALCULATION!
   100 YEAR RAINFALL INTENSITY(INCH/HOUR) =  8.027
  SUBAREA RUNOFF(CFS) =      0.57
  TOTAL AREA(ACRES) =      0.10   TOTAL RUNOFF(CFS) =      0.57

**************************************************************************
```

```
  FLOW PROCESS FROM NODE    102.00 TO NODE    104.00 IS CODE =  62
----------------------------------------------------------------------------
  >>>>>COMPUTE STREET FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>(STREET TABLE SECTION #  3 USED)<<<<<
============================================================================
  UPSTREAM ELEVATION(FEET) =  583.10  DOWNSTREAM ELEVATION(FEET) =  579.00
  STREET LENGTH(FEET) =   459.00   CURB HEIGHT(INCHES) =  4.0
  STREET HALFWIDTH(FEET) = 12.00

  DISTANCE FROM CROWN TO CROSSFALL GRADEBREAK(FEET) =   6.00
  INSIDE STREET CROSSFALL(DECIMAL) =  0.020
  OUTSIDE STREET CROSSFALL(DECIMAL)  =  0.020

  SPECIFIED NUMBER OF HALFSTREETS CARRYING RUNOFF =  2
  Manning's FRICTION FACTOR for Streetflow Section(curb-to-curb) =   0.0150

    **TRAVEL TIME COMPUTED USING ESTIMATED FLOW(CFS) =       2.55
    STREETFLOW MODEL RESULTS USING ESTIMATED FLOW:
    STREET FLOW DEPTH(FEET) =  0.23
    HALFSTREET FLOOD WIDTH(FEET) =    7.92
    AVERAGE FLOW VELOCITY(FEET/SEC.) =    1.83
    PRODUCT OF DEPTH&VELOCITY(FT*FT/SEC.) =    0.42
  STREET FLOW TRAVEL TIME(MIN.) =   4.19   Tc(MIN.) =    9.85
   100 YEAR RAINFALL INTENSITY(INCH/HOUR) =  5.615
  *USER SPECIFIED(SUBAREA):
  RESIDENTIAL (24. DU/AC OR LESS) RUNOFF COEFFICIENT = .7100
  S.C.S. CURVE NUMBER (AMC II) =   0
  AREA-AVERAGE RUNOFF COEFFICIENT =  0.710
  SUBAREA AREA(ACRES) =    0.98      SUBAREA RUNOFF(CFS) =    3.91
  TOTAL AREA(ACRES) =        1.1        PEAK FLOW RATE(CFS) =       4.31

  END OF SUBAREA STREET FLOW HYDRAULICS:
  DEPTH(FEET) = 0.27   HALFSTREET FLOOD WIDTH(FEET) =   9.89
  FLOW VELOCITY(FEET/SEC.) =  2.05   DEPTH*VELOCITY(FT*FT/SEC.) =   0.56
  LONGEST FLOWPATH FROM NODE    100.00 TO NODE    104.00 =     559.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    106.00 TO NODE    104.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
   100 YEAR RAINFALL INTENSITY(INCH/HOUR) =  5.615
  *USER SPECIFIED(SUBAREA):
  RESIDENTIAL (24. DU/AC OR LESS) RUNOFF COEFFICIENT = .7100
  S.C.S. CURVE NUMBER (AMC II) =   0
  AREA-AVERAGE RUNOFF COEFFICIENT = 0.7100
  SUBAREA AREA(ACRES) =    0.45   SUBAREA RUNOFF(CFS) =    1.79
  TOTAL AREA(ACRES) =        1.5   TOTAL RUNOFF(CFS) =       6.10
  TC(MIN.) =    9.85

****************************************************************************
  FLOW PROCESS FROM NODE    104.00 TO NODE    108.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   570.80  DOWNSTREAM(FEET) =   569.70
  FLOW LENGTH(FEET) =   266.30   MANNING'S N =  0.013
  DEPTH OF FLOW IN  18.0 INCH PIPE IS  13.7 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   4.23
  ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       6.10
  PIPE TRAVEL TIME(MIN.) =   1.05    Tc(MIN.) =   10.90
  LONGEST FLOWPATH FROM NODE    100.00 TO NODE    108.00 =     825.30 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    108.00 TO NODE    108.00 IS CODE =   1
----------------------------------------------------------------------------
  >>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<
============================================================================
  TOTAL NUMBER OF STREAMS =  2
  CONFLUENCE VALUES USED FOR INDEPENDENT STREAM  1 ARE:
  TIME OF CONCENTRATION(MIN.) =   10.90
```

```
  RAINFALL INTENSITY(INCH/HR) =   5.26
  TOTAL STREAM AREA(ACRES) =     1.53
  PEAK FLOW RATE(CFS) AT CONFLUENCE =      6.10

****************************************************************************
  FLOW PROCESS FROM NODE    110.00 TO NODE    112.00 IS CODE =  21
----------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
============================================================================
  *USER SPECIFIED(SUBAREA):
  RESIDENTIAL (24. DU/AC OR LESS) RUNOFF COEFFICIENT = .7100
  S.C.S. CURVE NUMBER (AMC II) =   0
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   100.00
  UPSTREAM ELEVATION(FEET) =    580.80
  DOWNSTREAM ELEVATION(FEET) =    579.22
  ELEVATION DIFFERENCE(FEET) =      1.58
  SUBAREA OVERLAND TIME OF FLOW(MIN.) =    5.072
  WARNING: INITIAL SUBAREA FLOW PATH LENGTH IS GREATER THAN
           THE MAXIMUM OVERLAND FLOW LENGTH =    70.80
           (Reference: Table 3-1B of Hydrology Manual)
           THE MAXIMUM OVERLAND FLOW LENGTH IS USED IN Tc CALCULATION!
   100 YEAR RAINFALL INTENSITY(INCH/HOUR) =  8.615
  SUBAREA RUNOFF(CFS) =      0.61
  TOTAL AREA(ACRES) =      0.10   TOTAL RUNOFF(CFS) =      0.61

****************************************************************************
  FLOW PROCESS FROM NODE    112.00 TO NODE    108.00 IS CODE =  62
----------------------------------------------------------------------------
  >>>>>COMPUTE STREET FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>(STREET TABLE SECTION #  3 USED)<<<<<
============================================================================
  UPSTREAM ELEVATION(FEET) =  579.22  DOWNSTREAM ELEVATION(FEET) =  576.40
  STREET LENGTH(FEET) =   292.00   CURB HEIGHT(INCHES) =  4.0
  STREET HALFWIDTH(FEET) = 12.00

  DISTANCE FROM CROWN TO CROSSFALL GRADEBREAK(FEET) =   6.00
  INSIDE STREET CROSSFALL(DECIMAL) =  0.020
  OUTSIDE STREET CROSSFALL(DECIMAL)  =  0.020

  SPECIFIED NUMBER OF HALFSTREETS CARRYING RUNOFF =  2
  Manning's FRICTION FACTOR for Streetflow Section(curb-to-curb) =   0.0150

    **TRAVEL TIME COMPUTED USING ESTIMATED FLOW(CFS) =       3.32
    STREETFLOW MODEL RESULTS USING ESTIMATED FLOW:
    STREET FLOW DEPTH(FEET) =  0.25
    HALFSTREET FLOOD WIDTH(FEET) =    8.77
    AVERAGE FLOW VELOCITY(FEET/SEC.) =    1.98
    PRODUCT OF DEPTH&VELOCITY(FT*FT/SEC.) =    0.49
  STREET FLOW TRAVEL TIME(MIN.) =   2.46   Tc(MIN.) =    7.53
   100 YEAR RAINFALL INTENSITY(INCH/HOUR) =  6.674
  *USER SPECIFIED(SUBAREA):
  RESIDENTIAL (24. DU/AC OR LESS) RUNOFF COEFFICIENT = .7100
  S.C.S. CURVE NUMBER (AMC II) =   0
  AREA-AVERAGE RUNOFF COEFFICIENT =  0.710
  SUBAREA AREA(ACRES) =    1.13      SUBAREA RUNOFF(CFS) =    5.35
  TOTAL AREA(ACRES) =        1.2        PEAK FLOW RATE(CFS) =       5.83

  END OF SUBAREA STREET FLOW HYDRAULICS:
  DEPTH(FEET) = 0.29   HALFSTREET FLOOD WIDTH(FEET) =  11.02
  FLOW VELOCITY(FEET/SEC.) =  2.27   DEPTH*VELOCITY(FT*FT/SEC.) =   0.67
  LONGEST FLOWPATH FROM NODE    110.00 TO NODE    108.00 =     392.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    108.00 TO NODE    108.00 IS CODE =   1
----------------------------------------------------------------------------
  >>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<
  >>>>>AND COMPUTE VARIOUS CONFLUENCED STREAM VALUES<<<<<
============================================================================
  TOTAL NUMBER OF STREAMS =  2
  CONFLUENCE VALUES USED FOR INDEPENDENT STREAM  2 ARE:
  TIME OF CONCENTRATION(MIN.) =    7.53
  RAINFALL INTENSITY(INCH/HR) =   6.67
  TOTAL STREAM AREA(ACRES) =     1.23
```

```
 PEAK FLOW RATE(CFS) AT CONFLUENCE =      5.83

 ** CONFLUENCE DATA **
 STREAM     RUNOFF       Tc      INTENSITY      AREA
 NUMBER      (CFS)     (MIN.)   (INCH/HOUR)    (ACRE)
     1        6.10    10.90        5.260          1.53
     2        5.83     7.53        6.674          1.23

 RAINFALL INTENSITY AND TIME OF CONCENTRATION RATIO
 CONFLUENCE FORMULA USED FOR  2 STREAMS.

 ** PEAK FLOW RATE TABLE **
 STREAM     RUNOFF      Tc      INTENSITY
 NUMBER      (CFS)    (MIN.)   (INCH/HOUR)
     1       10.04     7.53       6.674
     2       10.69    10.90       5.260

 COMPUTED CONFLUENCE ESTIMATES ARE AS FOLLOWS:
 PEAK FLOW RATE(CFS) =      10.69   Tc(MIN.) =   10.90
 TOTAL AREA(ACRES) =        2.8
 LONGEST FLOWPATH FROM NODE    100.00 TO NODE    108.00 =     825.30 FEET.

****************************************************************************
 FLOW PROCESS FROM NODE    114.00 TO NODE    108.00 IS CODE =  81
----------------------------------------------------------------------------
 >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  100 YEAR RAINFALL INTENSITY(INCH/HOUR) =  5.260
 *USER SPECIFIED(SUBAREA):
 RESIDENTIAL (24. DU/AC OR LESS) RUNOFF COEFFICIENT = .7100
 S.C.S. CURVE NUMBER (AMC II) =   0
 AREA-AVERAGE RUNOFF COEFFICIENT = 0.7100
 SUBAREA AREA(ACRES) =    0.84   SUBAREA RUNOFF(CFS) =    3.14
 TOTAL AREA(ACRES) =        3.6   TOTAL RUNOFF(CFS) =      13.44
 TC(MIN.) =   10.90

****************************************************************************
 FLOW PROCESS FROM NODE    108.00 TO NODE    118.00 IS CODE =  31
----------------------------------------------------------------------------
 >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
 >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
 ELEVATION DATA: UPSTREAM(FEET) =   567.50  DOWNSTREAM(FEET) =   566.41
 FLOW LENGTH(FEET) =    38.26   MANNING'S N =  0.013
 DEPTH OF FLOW IN  18.0 INCH PIPE IS  11.9 INCHES
 PIPE-FLOW VELOCITY(FEET/SEC.) =  10.81
 ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
 PIPE-FLOW(CFS) =      13.44
 PIPE TRAVEL TIME(MIN.) =   0.06    Tc(MIN.) =   10.96
 LONGEST FLOWPATH FROM NODE    100.00 TO NODE    118.00 =     863.56 FEET.

****************************************************************************
 FLOW PROCESS FROM NODE    118.00 TO NODE    118.00 IS CODE =   1
----------------------------------------------------------------------------
 >>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<
============================================================================
 TOTAL NUMBER OF STREAMS =  2
 CONFLUENCE VALUES USED FOR INDEPENDENT STREAM  1 ARE:
 TIME OF CONCENTRATION(MIN.) =   10.96
 RAINFALL INTENSITY(INCH/HR) =   5.24
 TOTAL STREAM AREA(ACRES) =     3.60
 PEAK FLOW RATE(CFS) AT CONFLUENCE =     13.44

****************************************************************************
 FLOW PROCESS FROM NODE    115.00 TO NODE    116.00 IS CODE =  21
----------------------------------------------------------------------------
 >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
============================================================================
 *USER SPECIFIED(SUBAREA):
 RESIDENTIAL (24. DU/AC OR LESS) RUNOFF COEFFICIENT = .7100
 S.C.S. CURVE NUMBER (AMC II) =   0
 INITIAL SUBAREA FLOW-LENGTH(FEET) =   100.00
 UPSTREAM ELEVATION(FEET) =    574.20
```

```
  DOWNSTREAM ELEVATION(FEET) =    574.00
  ELEVATION DIFFERENCE(FEET) =      0.20
  SUBAREA OVERLAND TIME OF FLOW(MIN.) =    6.254
  WARNING: INITIAL SUBAREA FLOW PATH LENGTH IS GREATER THAN
           THE MAXIMUM OVERLAND FLOW LENGTH =    50.00
           (Reference: Table 3-1B of Hydrology Manual)
           THE MAXIMUM OVERLAND FLOW LENGTH IS USED IN Tc CALCULATION!
   100 YEAR RAINFALL INTENSITY(INCH/HOUR) =  7.526
  SUBAREA RUNOFF(CFS) =      0.64
  TOTAL AREA(ACRES) =      0.12   TOTAL RUNOFF(CFS) =      0.64

****************************************************************************
  FLOW PROCESS FROM NODE    116.00 TO NODE    118.00 IS CODE =  51
----------------------------------------------------------------------------
  >>>>>COMPUTE TRAPEZOIDAL CHANNEL FLOW<<<<<
  >>>>>TRAVELTIME THRU SUBAREA (EXISTING ELEMENT)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =    573.70  DOWNSTREAM(FEET) =    572.70
  CHANNEL LENGTH THRU SUBAREA(FEET) =   106.00   CHANNEL SLOPE =  0.0094
  CHANNEL BASE(FEET) =    0.00   "Z" FACTOR =  50.000
  MANNING'S FACTOR = 0.015   MAXIMUM DEPTH(FEET) =   0.50
   100 YEAR RAINFALL INTENSITY(INCH/HOUR) =  6.761
  *USER SPECIFIED(SUBAREA):
  RESIDENTIAL (24. DU/AC OR LESS) RUNOFF COEFFICIENT = .7100
  S.C.S. CURVE NUMBER (AMC II) =   0
  TRAVEL TIME COMPUTED USING ESTIMATED FLOW(CFS) =       1.41
  TRAVEL TIME THRU SUBAREA BASED ON VELOCITY(FEET/SEC.) =   1.56
  AVERAGE FLOW DEPTH(FEET) =   0.13   TRAVEL TIME(MIN.) =   1.13
  Tc(MIN.) =    7.38
  SUBAREA AREA(ACRES) =     0.32       SUBAREA RUNOFF(CFS) =    1.54
  AREA-AVERAGE RUNOFF COEFFICIENT =  0.710
  TOTAL AREA(ACRES) =        0.4         PEAK FLOW RATE(CFS) =       2.11

  END OF SUBAREA CHANNEL FLOW HYDRAULICS:
  DEPTH(FEET) =  0.16   FLOW VELOCITY(FEET/SEC.) =   1.75
  LONGEST FLOWPATH FROM NODE    115.00 TO NODE    118.00 =     206.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    118.00 TO NODE    118.00 IS CODE =   1
----------------------------------------------------------------------------
  >>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<
  >>>>>AND COMPUTE VARIOUS CONFLUENCED STREAM VALUES<<<<<
============================================================================
  TOTAL NUMBER OF STREAMS =  2
  CONFLUENCE VALUES USED FOR INDEPENDENT STREAM  2 ARE:
  TIME OF CONCENTRATION(MIN.) =    7.38
  RAINFALL INTENSITY(INCH/HR) =   6.76
  TOTAL STREAM AREA(ACRES) =     0.44
  PEAK FLOW RATE(CFS) AT CONFLUENCE =      2.11

  ** CONFLUENCE DATA **
  STREAM     RUNOFF       Tc      INTENSITY      AREA
  NUMBER      (CFS)     (MIN.)   (INCH/HOUR)    (ACRE)
      1       13.44    10.96        5.242          3.60
      2        2.11     7.38        6.761          0.44

  RAINFALL INTENSITY AND TIME OF CONCENTRATION RATIO
  CONFLUENCE FORMULA USED FOR  2 STREAMS.

  ** PEAK FLOW RATE TABLE **
  STREAM     RUNOFF      Tc      INTENSITY
  NUMBER      (CFS)    (MIN.)   (INCH/HOUR)
      1       12.53     7.38       6.761
      2       15.08    10.96       5.242

  COMPUTED CONFLUENCE ESTIMATES ARE AS FOLLOWS:
  PEAK FLOW RATE(CFS) =      15.08   Tc(MIN.) =   10.96
  TOTAL AREA(ACRES) =        4.0
  LONGEST FLOWPATH FROM NODE    100.00 TO NODE    118.00 =     863.56 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    118.00 TO NODE    119.00 IS CODE =  31
----------------------------------------------------------------------------
```

```
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
================================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   566.41  DOWNSTREAM(FEET) =   564.70
  FLOW LENGTH(FEET) =   300.13   MANNING'S N =  0.013
  DEPTH OF FLOW IN  24.0 INCH PIPE IS  17.9 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   6.00
  ESTIMATED PIPE DIAMETER(INCH) =  24.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      15.08
  PIPE TRAVEL TIME(MIN.) =   0.83    Tc(MIN.) =   11.79
  LONGEST FLOWPATH FROM NODE    100.00 TO NODE    119.00 =    1163.69 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    119.00 TO NODE    119.00 IS CODE =  10
----------------------------------------------------------------------------
  >>>>>MAIN-STREAM MEMORY COPIED ONTO MEMORY BANK # 2 <<<<<
============================================================================

****************************************************************************
  FLOW PROCESS FROM NODE    200.00 TO NODE    202.00 IS CODE =  21
----------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
============================================================================
  *USER SPECIFIED(SUBAREA):
  RESIDENTIAL (24. DU/AC OR LESS) RUNOFF COEFFICIENT = .7100
  S.C.S. CURVE NUMBER (AMC II) =   0
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   100.00
  UPSTREAM ELEVATION(FEET) =    579.50
  DOWNSTREAM ELEVATION(FEET) =    578.50
  ELEVATION DIFFERENCE(FEET) =      1.00
  SUBAREA OVERLAND TIME OF FLOW(MIN.) =    5.660
  WARNING: INITIAL SUBAREA FLOW PATH LENGTH IS GREATER THAN
           THE MAXIMUM OVERLAND FLOW LENGTH =    65.00
           (Reference: Table 3-1B of Hydrology Manual)
           THE MAXIMUM OVERLAND FLOW LENGTH IS USED IN Tc CALCULATION!
   100 YEAR RAINFALL INTENSITY(INCH/HOUR) =  8.027
  SUBAREA RUNOFF(CFS) =      0.57
  TOTAL AREA(ACRES) =      0.10   TOTAL RUNOFF(CFS) =      0.57

****************************************************************************
  FLOW PROCESS FROM NODE    202.00 TO NODE    204.00 IS CODE =  62
----------------------------------------------------------------------------
  >>>>>COMPUTE STREET FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>(STREET TABLE SECTION #  3 USED)<<<<<
============================================================================
  UPSTREAM ELEVATION(FEET) =  578.50  DOWNSTREAM ELEVATION(FEET) =  573.60
  STREET LENGTH(FEET) =   440.00   CURB HEIGHT(INCHES) =  4.0
  STREET HALFWIDTH(FEET) = 12.00

  DISTANCE FROM CROWN TO CROSSFALL GRADEBREAK(FEET) =   6.00
  INSIDE STREET CROSSFALL(DECIMAL) =  0.020
  OUTSIDE STREET CROSSFALL(DECIMAL)  =  0.020

  SPECIFIED NUMBER OF HALFSTREETS CARRYING RUNOFF =  2
  Manning's FRICTION FACTOR for Streetflow Section(curb-to-curb) =   0.0150

    **TRAVEL TIME COMPUTED USING ESTIMATED FLOW(CFS) =       3.51
    STREETFLOW MODEL RESULTS USING ESTIMATED FLOW:
    STREET FLOW DEPTH(FEET) =  0.25
    HALFSTREET FLOOD WIDTH(FEET) =    8.67
    AVERAGE FLOW VELOCITY(FEET/SEC.) =    2.13
    PRODUCT OF DEPTH&VELOCITY(FT*FT/SEC.) =    0.53
  STREET FLOW TRAVEL TIME(MIN.) =   3.44   Tc(MIN.) =    9.10
   100 YEAR RAINFALL INTENSITY(INCH/HOUR) =  5.908
  *USER SPECIFIED(SUBAREA):
  RESIDENTIAL (24. DU/AC OR LESS) RUNOFF COEFFICIENT = .7100
  S.C.S. CURVE NUMBER (AMC II) =   0
  AREA-AVERAGE RUNOFF COEFFICIENT =  0.710
  SUBAREA AREA(ACRES) =    1.38      SUBAREA RUNOFF(CFS) =    5.79
  TOTAL AREA(ACRES) =        1.5        PEAK FLOW RATE(CFS) =       6.21

  END OF SUBAREA STREET FLOW HYDRAULICS:
  DEPTH(FEET) = 0.29   HALFSTREET FLOOD WIDTH(FEET) =  10.92
```

```
 FLOW VELOCITY(FEET/SEC.) =  2.46   DEPTH*VELOCITY(FT*FT/SEC.) =   0.72
 LONGEST FLOWPATH FROM NODE    200.00 TO NODE    204.00 =     540.00 FEET.

****************************************************************************
 FLOW PROCESS FROM NODE    206.00 TO NODE    204.00 IS CODE =  81
----------------------------------------------------------------------------
 >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  100 YEAR RAINFALL INTENSITY(INCH/HOUR) =  5.908
 *USER SPECIFIED(SUBAREA):
 RESIDENTIAL (24. DU/AC OR LESS) RUNOFF COEFFICIENT = .7100
 S.C.S. CURVE NUMBER (AMC II) =   0
 AREA-AVERAGE RUNOFF COEFFICIENT = 0.7100
 SUBAREA AREA(ACRES) =    0.44   SUBAREA RUNOFF(CFS) =    1.85
 TOTAL AREA(ACRES) =        1.9   TOTAL RUNOFF(CFS) =       8.05
 TC(MIN.) =    9.10

****************************************************************************
 FLOW PROCESS FROM NODE    204.00 TO NODE    119.00 IS CODE =  31
----------------------------------------------------------------------------
 >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
 >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
 ELEVATION DATA: UPSTREAM(FEET) =   565.50  DOWNSTREAM(FEET) =   564.90
 FLOW LENGTH(FEET) =    25.00   MANNING'S N =  0.013
 ESTIMATED PIPE DIAMETER(INCH) INCREASED TO 18.000
 DEPTH OF FLOW IN  18.0 INCH PIPE IS   9.1 INCHES
 PIPE-FLOW VELOCITY(FEET/SEC.) =   9.01
 ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
 PIPE-FLOW(CFS) =       8.05
 PIPE TRAVEL TIME(MIN.) =   0.05    Tc(MIN.) =    9.15
 LONGEST FLOWPATH FROM NODE    200.00 TO NODE    119.00 =     565.00 FEET.

****************************************************************************
 FLOW PROCESS FROM NODE    119.00 TO NODE    119.00 IS CODE =  11
----------------------------------------------------------------------------
 >>>>>CONFLUENCE MEMORY BANK # 2 WITH THE MAIN-STREAM MEMORY<<<<<
============================================================================

 ** MAIN STREAM CONFLUENCE DATA **
 STREAM     RUNOFF      Tc      INTENSITY     AREA
 NUMBER      (CFS)    (MIN.)   (INCH/HOUR)   (ACRE)
     1        8.05     9.15       5.888        1.92
 LONGEST FLOWPATH FROM NODE    200.00 TO NODE    119.00 =     565.00 FEET.

 ** MEMORY BANK #  2 CONFLUENCE DATA **
 STREAM     RUNOFF      Tc      INTENSITY     AREA
 NUMBER      (CFS)    (MIN.)   (INCH/HOUR)   (ACRE)
     1       15.08    11.79       5.000        4.04
 LONGEST FLOWPATH FROM NODE    100.00 TO NODE    119.00 =    1163.69 FEET.

 ** PEAK FLOW RATE TABLE **
 STREAM    RUNOFF       Tc      INTENSITY
 NUMBER     (CFS)     (MIN.)   (INCH/HOUR)
     1      19.76       9.15        5.888
     2      21.92      11.79        5.000

 COMPUTED CONFLUENCE ESTIMATES ARE AS FOLLOWS:
 PEAK FLOW RATE(CFS) =      21.92   Tc(MIN.) =   11.79
 TOTAL AREA(ACRES) =        6.0

****************************************************************************
 FLOW PROCESS FROM NODE    119.00 TO NODE    119.00 IS CODE =  12
----------------------------------------------------------------------------
 >>>>>CLEAR MEMORY BANK # 2 <<<<<
============================================================================

****************************************************************************
 FLOW PROCESS FROM NODE    119.00 TO NODE    120.00 IS CODE =  31
----------------------------------------------------------------------------
 >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
 >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
```

```
  ELEVATION DATA: UPSTREAM(FEET) =   564.90  DOWNSTREAM(FEET) =   564.50
  FLOW LENGTH(FEET) =    26.93   MANNING'S N =  0.013
  DEPTH OF FLOW IN  24.0 INCH PIPE IS  16.5 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   9.54
  ESTIMATED PIPE DIAMETER(INCH) =  24.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      21.92
  PIPE TRAVEL TIME(MIN.) =   0.05    Tc(MIN.) =   11.84
  LONGEST FLOWPATH FROM NODE    100.00 TO NODE    120.00 =    1190.62 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    120.00 TO NODE    120.00 IS CODE =  10
----------------------------------------------------------------------------
  >>>>>MAIN-STREAM MEMORY COPIED ONTO MEMORY BANK # 2 <<<<<
============================================================================

****************************************************************************
  FLOW PROCESS FROM NODE     25.00 TO NODE     25.00 IS CODE =   7
----------------------------------------------------------------------------
  >>>>>USER SPECIFIED HYDROLOGY INFORMATION AT NODE<<<<<
============================================================================
  USER-SPECIFIED VALUES ARE AS FOLLOWS:
  TC(MIN) =   6.74   RAIN INTENSITY(INCH/HOUR) =  7.17
  TOTAL AREA(ACRES) =     0.45   TOTAL RUNOFF(CFS) =      2.57

+--------------------------------------------------------------------------+
|                                                                          |
| The following Code 8 is the driveway and sidewalk drain towards the      |
| exisitng drive                                                           |
+--------------------------------------------------------------------------+

****************************************************************************
  FLOW PROCESS FROM NODE     25.00 TO NODE     25.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
   100 YEAR RAINFALL INTENSITY(INCH/HOUR) =  7.171
  *USER SPECIFIED(SUBAREA):
  RESIDENTIAL (14.5 DU/AC OR LESS) RUNOFF COEFFICIENT = .7100
  S.C.S. CURVE NUMBER (AMC II) =   0
  AREA-AVERAGE RUNOFF COEFFICIENT = 0.7769
  SUBAREA AREA(ACRES) =    0.09   SUBAREA RUNOFF(CFS) =    0.46
  TOTAL AREA(ACRES) =        0.5   TOTAL RUNOFF(CFS) =       3.03
  TC(MIN.) =    6.74

****************************************************************************
  FLOW PROCESS FROM NODE     25.00 TO NODE     20.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   565.50  DOWNSTREAM(FEET) =   563.95
  FLOW LENGTH(FEET) =   105.00   MANNING'S N =  0.013
  ESTIMATED PIPE DIAMETER(INCH) INCREASED TO 18.000
  DEPTH OF FLOW IN  18.0 INCH PIPE IS   6.0 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   5.81
  ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       3.03
  PIPE TRAVEL TIME(MIN.) =   0.30    Tc(MIN.) =    7.04
  LONGEST FLOWPATH FROM NODE    100.00 TO NODE     20.00 =    1295.62 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE     20.00 TO NODE     20.00 IS CODE =   1
----------------------------------------------------------------------------
  >>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<
============================================================================
  TOTAL NUMBER OF STREAMS =  2
  CONFLUENCE VALUES USED FOR INDEPENDENT STREAM  1 ARE:
  TIME OF CONCENTRATION(MIN.) =    7.04
  RAINFALL INTENSITY(INCH/HR) =   6.97
  TOTAL STREAM AREA(ACRES) =     0.54
  PEAK FLOW RATE(CFS) AT CONFLUENCE =      3.03

****************************************************************************
```

```
 FLOW PROCESS FROM NODE     20.00 TO NODE     20.00 IS CODE =   7
----------------------------------------------------------------------------
 >>>>>USER SPECIFIED HYDROLOGY INFORMATION AT NODE<<<<<
============================================================================
 USER-SPECIFIED VALUES ARE AS FOLLOWS:
 TC(MIN) =  50.98   RAIN INTENSITY(INCH/HOUR) =  1.94
 TOTAL AREA(ACRES) =     1.76   TOTAL RUNOFF(CFS) =      2.17

****************************************************************************
 FLOW PROCESS FROM NODE     20.00 TO NODE     20.00 IS CODE =   1
----------------------------------------------------------------------------
 >>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<
 >>>>>AND COMPUTE VARIOUS CONFLUENCED STREAM VALUES<<<<<
============================================================================
 TOTAL NUMBER OF STREAMS =  2
 CONFLUENCE VALUES USED FOR INDEPENDENT STREAM  2 ARE:
 TIME OF CONCENTRATION(MIN.) =   50.98
 RAINFALL INTENSITY(INCH/HR) =   1.94
 TOTAL STREAM AREA(ACRES) =     1.76
 PEAK FLOW RATE(CFS) AT CONFLUENCE =      2.17

 ** CONFLUENCE DATA **
 STREAM     RUNOFF       Tc      INTENSITY      AREA
 NUMBER      (CFS)     (MIN.)   (INCH/HOUR)    (ACRE)
     1        3.03     7.04        6.972          0.54
     2        2.17    50.98        1.945          1.76

 RAINFALL INTENSITY AND TIME OF CONCENTRATION RATIO
 CONFLUENCE FORMULA USED FOR  2 STREAMS.

 ** PEAK FLOW RATE TABLE **
 STREAM     RUNOFF      Tc      INTENSITY
 NUMBER      (CFS)    (MIN.)   (INCH/HOUR)
     1        3.33     7.04       6.972
     2        3.02    50.98       1.945

 COMPUTED CONFLUENCE ESTIMATES ARE AS FOLLOWS:
 PEAK FLOW RATE(CFS) =       3.33   Tc(MIN.) =    7.04
 TOTAL AREA(ACRES) =        2.3
 LONGEST FLOWPATH FROM NODE    100.00 TO NODE     20.00 =    1295.62 FEET.

****************************************************************************
 FLOW PROCESS FROM NODE     20.00 TO NODE    120.00 IS CODE =  31
----------------------------------------------------------------------------
 >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
 >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
 ELEVATION DATA: UPSTREAM(FEET) =   563.90  DOWNSTREAM(FEET) =   562.84
 FLOW LENGTH(FEET) =   205.00   MANNING'S N =  0.013
 ESTIMATED PIPE DIAMETER(INCH) INCREASED TO 18.000
 DEPTH OF FLOW IN  18.0 INCH PIPE IS   8.5 INCHES
 PIPE-FLOW VELOCITY(FEET/SEC.) =   4.06
 ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
 PIPE-FLOW(CFS) =       3.33
 PIPE TRAVEL TIME(MIN.) =   0.84    Tc(MIN.) =    7.88
 LONGEST FLOWPATH FROM NODE    100.00 TO NODE    120.00 =    1500.62 FEET.

****************************************************************************
 FLOW PROCESS FROM NODE    120.00 TO NODE    120.00 IS CODE =  11
----------------------------------------------------------------------------
 >>>>>CONFLUENCE MEMORY BANK # 2 WITH THE MAIN-STREAM MEMORY<<<<<
============================================================================

 ** MAIN STREAM CONFLUENCE DATA **
 STREAM     RUNOFF      Tc      INTENSITY     AREA
 NUMBER      (CFS)    (MIN.)   (INCH/HOUR)   (ACRE)
     1        3.33     7.88       6.482        2.30
 LONGEST FLOWPATH FROM NODE    100.00 TO NODE    120.00 =    1500.62 FEET.

 ** MEMORY BANK #  2 CONFLUENCE DATA **
 STREAM     RUNOFF      Tc      INTENSITY     AREA
 NUMBER      (CFS)    (MIN.)   (INCH/HOUR)   (ACRE)
     1       21.92    11.84       4.987        5.96
```

```
  LONGEST FLOWPATH FROM NODE    100.00 TO NODE    120.00 =    1190.62 FEET.

  ** PEAK FLOW RATE TABLE **
  STREAM    RUNOFF       Tc      INTENSITY
  NUMBER     (CFS)     (MIN.)   (INCH/HOUR)
      1      17.92       7.88        6.482
      2      24.48      11.84        4.987

  COMPUTED CONFLUENCE ESTIMATES ARE AS FOLLOWS:
  PEAK FLOW RATE(CFS) =      24.48   Tc(MIN.) =   11.84
  TOTAL AREA(ACRES) =        8.3

****************************************************************************
  FLOW PROCESS FROM NODE    120.00 TO NODE    120.00 IS CODE =  12
----------------------------------------------------------------------------
  >>>>>CLEAR MEMORY BANK # 2 <<<<<
============================================================================

****************************************************************************
  FLOW PROCESS FROM NODE    120.00 TO NODE      1.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   564.50  DOWNSTREAM(FEET) =   564.30
  FLOW LENGTH(FEET) =    25.30   MANNING'S N =  0.013
  DEPTH OF FLOW IN  27.0 INCH PIPE IS  20.3 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   7.65
  ESTIMATED PIPE DIAMETER(INCH) =  27.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      24.48
  PIPE TRAVEL TIME(MIN.) =   0.06    Tc(MIN.) =   11.89
  LONGEST FLOWPATH FROM NODE    100.00 TO NODE      1.00 =    1525.92 FEET.
============================================================================
  END OF STUDY SUMMARY:
  TOTAL AREA(ACRES)     =        8.3  TC(MIN.) =     11.89
  PEAK FLOW RATE(CFS)   =      24.48
============================================================================
============================================================================
  END OF RATIONAL METHOD ANALYSIS
```

Developed Condition
100 – Year Design Storm
Mitigated Flow

```
**************************************************************************

            RATIONAL METHOD HYDROLOGY COMPUTER PROGRAM PACKAGE
            Reference: SAN DIEGO COUNTY FLOOD CONTROL DISTRICT
                         2003,1985,1981 HYDROLOGY MANUAL
          (c) Copyright 1982-2015 Advanced Engineering Software (aes)
              Ver. 22.0 Release Date: 07/01/2015  License ID 1239

                          Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* Las Posas                                                             *
* 100-Year Proposed                                                     *
* DLN 1482, W.O. #0025-0364                                             *
 ************************************************************************

  FILE NAME: R:\1482\AES\MIT\100.DAT
  TIME/DATE OF STUDY: 15:46 02/16/2022
--------------------------------------------------------------------------
  USER SPECIFIED HYDROLOGY AND HYDRAULIC MODEL INFORMATION:
--------------------------------------------------------------------------
  2003 SAN DIEGO MANUAL CRITERIA

  USER SPECIFIED STORM EVENT(YEAR) = 100.00
  6-HOUR DURATION PRECIPITATION (INCHES) =   3.300
  SPECIFIED MINIMUM PIPE SIZE(INCH) =  18.00
  SPECIFIED PERCENT OF GRADIENTS(DECIMAL) TO USE FOR FRICTION SLOPE = 0.95
  SAN DIEGO HYDROLOGY MANUAL "C"-VALUES USED FOR RATIONAL METHOD
  NOTE: USE MODIFIED RATIONAL METHOD PROCEDURES FOR CONFLUENCE ANALYSIS
  *USER-DEFINED STREET-SECTIONS FOR COUPLED PIPEFLOW AND STREETFLOW MODEL*
     HALF-  CROWN TO   STREET-CROSSFALL:   CURB  GUTTER-GEOMETRIES:  MANNING
     WIDTH  CROSSFALL  IN-  / OUT-/PARK-  HEIGHT  WIDTH  LIP   HIKE  FACTOR
NO.   (FT)     (FT)    SIDE / SIDE/ WAY    (FT)    (FT)  (FT)  (FT)    (n)
===  =====  =========  ================  ======  =====  ======  =====  =======
  1   16.0      8.0    0.020/0.020/0.020   0.50    2.00 0.0313 0.125 0.0150
  2   12.0      6.0    0.020/0.020/0.020   0.50    1.50 0.0313 0.125 0.0130
  3   12.0      6.0    0.020/0.020/ ---    0.33    1.50 0.0208 0.083 0.0150

  GLOBAL STREET FLOW-DEPTH CONSTRAINTS:
    1. Relative Flow-Depth =  0.00 FEET
       as (Maximum Allowable Street Flow Depth) - (Top-of-Curb)
    2. (Depth)*(Velocity) Constraint =  6.0 (FT*FT/S)
  *SIZE PIPE WITH A FLOW CAPACITY GREATER THAN
   OR EQUAL TO THE UPSTREAM TRIBUTARY PIPE.*

**************************************************************************
  FLOW PROCESS FROM NODE    100.00 TO NODE    102.00 IS CODE =  21
--------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
==========================================================================
  *USER SPECIFIED(SUBAREA):
  RESIDENTIAL (24. DU/AC OR LESS) RUNOFF COEFFICIENT = .7100
  S.C.S. CURVE NUMBER (AMC II) =  93
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   100.00
  UPSTREAM ELEVATION(FEET) =    584.50
  DOWNSTREAM ELEVATION(FEET) =    583.50
  ELEVATION DIFFERENCE(FEET) =      1.00
  SUBAREA OVERLAND TIME OF FLOW(MIN.) =    5.660
  WARNING: INITIAL SUBAREA FLOW PATH LENGTH IS GREATER THAN
           THE MAXIMUM OVERLAND FLOW LENGTH =    65.00
           (Reference: Table 3-1B of Hydrology Manual)
           THE MAXIMUM OVERLAND FLOW LENGTH IS USED IN Tc CALCULATION!
   100 YEAR RAINFALL INTENSITY(INCH/HOUR) =  8.027
  SUBAREA RUNOFF(CFS) =      0.57
  TOTAL AREA(ACRES) =      0.10   TOTAL RUNOFF(CFS) =      0.57

**************************************************************************
```

```
 FLOW PROCESS FROM NODE    102.00 TO NODE    104.00 IS CODE =  62
----------------------------------------------------------------------------
 >>>>>COMPUTE STREET FLOW TRAVEL TIME THRU SUBAREA<<<<<
 >>>>>(STREET TABLE SECTION #  3 USED)<<<<<
============================================================================
 UPSTREAM ELEVATION(FEET) =  583.10  DOWNSTREAM ELEVATION(FEET) =  579.00
 STREET LENGTH(FEET) =   459.00   CURB HEIGHT(INCHES) =  4.0
 STREET HALFWIDTH(FEET) = 12.00

 DISTANCE FROM CROWN TO CROSSFALL GRADEBREAK(FEET) =   6.00
 INSIDE STREET CROSSFALL(DECIMAL) =  0.020
 OUTSIDE STREET CROSSFALL(DECIMAL)  =  0.020

 SPECIFIED NUMBER OF HALFSTREETS CARRYING RUNOFF =  2
 Manning's FRICTION FACTOR for Streetflow Section(curb-to-curb) =   0.0150

   **TRAVEL TIME COMPUTED USING ESTIMATED FLOW(CFS) =       2.55
   STREETFLOW MODEL RESULTS USING ESTIMATED FLOW:
   STREET FLOW DEPTH(FEET) =  0.23
   HALFSTREET FLOOD WIDTH(FEET) =    7.92
   AVERAGE FLOW VELOCITY(FEET/SEC.) =    1.83
   PRODUCT OF DEPTH&VELOCITY(FT*FT/SEC.) =    0.42
 STREET FLOW TRAVEL TIME(MIN.) =   4.19   Tc(MIN.) =    9.85
  100 YEAR RAINFALL INTENSITY(INCH/HOUR) =  5.615
 *USER SPECIFIED(SUBAREA):
 RESIDENTIAL (24. DU/AC OR LESS) RUNOFF COEFFICIENT = .7100
 S.C.S. CURVE NUMBER (AMC II) =  93
 AREA-AVERAGE RUNOFF COEFFICIENT =  0.710
 SUBAREA AREA(ACRES) =    0.98      SUBAREA RUNOFF(CFS) =    3.91
 TOTAL AREA(ACRES) =        1.1        PEAK FLOW RATE(CFS) =       4.31

 END OF SUBAREA STREET FLOW HYDRAULICS:
 DEPTH(FEET) = 0.27   HALFSTREET FLOOD WIDTH(FEET) =   9.89
 FLOW VELOCITY(FEET/SEC.) =  2.05   DEPTH*VELOCITY(FT*FT/SEC.) =   0.56
 LONGEST FLOWPATH FROM NODE    100.00 TO NODE    104.00 =     559.00 FEET.

****************************************************************************
 FLOW PROCESS FROM NODE    106.00 TO NODE    104.00 IS CODE =  81
----------------------------------------------------------------------------
 >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  100 YEAR RAINFALL INTENSITY(INCH/HOUR) =  5.615
 *USER SPECIFIED(SUBAREA):
 RESIDENTIAL (24. DU/AC OR LESS) RUNOFF COEFFICIENT = .7100
 S.C.S. CURVE NUMBER (AMC II) =  93
 AREA-AVERAGE RUNOFF COEFFICIENT = 0.7100
 SUBAREA AREA(ACRES) =    0.45   SUBAREA RUNOFF(CFS) =    1.79
 TOTAL AREA(ACRES) =        1.5   TOTAL RUNOFF(CFS) =       6.10
 TC(MIN.) =    9.85

****************************************************************************
 FLOW PROCESS FROM NODE    104.00 TO NODE    108.00 IS CODE =  31
----------------------------------------------------------------------------
 >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
 >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
 ELEVATION DATA: UPSTREAM(FEET) =   570.80  DOWNSTREAM(FEET) =   569.70
 FLOW LENGTH(FEET) =   266.30   MANNING'S N =  0.013
 DEPTH OF FLOW IN  18.0 INCH PIPE IS  13.7 INCHES
 PIPE-FLOW VELOCITY(FEET/SEC.) =   4.23
 ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
 PIPE-FLOW(CFS) =       6.10
 PIPE TRAVEL TIME(MIN.) =   1.05    Tc(MIN.) =   10.90
 LONGEST FLOWPATH FROM NODE    100.00 TO NODE    108.00 =     825.30 FEET.

****************************************************************************
 FLOW PROCESS FROM NODE    108.00 TO NODE    108.00 IS CODE =   1
----------------------------------------------------------------------------
 >>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<
============================================================================
 TOTAL NUMBER OF STREAMS =  2
 CONFLUENCE VALUES USED FOR INDEPENDENT STREAM  1 ARE:
 TIME OF CONCENTRATION(MIN.) =   10.90
```

```
 RAINFALL INTENSITY(INCH/HR) =   5.26
 TOTAL STREAM AREA(ACRES) =     1.53
 PEAK FLOW RATE(CFS) AT CONFLUENCE =      6.10

****************************************************************************
 FLOW PROCESS FROM NODE    110.00 TO NODE    112.00 IS CODE =  21
----------------------------------------------------------------------------
 >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
============================================================================
 *USER SPECIFIED(SUBAREA):
 RESIDENTIAL (24. DU/AC OR LESS) RUNOFF COEFFICIENT = .7100
 S.C.S. CURVE NUMBER (AMC II) =  93
 INITIAL SUBAREA FLOW-LENGTH(FEET) =   100.00
 UPSTREAM ELEVATION(FEET) =    580.80
 DOWNSTREAM ELEVATION(FEET) =    579.22
 ELEVATION DIFFERENCE(FEET) =      1.58
 SUBAREA OVERLAND TIME OF FLOW(MIN.) =    5.072
 WARNING: INITIAL SUBAREA FLOW PATH LENGTH IS GREATER THAN
          THE MAXIMUM OVERLAND FLOW LENGTH =    70.80
          (Reference: Table 3-1B of Hydrology Manual)
          THE MAXIMUM OVERLAND FLOW LENGTH IS USED IN Tc CALCULATION!
  100 YEAR RAINFALL INTENSITY(INCH/HOUR) =  8.615
 SUBAREA RUNOFF(CFS) =      0.61
 TOTAL AREA(ACRES) =      0.10   TOTAL RUNOFF(CFS) =      0.61

****************************************************************************
 FLOW PROCESS FROM NODE    112.00 TO NODE    108.00 IS CODE =  62
----------------------------------------------------------------------------
 >>>>>COMPUTE STREET FLOW TRAVEL TIME THRU SUBAREA<<<<<
 >>>>>(STREET TABLE SECTION #  3 USED)<<<<<
============================================================================
 UPSTREAM ELEVATION(FEET) =  579.22  DOWNSTREAM ELEVATION(FEET) =  576.40
 STREET LENGTH(FEET) =   292.00   CURB HEIGHT(INCHES) =  4.0
 STREET HALFWIDTH(FEET) = 12.00

 DISTANCE FROM CROWN TO CROSSFALL GRADEBREAK(FEET) =   6.00
 INSIDE STREET CROSSFALL(DECIMAL) =  0.020
 OUTSIDE STREET CROSSFALL(DECIMAL)  =  0.020

 SPECIFIED NUMBER OF HALFSTREETS CARRYING RUNOFF =  2
 Manning's FRICTION FACTOR for Streetflow Section(curb-to-curb) =   0.0150

   **TRAVEL TIME COMPUTED USING ESTIMATED FLOW(CFS) =       3.32
   STREETFLOW MODEL RESULTS USING ESTIMATED FLOW:
   STREET FLOW DEPTH(FEET) =  0.25
   HALFSTREET FLOOD WIDTH(FEET) =    8.77
   AVERAGE FLOW VELOCITY(FEET/SEC.) =    1.98
   PRODUCT OF DEPTH&VELOCITY(FT*FT/SEC.) =    0.49
 STREET FLOW TRAVEL TIME(MIN.) =   2.46   Tc(MIN.) =    7.53
  100 YEAR RAINFALL INTENSITY(INCH/HOUR) =  6.674
 *USER SPECIFIED(SUBAREA):
 RESIDENTIAL (24. DU/AC OR LESS) RUNOFF COEFFICIENT = .7100
 S.C.S. CURVE NUMBER (AMC II) =  93
 AREA-AVERAGE RUNOFF COEFFICIENT =  0.710
 SUBAREA AREA(ACRES) =    1.13      SUBAREA RUNOFF(CFS) =    5.35
 TOTAL AREA(ACRES) =        1.2        PEAK FLOW RATE(CFS) =       5.83

 END OF SUBAREA STREET FLOW HYDRAULICS:
 DEPTH(FEET) = 0.29   HALFSTREET FLOOD WIDTH(FEET) =  11.02
 FLOW VELOCITY(FEET/SEC.) =  2.27   DEPTH*VELOCITY(FT*FT/SEC.) =   0.67
 LONGEST FLOWPATH FROM NODE    110.00 TO NODE    108.00 =     392.00 FEET.

****************************************************************************
 FLOW PROCESS FROM NODE    108.00 TO NODE    108.00 IS CODE =   1
----------------------------------------------------------------------------
 >>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<
 >>>>>AND COMPUTE VARIOUS CONFLUENCED STREAM VALUES<<<<<
============================================================================
 TOTAL NUMBER OF STREAMS =  2
 CONFLUENCE VALUES USED FOR INDEPENDENT STREAM  2 ARE:
 TIME OF CONCENTRATION(MIN.) =    7.53
 RAINFALL INTENSITY(INCH/HR) =   6.67
 TOTAL STREAM AREA(ACRES) =     1.23
```

```
  PEAK FLOW RATE(CFS) AT CONFLUENCE =      5.83

  ** CONFLUENCE DATA **
  STREAM     RUNOFF       Tc      INTENSITY      AREA
  NUMBER      (CFS)     (MIN.)   (INCH/HOUR)    (ACRE)
      1        6.10    10.90        5.260          1.53
      2        5.83     7.53        6.674          1.23

  RAINFALL INTENSITY AND TIME OF CONCENTRATION RATIO
  CONFLUENCE FORMULA USED FOR  2 STREAMS.

  ** PEAK FLOW RATE TABLE **
  STREAM     RUNOFF      Tc      INTENSITY
  NUMBER      (CFS)    (MIN.)   (INCH/HOUR)
      1       10.04     7.53       6.674
      2       10.69    10.90       5.260

  COMPUTED CONFLUENCE ESTIMATES ARE AS FOLLOWS:
  PEAK FLOW RATE(CFS) =      10.69   Tc(MIN.) =   10.90
  TOTAL AREA(ACRES) =        2.8
  LONGEST FLOWPATH FROM NODE    100.00 TO NODE    108.00 =     825.30 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    114.00 TO NODE    108.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
   100 YEAR RAINFALL INTENSITY(INCH/HOUR) =  5.260
  *USER SPECIFIED(SUBAREA):
  RESIDENTIAL (24. DU/AC OR LESS) RUNOFF COEFFICIENT = .7100
  S.C.S. CURVE NUMBER (AMC II) =  93
  AREA-AVERAGE RUNOFF COEFFICIENT = 0.7100
  SUBAREA AREA(ACRES) =    0.84   SUBAREA RUNOFF(CFS) =    3.14
  TOTAL AREA(ACRES) =        3.6   TOTAL RUNOFF(CFS) =      13.44
  TC(MIN.) =   10.90

+----------------------------------------------------------------------------+
| The following code 7 from detention analysis for Vault 2 at Node 108       |
| See chapter 5 for detention Analysis                                       |
|                                                                            |
+----------------------------------------------------------------------------+

****************************************************************************
  FLOW PROCESS FROM NODE    108.00 TO NODE    108.00 IS CODE =   7
----------------------------------------------------------------------------
  >>>>>USER SPECIFIED HYDROLOGY INFORMATION AT NODE<<<<<
============================================================================
  USER-SPECIFIED VALUES ARE AS FOLLOWS:
  TC(MIN) =  19.90   RAIN INTENSITY(INCH/HOUR) =  3.57
  TOTAL AREA(ACRES) =     3.60   TOTAL RUNOFF(CFS) =      5.85

****************************************************************************
  FLOW PROCESS FROM NODE    108.00 TO NODE    118.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   567.50  DOWNSTREAM(FEET) =   566.41
  FLOW LENGTH(FEET) =    38.26   MANNING'S N =  0.013
  ESTIMATED PIPE DIAMETER(INCH) INCREASED TO 18.000
  DEPTH OF FLOW IN  18.0 INCH PIPE IS   7.2 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   8.83
  ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       5.85
  PIPE TRAVEL TIME(MIN.) =   0.07    Tc(MIN.) =   19.97
  LONGEST FLOWPATH FROM NODE    100.00 TO NODE    118.00 =     863.56 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    118.00 TO NODE    118.00 IS CODE =   1
----------------------------------------------------------------------------
  >>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<
============================================================================
  TOTAL NUMBER OF STREAMS =  2
```

```
 CONFLUENCE VALUES USED FOR INDEPENDENT STREAM  1 ARE:
 TIME OF CONCENTRATION(MIN.) =   19.97
 RAINFALL INTENSITY(INCH/HR) =   3.56
 TOTAL STREAM AREA(ACRES) =     3.60
 PEAK FLOW RATE(CFS) AT CONFLUENCE =      5.85

****************************************************************************
 FLOW PROCESS FROM NODE    115.00 TO NODE    116.00 IS CODE =  21
----------------------------------------------------------------------------
 >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
============================================================================
 *USER SPECIFIED(SUBAREA):
 RESIDENTIAL (24. DU/AC OR LESS) RUNOFF COEFFICIENT = .7100
 S.C.S. CURVE NUMBER (AMC II) =  93
 INITIAL SUBAREA FLOW-LENGTH(FEET) =   100.00
 UPSTREAM ELEVATION(FEET) =    574.20
 DOWNSTREAM ELEVATION(FEET) =    574.00
 ELEVATION DIFFERENCE(FEET) =      0.20
 SUBAREA OVERLAND TIME OF FLOW(MIN.) =    6.254
 WARNING: INITIAL SUBAREA FLOW PATH LENGTH IS GREATER THAN
          THE MAXIMUM OVERLAND FLOW LENGTH =    50.00
          (Reference: Table 3-1B of Hydrology Manual)
          THE MAXIMUM OVERLAND FLOW LENGTH IS USED IN Tc CALCULATION!
  100 YEAR RAINFALL INTENSITY(INCH/HOUR) =  7.526
 SUBAREA RUNOFF(CFS) =      0.64
 TOTAL AREA(ACRES) =      0.12   TOTAL RUNOFF(CFS) =      0.64

****************************************************************************
 FLOW PROCESS FROM NODE    116.00 TO NODE    118.00 IS CODE =  51
----------------------------------------------------------------------------
 >>>>>COMPUTE TRAPEZOIDAL CHANNEL FLOW<<<<<
 >>>>>TRAVELTIME THRU SUBAREA (EXISTING ELEMENT)<<<<<
============================================================================
 ELEVATION DATA: UPSTREAM(FEET) =    573.70  DOWNSTREAM(FEET) =    572.70
 CHANNEL LENGTH THRU SUBAREA(FEET) =   106.00   CHANNEL SLOPE =  0.0094
 CHANNEL BASE(FEET) =    0.00   "Z" FACTOR =  50.000
 MANNING'S FACTOR = 0.015   MAXIMUM DEPTH(FEET) =   0.50
  100 YEAR RAINFALL INTENSITY(INCH/HOUR) =  6.761
 *USER SPECIFIED(SUBAREA):
 RESIDENTIAL (24. DU/AC OR LESS) RUNOFF COEFFICIENT = .7100
 S.C.S. CURVE NUMBER (AMC II) =  93
 TRAVEL TIME COMPUTED USING ESTIMATED FLOW(CFS) =       1.41
 TRAVEL TIME THRU SUBAREA BASED ON VELOCITY(FEET/SEC.) =   1.56
 AVERAGE FLOW DEPTH(FEET) =   0.13   TRAVEL TIME(MIN.) =   1.13
 Tc(MIN.) =    7.38
 SUBAREA AREA(ACRES) =     0.32       SUBAREA RUNOFF(CFS) =    1.54
 AREA-AVERAGE RUNOFF COEFFICIENT =  0.710
 TOTAL AREA(ACRES) =        0.4         PEAK FLOW RATE(CFS) =       2.11

 END OF SUBAREA CHANNEL FLOW HYDRAULICS:
 DEPTH(FEET) =  0.16   FLOW VELOCITY(FEET/SEC.) =   1.75
 LONGEST FLOWPATH FROM NODE    115.00 TO NODE    118.00 =     206.00 FEET.

****************************************************************************
 FLOW PROCESS FROM NODE    118.00 TO NODE    118.00 IS CODE =   1
----------------------------------------------------------------------------
 >>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<
 >>>>>AND COMPUTE VARIOUS CONFLUENCED STREAM VALUES<<<<<
============================================================================
 TOTAL NUMBER OF STREAMS =  2
 CONFLUENCE VALUES USED FOR INDEPENDENT STREAM  2 ARE:
 TIME OF CONCENTRATION(MIN.) =    7.38
 RAINFALL INTENSITY(INCH/HR) =   6.76
 TOTAL STREAM AREA(ACRES) =     0.44
 PEAK FLOW RATE(CFS) AT CONFLUENCE =      2.11

 ** CONFLUENCE DATA **
 STREAM     RUNOFF       Tc      INTENSITY      AREA
 NUMBER      (CFS)     (MIN.)   (INCH/HOUR)    (ACRE)
     1        5.85    19.97        3.559          3.60
     2        2.11     7.38        6.761          0.44

 RAINFALL INTENSITY AND TIME OF CONCENTRATION RATIO
```

```
  CONFLUENCE FORMULA USED FOR  2 STREAMS.

  ** PEAK FLOW RATE TABLE **
  STREAM     RUNOFF      Tc      INTENSITY
  NUMBER      (CFS)    (MIN.)   (INCH/HOUR)
      1        4.28     7.38       6.761
      2        6.96    19.97       3.559

  COMPUTED CONFLUENCE ESTIMATES ARE AS FOLLOWS:
  PEAK FLOW RATE(CFS) =       6.96   Tc(MIN.) =   19.97
  TOTAL AREA(ACRES) =        4.0
  LONGEST FLOWPATH FROM NODE    100.00 TO NODE    118.00 =     863.56 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    118.00 TO NODE    119.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   566.41  DOWNSTREAM(FEET) =   564.70
  FLOW LENGTH(FEET) =   300.13   MANNING'S N =  0.013
  DEPTH OF FLOW IN  18.0 INCH PIPE IS  13.4 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   4.95
  ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       6.96
  PIPE TRAVEL TIME(MIN.) =   1.01    Tc(MIN.) =   20.98
  LONGEST FLOWPATH FROM NODE    100.00 TO NODE    119.00 =    1163.69 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    119.00 TO NODE    119.00 IS CODE =  10
----------------------------------------------------------------------------
  >>>>>MAIN-STREAM MEMORY COPIED ONTO MEMORY BANK # 2 <<<<<
============================================================================

****************************************************************************
  FLOW PROCESS FROM NODE    200.00 TO NODE    202.00 IS CODE =  21
----------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
============================================================================
  *USER SPECIFIED(SUBAREA):
  RESIDENTIAL (24. DU/AC OR LESS) RUNOFF COEFFICIENT = .7100
  S.C.S. CURVE NUMBER (AMC II) =  93
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   100.00
  UPSTREAM ELEVATION(FEET) =    579.50
  DOWNSTREAM ELEVATION(FEET) =    578.50
  ELEVATION DIFFERENCE(FEET) =      1.00
  SUBAREA OVERLAND TIME OF FLOW(MIN.) =    5.660
  WARNING: INITIAL SUBAREA FLOW PATH LENGTH IS GREATER THAN
           THE MAXIMUM OVERLAND FLOW LENGTH =    65.00
           (Reference: Table 3-1B of Hydrology Manual)
           THE MAXIMUM OVERLAND FLOW LENGTH IS USED IN Tc CALCULATION!
   100 YEAR RAINFALL INTENSITY(INCH/HOUR) =  8.027
  SUBAREA RUNOFF(CFS) =      0.57
  TOTAL AREA(ACRES) =      0.10   TOTAL RUNOFF(CFS) =      0.57

****************************************************************************
  FLOW PROCESS FROM NODE    202.00 TO NODE    204.00 IS CODE =  62
----------------------------------------------------------------------------
  >>>>>COMPUTE STREET FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>(STREET TABLE SECTION #  3 USED)<<<<<
============================================================================
  UPSTREAM ELEVATION(FEET) =  578.50  DOWNSTREAM ELEVATION(FEET) =  573.60
  STREET LENGTH(FEET) =   440.00   CURB HEIGHT(INCHES) =  4.0
  STREET HALFWIDTH(FEET) = 12.00

  DISTANCE FROM CROWN TO CROSSFALL GRADEBREAK(FEET) =   6.00
  INSIDE STREET CROSSFALL(DECIMAL) =  0.020
  OUTSIDE STREET CROSSFALL(DECIMAL)  =  0.020

  SPECIFIED NUMBER OF HALFSTREETS CARRYING RUNOFF =  2
  Manning's FRICTION FACTOR for Streetflow Section(curb-to-curb) =   0.0150

    **TRAVEL TIME COMPUTED USING ESTIMATED FLOW(CFS) =       3.51
```

```
    STREETFLOW MODEL RESULTS USING ESTIMATED FLOW:
    STREET FLOW DEPTH(FEET) =  0.25
    HALFSTREET FLOOD WIDTH(FEET) =    8.67
    AVERAGE FLOW VELOCITY(FEET/SEC.) =    2.13
    PRODUCT OF DEPTH&VELOCITY(FT*FT/SEC.) =    0.53
  STREET FLOW TRAVEL TIME(MIN.) =   3.44   Tc(MIN.) =    9.10
   100 YEAR RAINFALL INTENSITY(INCH/HOUR) =  5.908
  *USER SPECIFIED(SUBAREA):
  RESIDENTIAL (24. DU/AC OR LESS) RUNOFF COEFFICIENT = .7100
  S.C.S. CURVE NUMBER (AMC II) =  93
  AREA-AVERAGE RUNOFF COEFFICIENT =  0.710
  SUBAREA AREA(ACRES) =    1.38      SUBAREA RUNOFF(CFS) =    5.79
  TOTAL AREA(ACRES) =        1.5        PEAK FLOW RATE(CFS) =       6.21

  END OF SUBAREA STREET FLOW HYDRAULICS:
  DEPTH(FEET) = 0.29   HALFSTREET FLOOD WIDTH(FEET) =  10.92
  FLOW VELOCITY(FEET/SEC.) =  2.46   DEPTH*VELOCITY(FT*FT/SEC.) =   0.72
  LONGEST FLOWPATH FROM NODE    200.00 TO NODE    204.00 =     540.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    206.00 TO NODE    204.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
   100 YEAR RAINFALL INTENSITY(INCH/HOUR) =  5.908
  *USER SPECIFIED(SUBAREA):
  RESIDENTIAL (24. DU/AC OR LESS) RUNOFF COEFFICIENT = .7100
  S.C.S. CURVE NUMBER (AMC II) =  93
  AREA-AVERAGE RUNOFF COEFFICIENT = 0.7100
  SUBAREA AREA(ACRES) =    0.44   SUBAREA RUNOFF(CFS) =    1.85
  TOTAL AREA(ACRES) =        1.9   TOTAL RUNOFF(CFS) =       8.05
  TC(MIN.) =    9.10

+--------------------------------------------------------------------------+
| the following code 7 is from detention analysis for Vault 1              |
| see chapter 5 for detention analysis                                     |
|                                                                          |
+--------------------------------------------------------------------------+

****************************************************************************
  FLOW PROCESS FROM NODE    204.00 TO NODE    204.00 IS CODE =   7
----------------------------------------------------------------------------
  >>>>>USER SPECIFIED HYDROLOGY INFORMATION AT NODE<<<<<
============================================================================
  USER-SPECIFIED VALUES ARE AS FOLLOWS:
  TC(MIN) =  17.10   RAIN INTENSITY(INCH/HOUR) =  3.93
  TOTAL AREA(ACRES) =     1.90   TOTAL RUNOFF(CFS) =      2.79

****************************************************************************
  FLOW PROCESS FROM NODE    204.00 TO NODE    119.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   565.50  DOWNSTREAM(FEET) =   564.90
  FLOW LENGTH(FEET) =    25.00   MANNING'S N =  0.013
  ESTIMATED PIPE DIAMETER(INCH) INCREASED TO 18.000
  DEPTH OF FLOW IN  18.0 INCH PIPE IS   5.1 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   6.76
  ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       2.79
  PIPE TRAVEL TIME(MIN.) =   0.06    Tc(MIN.) =   17.16
  LONGEST FLOWPATH FROM NODE    200.00 TO NODE    119.00 =     565.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    119.00 TO NODE    119.00 IS CODE =  11
----------------------------------------------------------------------------
  >>>>>CONFLUENCE MEMORY BANK # 2 WITH THE MAIN-STREAM MEMORY<<<<<
============================================================================

  ** MAIN STREAM CONFLUENCE DATA **
  STREAM     RUNOFF      Tc      INTENSITY     AREA
  NUMBER      (CFS)    (MIN.)   (INCH/HOUR)   (ACRE)
```

```
    1        2.79    17.16       3.925        1.90
  LONGEST FLOWPATH FROM NODE    200.00 TO NODE    119.00 =     565.00 FEET.

  ** MEMORY BANK #  2 CONFLUENCE DATA **
  STREAM     RUNOFF      Tc      INTENSITY     AREA
  NUMBER      (CFS)    (MIN.)   (INCH/HOUR)   (ACRE)
    1         6.96    20.98       3.447        4.04
  LONGEST FLOWPATH FROM NODE    100.00 TO NODE    119.00 =    1163.69 FEET.

  ** PEAK FLOW RATE TABLE **
  STREAM    RUNOFF       Tc      INTENSITY
  NUMBER     (CFS)     (MIN.)   (INCH/HOUR)
    1        8.48      17.16        3.925
    2        9.41      20.98        3.447

  COMPUTED CONFLUENCE ESTIMATES ARE AS FOLLOWS:
  PEAK FLOW RATE(CFS) =       9.41   Tc(MIN.) =   20.98
  TOTAL AREA(ACRES) =        5.9

****************************************************************************
  FLOW PROCESS FROM NODE    119.00 TO NODE    119.00 IS CODE =  12
----------------------------------------------------------------------------
  >>>>>CLEAR MEMORY BANK # 2 <<<<<
============================================================================

****************************************************************************
  FLOW PROCESS FROM NODE    119.00 TO NODE    120.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   564.90  DOWNSTREAM(FEET) =   564.50
  FLOW LENGTH(FEET) =    26.93   MANNING'S N =  0.013
  DEPTH OF FLOW IN  18.0 INCH PIPE IS  11.7 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   7.76
  ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       9.41
  PIPE TRAVEL TIME(MIN.) =   0.06    Tc(MIN.) =   21.04
  LONGEST FLOWPATH FROM NODE    100.00 TO NODE    120.00 =    1190.62 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    120.00 TO NODE    120.00 IS CODE =  10
----------------------------------------------------------------------------
  >>>>>MAIN-STREAM MEMORY COPIED ONTO MEMORY BANK # 2 <<<<<
============================================================================

****************************************************************************
  FLOW PROCESS FROM NODE     25.00 TO NODE     25.00 IS CODE =   7
----------------------------------------------------------------------------
  >>>>>USER SPECIFIED HYDROLOGY INFORMATION AT NODE<<<<<
============================================================================
  USER-SPECIFIED VALUES ARE AS FOLLOWS:
  TC(MIN) =   6.74   RAIN INTENSITY(INCH/HOUR) =  7.17
  TOTAL AREA(ACRES) =     0.45   TOTAL RUNOFF(CFS) =      2.57

+--------------------------------------------------------------------------+
|                                                                          |
| The following Code 8 is the driveway and sidewalk drain towards the      |
| exisitng drive                                                           |
+--------------------------------------------------------------------------+

****************************************************************************
  FLOW PROCESS FROM NODE     25.00 TO NODE     25.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
   100 YEAR RAINFALL INTENSITY(INCH/HOUR) =  7.171
  *USER SPECIFIED(SUBAREA):
  RESIDENTIAL (14.5 DU/AC OR LESS) RUNOFF COEFFICIENT = .7100
  S.C.S. CURVE NUMBER (AMC II) =  93
  AREA-AVERAGE RUNOFF COEFFICIENT = 0.7769
  SUBAREA AREA(ACRES) =    0.09   SUBAREA RUNOFF(CFS) =    0.46
  TOTAL AREA(ACRES) =        0.5   TOTAL RUNOFF(CFS) =       3.03
```

```
 TC(MIN.) =    6.74

****************************************************************************
 FLOW PROCESS FROM NODE     25.00 TO NODE     20.00 IS CODE =  31
----------------------------------------------------------------------------
 >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
 >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
 ELEVATION DATA: UPSTREAM(FEET) =   565.50  DOWNSTREAM(FEET) =   563.95
 FLOW LENGTH(FEET) =   105.00   MANNING'S N =  0.013
 ESTIMATED PIPE DIAMETER(INCH) INCREASED TO 18.000
 DEPTH OF FLOW IN  18.0 INCH PIPE IS   6.0 INCHES
 PIPE-FLOW VELOCITY(FEET/SEC.) =   5.81
 ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
 PIPE-FLOW(CFS) =       3.03
 PIPE TRAVEL TIME(MIN.) =   0.30    Tc(MIN.) =    7.04
 LONGEST FLOWPATH FROM NODE    100.00 TO NODE     20.00 =    1295.62 FEET.

****************************************************************************
 FLOW PROCESS FROM NODE     20.00 TO NODE     20.00 IS CODE =   1
----------------------------------------------------------------------------
 >>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<
============================================================================
 TOTAL NUMBER OF STREAMS =  2
 CONFLUENCE VALUES USED FOR INDEPENDENT STREAM  1 ARE:
 TIME OF CONCENTRATION(MIN.) =    7.04
 RAINFALL INTENSITY(INCH/HR) =   6.97
 TOTAL STREAM AREA(ACRES) =     0.54
 PEAK FLOW RATE(CFS) AT CONFLUENCE =      3.03

****************************************************************************
 FLOW PROCESS FROM NODE     20.00 TO NODE     20.00 IS CODE =   7
----------------------------------------------------------------------------
 >>>>>USER SPECIFIED HYDROLOGY INFORMATION AT NODE<<<<<
============================================================================
 USER-SPECIFIED VALUES ARE AS FOLLOWS:
 TC(MIN) =  50.98   RAIN INTENSITY(INCH/HOUR) =  1.94
 TOTAL AREA(ACRES) =     1.76   TOTAL RUNOFF(CFS) =      2.17

****************************************************************************
 FLOW PROCESS FROM NODE     20.00 TO NODE     20.00 IS CODE =   1
----------------------------------------------------------------------------
 >>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<
 >>>>>AND COMPUTE VARIOUS CONFLUENCED STREAM VALUES<<<<<
============================================================================
 TOTAL NUMBER OF STREAMS =  2
 CONFLUENCE VALUES USED FOR INDEPENDENT STREAM  2 ARE:
 TIME OF CONCENTRATION(MIN.) =   50.98
 RAINFALL INTENSITY(INCH/HR) =   1.94
 TOTAL STREAM AREA(ACRES) =     1.76
 PEAK FLOW RATE(CFS) AT CONFLUENCE =      2.17

 ** CONFLUENCE DATA **
 STREAM     RUNOFF       Tc      INTENSITY      AREA
 NUMBER      (CFS)     (MIN.)   (INCH/HOUR)    (ACRE)
     1        3.03     7.04        6.972          0.54
     2        2.17    50.98        1.945          1.76

 RAINFALL INTENSITY AND TIME OF CONCENTRATION RATIO
 CONFLUENCE FORMULA USED FOR  2 STREAMS.

 ** PEAK FLOW RATE TABLE **
 STREAM     RUNOFF      Tc      INTENSITY
 NUMBER      (CFS)    (MIN.)   (INCH/HOUR)
     1        3.33     7.04       6.972
     2        3.02    50.98       1.945

 COMPUTED CONFLUENCE ESTIMATES ARE AS FOLLOWS:
 PEAK FLOW RATE(CFS) =       3.33   Tc(MIN.) =    7.04
 TOTAL AREA(ACRES) =        2.3
 LONGEST FLOWPATH FROM NODE    100.00 TO NODE     20.00 =    1295.62 FEET.

****************************************************************************
```

```
  FLOW PROCESS FROM NODE     20.00 TO NODE    120.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   563.90  DOWNSTREAM(FEET) =   562.84
  FLOW LENGTH(FEET) =   205.00   MANNING'S N =  0.013
  ESTIMATED PIPE DIAMETER(INCH) INCREASED TO 18.000
  DEPTH OF FLOW IN  18.0 INCH PIPE IS   8.5 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   4.06
  ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       3.33
  PIPE TRAVEL TIME(MIN.) =   0.84    Tc(MIN.) =    7.88
  LONGEST FLOWPATH FROM NODE    100.00 TO NODE    120.00 =    1500.62 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    120.00 TO NODE    120.00 IS CODE =  11
----------------------------------------------------------------------------
  >>>>>CONFLUENCE MEMORY BANK # 2 WITH THE MAIN-STREAM MEMORY<<<<<
============================================================================

  ** MAIN STREAM CONFLUENCE DATA **
  STREAM     RUNOFF      Tc      INTENSITY     AREA
  NUMBER      (CFS)    (MIN.)   (INCH/HOUR)   (ACRE)
      1        3.33     7.88       6.482        2.30
  LONGEST FLOWPATH FROM NODE    100.00 TO NODE    120.00 =    1500.62 FEET.

  ** MEMORY BANK #  2 CONFLUENCE DATA **
  STREAM     RUNOFF      Tc      INTENSITY     AREA
  NUMBER      (CFS)    (MIN.)   (INCH/HOUR)   (ACRE)
      1        9.41    21.04       3.441        5.94
  LONGEST FLOWPATH FROM NODE    100.00 TO NODE    120.00 =    1190.62 FEET.

  ** PEAK FLOW RATE TABLE **
  STREAM    RUNOFF       Tc      INTENSITY
  NUMBER     (CFS)     (MIN.)   (INCH/HOUR)
      1       6.85       7.88        6.482
      2      11.18      21.04        3.441

  COMPUTED CONFLUENCE ESTIMATES ARE AS FOLLOWS:
  PEAK FLOW RATE(CFS) =      11.18   Tc(MIN.) =   21.04
  TOTAL AREA(ACRES) =        8.2

****************************************************************************
  FLOW PROCESS FROM NODE    120.00 TO NODE    120.00 IS CODE =  12
----------------------------------------------------------------------------
  >>>>>CLEAR MEMORY BANK # 2 <<<<<
============================================================================

****************************************************************************
  FLOW PROCESS FROM NODE    120.00 TO NODE      1.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   564.50  DOWNSTREAM(FEET) =   564.30
  FLOW LENGTH(FEET) =    25.30   MANNING'S N =  0.013
  DEPTH OF FLOW IN  21.0 INCH PIPE IS  14.4 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   6.36
  ESTIMATED PIPE DIAMETER(INCH) =  21.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      11.18
  PIPE TRAVEL TIME(MIN.) =   0.07    Tc(MIN.) =   21.11
  LONGEST FLOWPATH FROM NODE    100.00 TO NODE      1.00 =    1525.92 FEET.


============================================================================
============================================================================
  END OF RATIONAL METHOD ANALYSIS
```

CHAPTER 5
DETENTION VAULTS ANALYSIS

RickRatHydro
Inflow Hydrogaph for Vault 2 At Node 108

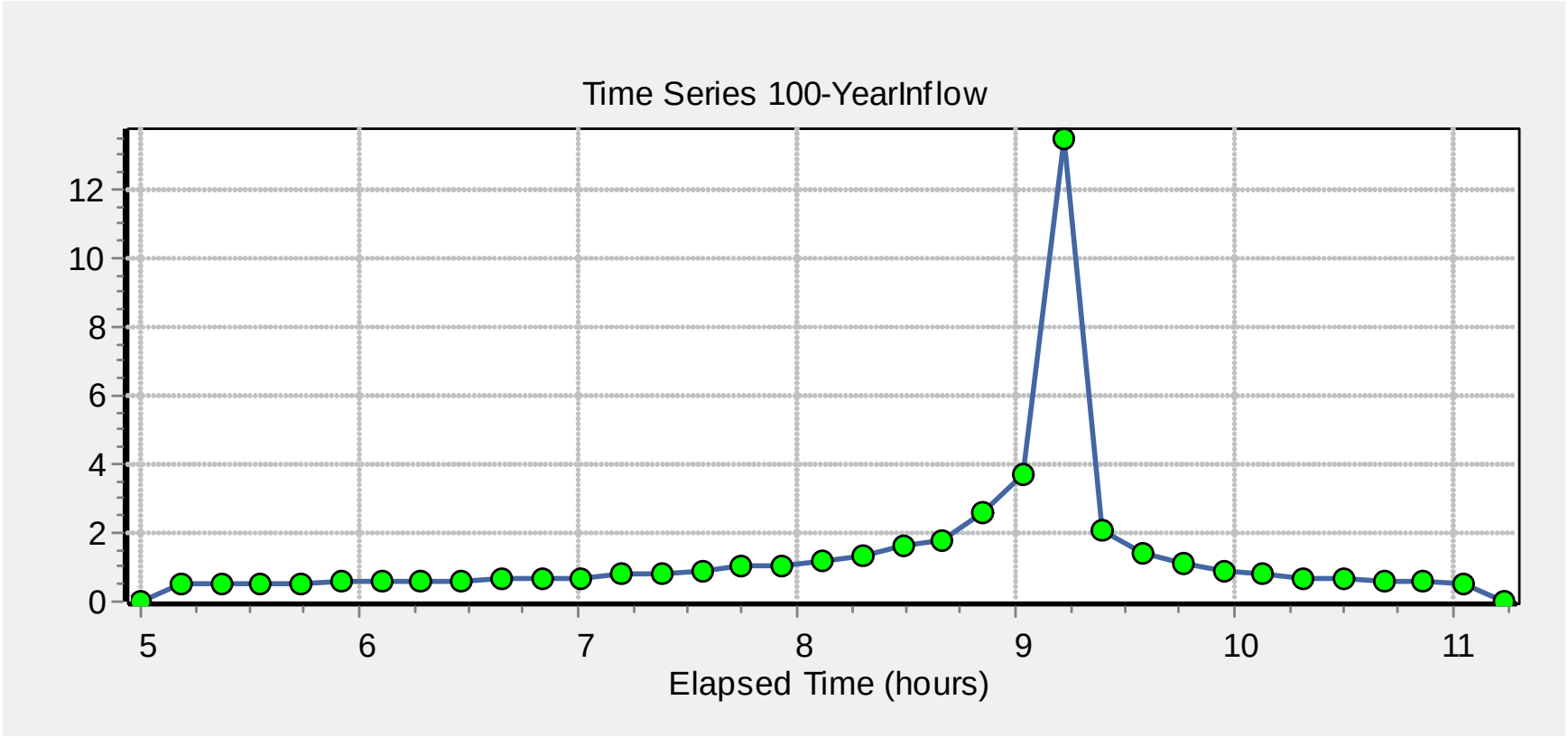
RATIONAL METHOD HYDROGRAPH PROGRAM
COPYRIGHT 1992, 2001 RICK ENGINEERING COMPANY

RUN DATE 2/15/2022
HYDROGRAPH FILE NAME Text1
TIME OF CONCENTRATION 11 MIN.
6 HOUR RAINFALL 3.3 INCHES
BASIN AREA 3.6 ACRES
RUNOFF COEFFICIENT 0.71
PEAK DISCHARGE 13.44 CFS

TIME (MIN) = 0	DISCHARGE (CFS) = 0
TIME (MIN) = 11	DISCHARGE (CFS) = 0.5
TIME (MIN) = 22	DISCHARGE (CFS) = 0.5
TIME (MIN) = 33	DISCHARGE (CFS) = 0.5
TIME (MIN) = 44	DISCHARGE (CFS) = 0.5
TIME (MIN) = 55	DISCHARGE (CFS) = 0.6
TIME (MIN) = 66	DISCHARGE (CFS) = 0.6
TIME (MIN) = 77	DISCHARGE (CFS) = 0.6
TIME (MIN) = 88	DISCHARGE (CFS) = 0.6
TIME (MIN) = 99	DISCHARGE (CFS) = 0.7
TIME (MIN) = 110	DISCHARGE (CFS) = 0.7
TIME (MIN) = 121	DISCHARGE (CFS) = 0.7
TIME (MIN) = 132	DISCHARGE (CFS) = 0.8
TIME (MIN) = 143	DISCHARGE (CFS) = 0.8
TIME (MIN) = 154	DISCHARGE (CFS) = 0.9
TIME (MIN) = 165	DISCHARGE (CFS) = 1
TIME (MIN) = 176	DISCHARGE (CFS) = 1
TIME (MIN) = 187	DISCHARGE (CFS) = 1.2
TIME (MIN) = 198	DISCHARGE (CFS) = 1.3
TIME (MIN) = 209	DISCHARGE (CFS) = 1.6
TIME (MIN) = 220	DISCHARGE (CFS) = 1.8
TIME (MIN) = 231	DISCHARGE (CFS) = 2.6
TIME (MIN) = 242	DISCHARGE (CFS) = 3.7
TIME (MIN) = 253	DISCHARGE (CFS) = 13.44
TIME (MIN) = 264	DISCHARGE (CFS) = 2.1
TIME (MIN) = 275	DISCHARGE (CFS) = 1.4
TIME (MIN) = 286	DISCHARGE (CFS) = 1.1
TIME (MIN) = 297	DISCHARGE (CFS) = 0.9
TIME (MIN) = 308	DISCHARGE (CFS) = 0.8
TIME (MIN) = 319	DISCHARGE (CFS) = 0.7
TIME (MIN) = 330	DISCHARGE (CFS) = 0.7
TIME (MIN) = 341	DISCHARGE (CFS) = 0.6
TIME (MIN) = 352	DISCHARGE (CFS) = 0.6
TIME (MIN) = 363	DISCHARGE (CFS) = 0.5
TIME (MIN) = 374	DISCHARGE (CFS) = 0

Inflow Hydrogaph for Vault 2 At Node 108

LAS POSAS - Post-project Condition



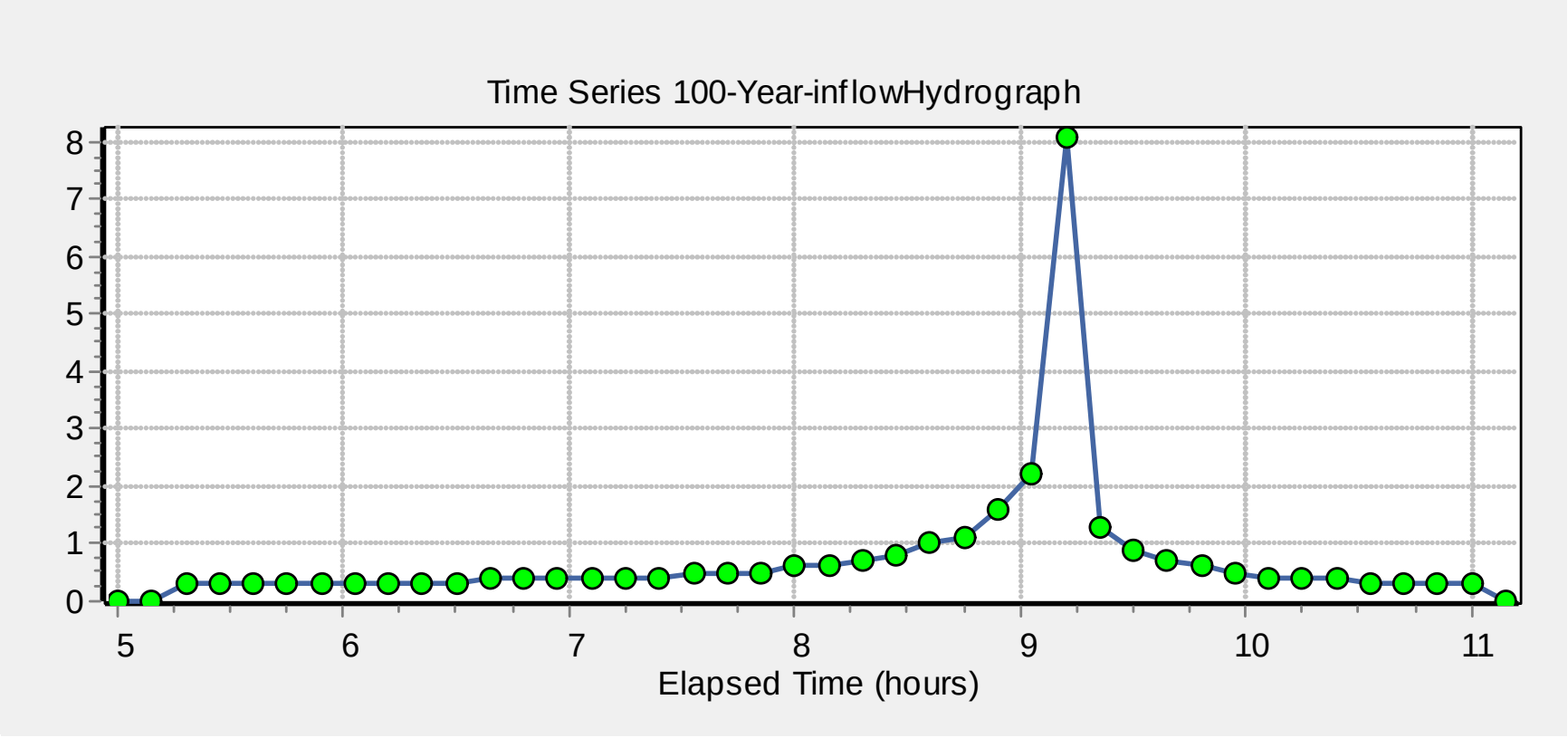
RickRatHydro
Inflow Hydrogaph for Vault 1 At Node 204

RATIONAL METHOD HYDROGRAPH PROGRAM
COPYRIGHT 1992, 2001 RICK ENGINEERING COMPANY

RUN DATE 2/16/2022
HYDROGRAPH FILE NAME Text1
TIME OF CONCENTRATION 9 MIN.
6 HOUR RAINFALL 3.3 INCHES
BASIN AREA 1.9 ACRES
RUNOFF COEFFICIENT 0.71
PEAK DISCHARGE 8.05 CFS

TIME (MIN) = 0	DISCHARGE (CFS) = 0
TIME (MIN) = 9	DISCHARGE (CFS) = 0
TIME (MIN) = 18	DISCHARGE (CFS) = 0.3
TIME (MIN) = 27	DISCHARGE (CFS) = 0.3
TIME (MIN) = 36	DISCHARGE (CFS) = 0.3
TIME (MIN) = 45	DISCHARGE (CFS) = 0.3
TIME (MIN) = 54	DISCHARGE (CFS) = 0.3
TIME (MIN) = 63	DISCHARGE (CFS) = 0.3
TIME (MIN) = 72	DISCHARGE (CFS) = 0.3
TIME (MIN) = 81	DISCHARGE (CFS) = 0.3
TIME (MIN) = 90	DISCHARGE (CFS) = 0.3
TIME (MIN) = 99	DISCHARGE (CFS) = 0.4
TIME (MIN) = 108	DISCHARGE (CFS) = 0.4
TIME (MIN) = 117	DISCHARGE (CFS) = 0.4
TIME (MIN) = 126	DISCHARGE (CFS) = 0.4
TIME (MIN) = 135	DISCHARGE (CFS) = 0.4
TIME (MIN) = 144	DISCHARGE (CFS) = 0.4
TIME (MIN) = 153	DISCHARGE (CFS) = 0.5
TIME (MIN) = 162	DISCHARGE (CFS) = 0.5
TIME (MIN) = 171	DISCHARGE (CFS) = 0.5
TIME (MIN) = 180	DISCHARGE (CFS) = 0.6
TIME (MIN) = 189	DISCHARGE (CFS) = 0.6
TIME (MIN) = 198	DISCHARGE (CFS) = 0.7
TIME (MIN) = 207	DISCHARGE (CFS) = 0.8
TIME (MIN) = 216	DISCHARGE (CFS) = 1
TIME (MIN) = 225	DISCHARGE (CFS) = 1.1
TIME (MIN) = 234	DISCHARGE (CFS) = 1.6
TIME (MIN) = 243	DISCHARGE (CFS) = 2.2
TIME (MIN) = 252	DISCHARGE (CFS) = 8.05
TIME (MIN) = 261	DISCHARGE (CFS) = 1.3
TIME (MIN) = 270	DISCHARGE (CFS) = 0.9
TIME (MIN) = 279	DISCHARGE (CFS) = 0.7
TIME (MIN) = 288	DISCHARGE (CFS) = 0.6
TIME (MIN) = 297	DISCHARGE (CFS) = 0.5
TIME (MIN) = 306	DISCHARGE (CFS) = 0.4
TIME (MIN) = 315	DISCHARGE (CFS) = 0.4
TIME (MIN) = 324	DISCHARGE (CFS) = 0.4
TIME (MIN) = 333	DISCHARGE (CFS) = 0.3
TIME (MIN) = 342	DISCHARGE (CFS) = 0.3
TIME (MIN) = 351	DISCHARGE (CFS) = 0.3
TIME (MIN) = 360	DISCHARGE (CFS) = 0.3
TIME (MIN) = 369	DISCHARGE (CFS) = 0

LAS POSAS - Post-project Condition



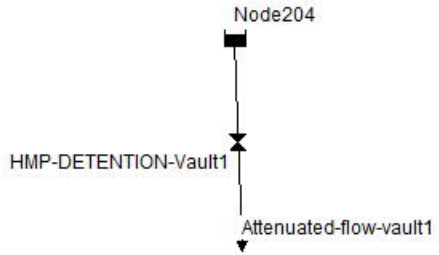
LAS POSAS - Post-project Condition

08/28/1951 06:00:00



LAS POSAS - Post-project Condition

08/28/1951 06:00:00



Storage Unit Node204

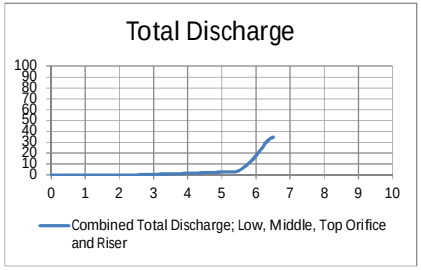
Property	Value
Name	Node204
X-Coordinate	2577.079
Y-Coordinate	7877.753
Description	
Tag	
Inflows	YES
Treatment	NO
Invert El.	0
Max. Depth	6.5
Initial Depth	2.5
Surcharge Depth	0
Evap. Factor	0
Seepage Loss	NO
Storage Curve	TABULAR
Functional Curve	
Coefficient	1000
Exponent	0
Constant	0

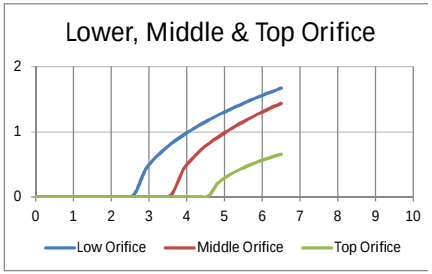
Click to specify any external inflows received at the storage unit

Vault #1 HMP Discharge

Discharge vs Elevation Table

Low orifice:	4	"	Top orifice:	3.000	"
Number:	2		Number:	2.000	
Cg-low:	0.61		Cg-low:	0.610	
invert elev:	2.50	ft	invert elev:	4.500	ft
Middle orifice:	4	"	Emergency inlet:		
number of orif:	2		Rim height:	5.40	ft
Cg-middle:	0.61		Area	6.00	sq ft <---2' x 3'
invert elev:	3.50	ft	Circumference	10.00	ft





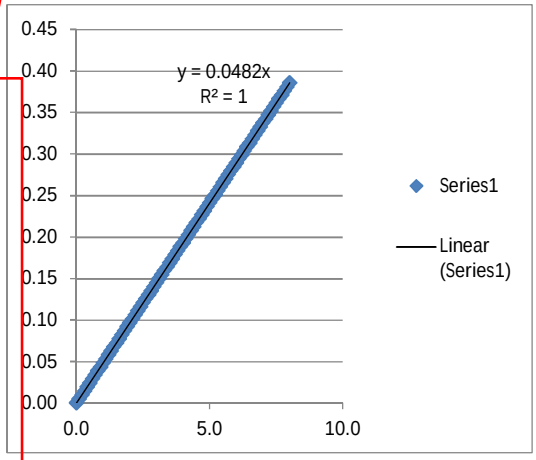
h (ft)	H/D-low -	H/D-mid -	H/D-top -	Qlow-orif (cfs)	Qlow-weir (cfs)	Qtot-low (cfs)	Qmid-orif (cfs)	Qmid-weir (cfs)	Qtot-med (cfs)	Qtop-orif (cfs)	Qtop-weir (cfs)	Qtot-top (cfs)	Qemerg (cfs)	Qtot (cfs)
0.0	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.1	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.2	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.3	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.4	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.5	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.6	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.7	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.8	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.9	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1.0	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1.1	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1.2	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1.3	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1.4	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1.5	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1.6	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1.7	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1.8	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1.9	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.0	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.1	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.2	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.3	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.4	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.5	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.6	0.30	0.00	0.00	0.000	0.037	0.037	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.037
2.7	0.60	0.00	0.00	0.156	0.138	0.138	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.138
2.8	0.90	0.00	0.00	0.312	0.280	0.280	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.280
2.9	1.20	0.00	0.00	0.413	0.442	0.413	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.413
3.0	1.50	0.00	0.00	0.493	0.600	0.493	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.493
3.10	1.80	0.00	0.00	0.562	0.734	0.562	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.562
3.2	2.10	0.00	0.00	0.624	0.830	0.624	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.624
3.3	2.40	0.00	0.00	0.680	0.883	0.680	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.680
3.4	2.70	0.00	0.00	0.732	0.901	0.732	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.732
3.5	3.00	0.00	0.00	0.780	0.906	0.780	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.780
3.6	3.30	0.30	0.00	0.825	0.938	0.825	0.000	0.037	0.037	0.000	0.000	0.000	0.000	0.863
3.7	3.60	0.60	0.00	0.869	1.061	0.869	0.156	0.138	0.138	0.000	0.000	0.000	0.000	1.006
3.8	3.90	0.90	0.00	0.910	1.358	0.910	0.312	0.280	0.280	0.000	0.000	0.000	0.000	1.18981
3.9	4.20	1.20	0.00	0.949	1.944	0.949	0.413	0.442	0.413	0.000	0.000	0.000	0.000	1.36154
4.0	4.50	1.50	0.00	0.987	2.960	0.987	0.493	0.600	0.493	0.000	0.000	0.000	0.000	1.47983
4.1	4.80	1.80	0.00	1.023	4.584	1.023	0.562	0.734	0.562	0.000	0.000	0.000	0.000	1.585
4.2	5.10	2.10	0.00	1.058	7.028	1.058	0.624	0.830	0.624	0.000	0.000	0.000	0.000	1.682
4.3	5.40	2.40	0.00	1.092	10.542	1.092	0.680	0.883	0.680	0.000	0.000	0.000	0.000	1.772
4.4	5.70	2.70	0.00	1.125	15.420	1.125	0.732	0.901	0.732	0.000	0.000	0.000	0.000	1.8565
4.5	6.00	3.00	0.00	1.157	22.001	1.157	0.780	0.906	0.780	0.000	0.000	0.000	0.000	1.937
4.6	6.30	3.30	0.40	1.188	30.670	1.188	0.825	0.938	0.825	0.000	0.032	0.032	0.000	2.045

4.7	6.60	3.60	0.80	1.218	41.866	1.218	0.869	1.061	0.869	0.132	0.112	0.112	0.000	2.199
4.8	6.90	3.90	1.20	1.248	56.080	1.248	0.910	1.358	0.910	0.201	0.215	0.201	0.000	2.358
4.9	7.20	4.20	1.60	1.277	73.861	1.277	0.949	1.944	0.949	0.252	0.316	0.252	0.000	2.478
5.0	7.50	4.50	2.00	1.305	95.817	1.305	0.987	2.960	0.987	0.294	0.391	0.294	0.000	2.586
5.1	7.80	4.80	2.40	1.333	122.620	1.333	1.023	4.584	1.023	0.331	0.430	0.331	0.000	2.687
5.2	8.10	5.10	2.80	1.360	155.009	1.360	1.058	7.028	1.058	0.364	0.439	0.364	0.000	2.782
5.3	8.40	5.40	3.20	1.386	193.789	1.386	1.092	10.542	1.092	0.395	0.449	0.395	0.000	2.873
5.4	8.70	5.70	3.60	1.413	239.840	1.413	1.125	15.420	1.125	0.423	0.517	0.423	0.000	2.960
5.5	9.00	6.00	4.00	1.438	294.116	1.438	1.157	22.001	1.157	0.450	0.738	0.450	0.980	4.025
5.6	9.30	6.30	4.40	1.463	357.648	1.463	1.188	30.670	1.188	0.475	1.249	0.475	2.773	5.899
5.7	9.60	6.60	4.80	1.488	431.549	1.488	1.218	41.866	1.218	0.498	2.233	0.498	5.094	8.298
5.8	9.90	6.90	5.20	1.512	517.017	1.512	1.248	56.080	1.248	0.521	3.930	0.521	7.842	11.124
5.9	10.20	7.20	5.60	1.536	615.336	1.536	1.277	73.861	1.277	0.543	6.636	0.543	10.960	14.316
6.0	10.50	7.50	6.00	1.560	727.878	1.560	1.305	95.817	1.305	0.564	10.717	0.564	14.407	17.836

WQ Volume

Vault#1 Stage Storage

depth	area sft	area (ac)	elevation	volume (cf)	volume (acft)
0.0	2100	0.05	0.0	0	0.00
0.1	2100	0.05	0.1	210	0.00
0.2	2100	0.05	0.2	420	0.01
0.3	2100	0.05	0.3	630	0.01
0.4	2100	0.05	0.4	840	0.02
0.5	2100	0.05	0.5	1050	0.02
0.6	2100	0.05	0.6	1260	0.03
0.7	2100	0.05	0.7	1470	0.03
0.8	2100	0.05	0.8	1680	0.04
0.9	2100	0.05	0.9	1890	0.04
1.0	2100	0.05	1.0	2100	0.05
1.1	2100	0.05	1.1	2310	0.05
1.2	2100	0.05	1.2	2520	0.06
1.3	2100	0.05	1.3	2730	0.06
1.4	2100	0.05	1.4	2940	0.07
1.5	2100	0.05	1.5	3150	0.07
1.6	2100	0.05	1.6	3360	0.08
1.7	2100	0.05	1.7	3570	0.08
1.8	2100	0.05	1.8	3780	0.09
1.9	2100	0.05	1.9	3990	0.09
2.0	2100	0.05	2.0	4200	0.10
2.1	2100	0.05	2.1	4410	0.10
2.2	2100	0.05	2.2	4620	0.11
2.3	2100	0.05	2.3	4830	0.11
2.4	2100	0.05	2.4	5040	0.12
2.5	2100	0.05	2.5	5250	0.12
2.6	2100	0.05	2.6	5460	0.13
2.7	2100	0.05	2.7	5670	0.13
2.8	2100	0.05	2.8	5880	0.13
2.9	2100	0.05	2.9	6090	0.14
3.0	2100	0.05	3.0	6300	0.14
3.1	2100	0.05	3.1	6510	0.15
3.2	2100	0.05	3.2	6720	0.15
3.3	2100	0.05	3.3	6930	0.16
3.4	2100	0.05	3.4	7140	0.16
3.5	2100	0.05	3.5	7350	0.17
3.6	2100	0.05	3.6	7560	0.17
3.7	2100	0.05	3.7	7770	0.18
3.8	2100	0.05	3.8	7980	0.18
3.9	2100	0.05	3.9	8190	0.19
4.0	2100	0.05	4.0	8400	0.19
4.1	2100	0.05	4.1	8610	0.20
4.2	2100	0.05	4.2	8820	0.20
4.3	2100	0.05	4.3	9030	0.21
4.4	2100	0.05	4.4	9240	0.21
4.5	2100	0.05	4.5	9450	0.22
4.6	2100	0.05	4.6	9660	0.22
4.7	2100	0.05	4.7	9870	0.23
4.8	2100	0.05	4.8	10080	0.23
4.9	2100	0.05	4.9	10290	0.24
5.0	2100	0.05	5.0	10500	0.24
5.1	2100	0.05	5.1	10710	0.25
5.2	2100	0.05	5.2	10920	0.25
5.3	2100	0.05	5.3	11130	0.26
5.4	2100	0.05	5.4	11340	0.26
5.5	2100	0.05	5.5	11550	0.27
5.6	2100	0.05	5.6	11760	0.27
5.7	2100	0.05	5.7	11970	0.27



5.8	2100	0.05	5.8	12180	0.28
5.9	2100	0.05	5.9	12390	0.28
6.0	2100	0.05	6.0	12600	0.29
6.1	2100	0.05	6.1	12810	0.29
6.2	2100	0.05	6.2	13020	0.30
6.3	2100	0.05	6.3	13230	0.30
6.4	2100	0.05	6.4	13440	0.31
6.5	2100	0.05	6.5	13650	0.31

Vault #1 WQ Discharge to the MWS BF-3-1 (was not included in detention calcs)

Discharge vs Elevation Table

Low orifice:	1.6 "
Number:	1
Cg-low:	0.61
invert elev:	0.00 ft

h (ft)	H/D-low -	H/D-mid -	H/D-top -	Qlow-orif (cfs)	Qlow-weir (cfs)	Qtot-low (cfs)	Qmid-orif (cfs)	Qmid-weir (cfs)	Qtot-med (cfs)	Qtop-orif (cfs)	Qtop-weir (cfs)	Qtot-top (cfs)	Qemerg (cfs)	Qtot (cfs)
0.0	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.1	0.75	0.00	0.15	0.012	0.010	0.010	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.010
0.2	1.50	0.00	0.30	0.025	0.030	0.025	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.025
0.3	2.25	0.00	0.45	0.033	0.044	0.033	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.033
0.4	3.00	0.00	0.60	0.039	0.046	0.039	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.039
0.5	3.75	0.00	0.75	0.045	0.060	0.045	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.045
0.6	4.50	0.80	0.90	0.050	0.150	0.050	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.050
0.7	5.25	1.60	1.05	0.054	0.437	0.054	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.054
0.8	6.00	2.40	1.20	0.059	1.113	0.059	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.059
0.9	6.75	3.20	1.35	0.062	2.457	0.062	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.062
1.0	7.50	4.00	1.50	0.066	4.848	0.066	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.066
1.1	8.25	4.80	1.65	0.069	8.781	0.069	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.069
1.2	9.00	5.60	1.80	0.073	14.881	0.073	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.073
1.3	9.75	6.40	1.95	0.076	23.920	0.076	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.076
1.4	10.50	7.20	2.10	0.079	36.828	0.079	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.079
1.5	11.25	8.00	2.25	0.082	54.712	0.082	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.082
1.6	12.00	8.80	2.40	0.085	78.866	0.085	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.085
1.7	12.75	9.60	2.55	0.087	110.792	0.087	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.087
1.8	13.50	10.40	2.70	0.090	152.208	0.090	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.090
1.9	14.25	11.20	2.85	0.093	205.069	0.093	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.093
2.0	15.00	12.00	3.00	0.095	271.576	0.095	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.095
2.1	15.75	12.80	3.15	0.097	354.197	0.097	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.097
2.2	16.50	13.60	3.30	0.100	455.676	0.100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.100
2.3	17.25	14.40	3.45	0.102	579.052	0.102	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.102
2.4	18.00	15.20	3.60	0.104	727.670	0.104	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.104
2.5	18.75	16.00	3.75	0.107	905.200	0.107	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.107

WQ Volume

Total Vault Draw Down

Elevation	Q_{AVG} (CFS)	DV (CF)	DT (HR)	Total T
0.1	0.01	210	11.25	37.12
0.2	0.02	210	3.30	25.87
0.3	0.03	210	2.01	22.57
0.4	0.04	210	1.61	20.56
0.5	0.04	210	1.38	18.95
0.6	0.05	210	1.23	17.57
0.7	0.05	210	1.12	16.34
0.8	0.06	210	1.03	15.22
0.9	0.06	210	0.96	14.19
1.0	0.06	210	0.91	13.22
1.1	0.07	210	0.86	12.31
1.2	0.07	210	0.82	11.45
1.3	0.07	210	0.78	10.63
1.4	0.08	210	0.75	9.85
1.5	0.08	210	0.73	9.09
1.6	0.08	210	0.70	8.37
1.7	0.09	210	0.68	7.67
1.8	0.09	210	0.66	6.99
1.9	0.09	210	0.64	6.33
2.0	0.09	210	0.62	5.69
2.1	0.10	210	0.61	5.07
2.2	0.10	210	0.59	4.46
2.3	0.10	210	0.58	3.87
2.4	0.10	210	0.56	3.30
2.5	0.11	210	0.55	2.73
2.6	0.13	210	0.46	2.18
2.7	0.20	210	0.30	1.72
2.8	0.32	210	0.18	1.42
2.9	0.46	210	0.13	1.24
3.0	0.57	210	0.10	1.11
3.1	0.65	210	0.09	1.01
3.2	0.71	210	0.08	0.92
3.3	0.77	210	0.08	0.84
3.4	0.83	210	0.07	0.76
3.5	0.88	210	0.07	0.69
3.6	0.95	210	0.06	0.63
3.7	1.06	210	0.05	0.56
3.8	1.23	210	0.05	0.51
3.9	1.41	210	0.04	0.46
4.0	1.56	210	0.04	0.42
4.1	1.67	210	0.03	0.38
4.2	1.77	210	0.03	0.35
4.3	1.87	210	0.03	0.32
4.4	1.96	210	0.03	0.28

4.5	2.04	210	0.03	0.25
4.6	2.14	210	0.03	0.23
4.7	2.27	210	0.03	0.20
4.8	2.43	210	0.02	0.17
4.9	2.57	210	0.02	0.15
5.0	2.68	210	0.02	0.13
5.1	2.79	210	0.02	0.10
5.2	2.89	210	0.02	0.08
5.3	3.47	210	0.02	0.06
5.4	4.95	210	0.01	0.05
5.5	7.58	210	0.01	0.03
5.6	11.59	210	0.01	0.03
5.7	16.66	210	0.00	0.02
5.8	22.56	210	0.00	0.02
5.9	29.17	210	0.00	0.02
6.0	25.24	210	0.00	0.01
6.1	19.75	210	0.00	0.01
6.2	23.70	210	0.00	0.01
6.3	27.93	210	0.00	0.01
6.4	31.59	210	0.00	0.00
6.5	33.82	210	0.00	0.00

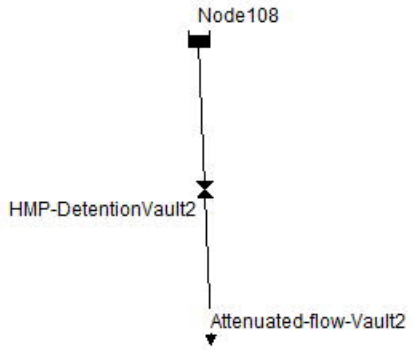
LAS POSAS - Post-project Condition

08/28/1951 06:00:00

Storage Unit Node108

Property	Value
Name	Node108
X-Coordinate	1760.803
Y-Coordinate	7842.048
Description	
Tag	
Inflows	YES
Treatment	NO
Invert El.	0
Max. Depth	7
Initial Depth	2.6
Surcharge Depth	0
Evap. Factor	0
Seepage Loss	NO
Storage Curve	TABULAR
Functional Curve	
Coefficient	1000
Exponent	0
Constant	0
Tabular Curve	
Curve Name	Vault-2

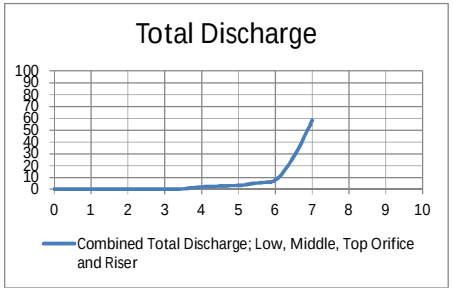
Click to specify any external inflows received at the storage unit



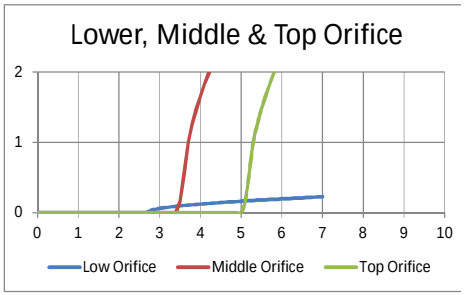
Vault #2 HMP Discharge

Discharge vs Elevation Table

Low orifice:	2 "	Top orifice:	3 "	
Number:	1	Number:	10	
Cg-low:	0.61	Cg-low:	0.61	
invert elev:	2.60 ft	invert elev:	5.00 ft	
Middle orifice:	3 "	Emergency inlet:		
number of orif:	10	Rim height:	5.90 ft	
Cg-middle:	0.61	Area	12.00 sq ft	<---4' x 3'
invert elev:	3.40 ft	Circumference	14.00 ft	



h (ft)	H/D-low -	H/D-mid -	H/D-top -	Qlow-orif (cfs)	Qlow-weir (cfs)	Qtot-low (cfs)	Qmid-orif (cfs)	Qmid-weir (cfs)	Qtot-med (cfs)	Qtop-orif (cfs)	Qtop-weir (cfs)	Qtot-top (cfs)	Qemerg (cfs)	Qtot (cfs)
0.0	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.1	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.2	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.3	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.4	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.5	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.6	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.7	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.8	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.9	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1.0	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1.1	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1.2	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1.3	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1.4	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1.5	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1.6	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1.7	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1.8	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1.9	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.0	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.1	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.2	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.3	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.4	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.5	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.6	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.7	0.60	0.00	0.00	0.014	0.012	0.012	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.012
2.8	1.20	0.00	0.00	0.036	0.039	0.036	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.036
2.9	1.80	0.00	0.00	0.050	0.065	0.050	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.050
3.0	2.40	0.00	0.00	0.060	0.078	0.060	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.060
3.1	3.00	0.00	0.00	0.069	0.080	0.069	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.069
3.2	3.60	0.00	0.00	0.077	0.094	0.077	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.077
3.3	4.20	0.00	0.00	0.084	0.172	0.084	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.084
3.4	4.80	0.00	0.00	0.090	0.405	0.090	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.090
3.5	5.40	0.40	0.00	0.097	0.932	0.097	0.000	0.158	0.158	0.000	0.000	0.000	0.000	0.254
3.6	6.00	0.80	0.00	0.102	1.945	0.102	0.658	0.559	0.559	0.000	0.000	0.000	0.000	0.661
3.7	6.60	1.20	0.00	0.108	3.700	0.108	1.005	1.077	1.005	0.000	0.000	0.000	0.000	1.113
3.8	7.20	1.60	0.00	0.113	6.528	0.113	1.260	1.578	1.260	0.000	0.000	0.000	0.000	1.373
3.9	7.80	2.00	0.00	0.118	10.838	0.118	1.471	1.954	1.471	0.000	0.000	0.000	0.000	1.589
4.0	8.40	2.40	0.00	0.123	17.129	0.123	1.656	2.150	1.656	0.000	0.000	0.000	0.000	1.779
4.1	9.00	2.80	0.00	0.127	25.996	0.127	1.822	2.197	1.822	0.000	0.000	0.000	0.000	1.949

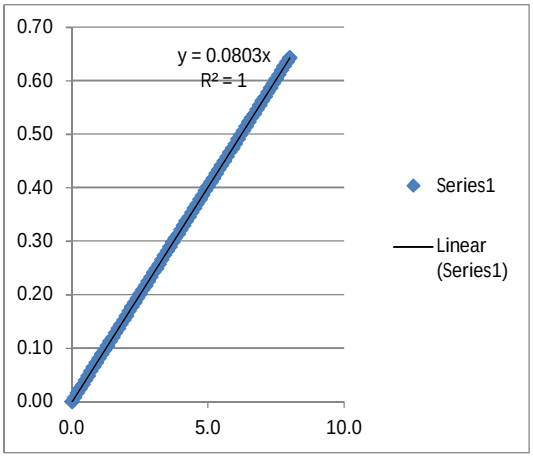


4.2	9.60	3.20	0.00	0.132	38.144	0.132	1.974	2.243	1.974	0.000	0.000	0.000	0.000	2.106
4.3	10.20	3.60	0.00	0.136	54.389	0.136	2.115	2.583	2.115	0.000	0.000	0.000	0.000	2.251
4.4	10.80	4.00	0.00	0.140	75.670	0.140	2.248	3.690	2.248	0.000	0.000	0.000	0.000	2.388
4.5	11.40	4.40	0.00	0.144	103.061	0.144	2.373	6.244	2.373	0.000	0.000	0.000	0.000	2.517
4.6	12.00	4.80	0.00	0.148	137.773	0.148	2.491	11.166	2.491	0.000	0.000	0.000	0.000	2.639
4.7	12.60	5.20	0.00	0.152	181.166	0.152	2.605	19.648	2.605	0.000	0.000	0.000	0.000	2.756
4.8	13.20	5.60	0.00	0.155	234.757	0.155	2.713	33.180	2.713	0.000	0.000	0.000	0.000	2.869
4.9	13.80	6.00	0.00	0.159	300.229	0.159	2.818	53.587	2.818	0.000	0.000	0.000	0.000	2.977
5.0	14.40	6.40	0.00	0.163	379.439	0.163	2.918	83.053	2.918	0.000	0.000	0.000	0.000	3.081
5.1	15.00	6.80	0.40	0.166	474.424	0.166	3.016	124.157	3.016	0.000	0.158	0.158	0.000	3.339
5.2	15.60	7.20	0.80	0.169	587.416	0.169	3.110	179.902	3.110	0.658	0.559	0.559	0.000	3.838
5.3	16.20	7.60	1.20	0.173	720.842	0.173	3.201	253.745	3.201	1.005	1.077	1.005	0.000	4.379
5.4	16.80	8.00	1.60	0.176	877.340	0.176	3.290	349.629	3.290	1.260	1.578	1.260	0.000	4.726
5.5	17.40	8.40	2.00	0.179	1059.762	0.179	3.377	472.011	3.377	1.471	1.954	1.471	0.000	5.028
5.6	18.00	8.80	2.40	0.182	1271.187	0.182	3.461	625.898	3.461	1.656	2.150	1.656	0.000	5.300
5.7	18.60	9.20	2.80	0.185	1514.925	0.185	3.544	816.871	3.544	1.822	2.197	1.822	0.000	5.551
5.8	19.20	9.60	3.20	0.189	1794.529	0.189	3.624	1051.123	3.624	1.974	2.243	1.974	0.000	5.787
5.9	19.80	10.00	3.60	0.192	2113.801	0.192	3.703	1335.483	3.703	2.115	2.583	2.115	0.000	6.010
6.0	20.40	10.40	4.00	0.194	2476.804	0.194	3.780	1677.452	3.780	2.248	3.690	2.248	1.372	7.595

WQ Volume

Vault#2 Stage Storage

depth	area sft	area (ac)	elevation	volume (cf)	volume (acft)
0.0	3500	0.08	0.0	0	0.00
0.1	3500	0.08	0.1	350	0.01
0.2	3500	0.08	0.2	700	0.02
0.3	3500	0.08	0.3	1050	0.02
0.4	3500	0.08	0.4	1400	0.03
0.5	3500	0.08	0.5	1750	0.04
0.6	3500	0.08	0.6	2100	0.05
0.7	3500	0.08	0.7	2450	0.06
0.8	3500	0.08	0.8	2800	0.06
0.9	3500	0.08	0.9	3150	0.07
1.0	3500	0.08	1.0	3500	0.08
1.1	3500	0.08	1.1	3850	0.09
1.2	3500	0.08	1.2	4200	0.10
1.3	3500	0.08	1.3	4550	0.10
1.4	3500	0.08	1.4	4900	0.11
1.5	3500	0.08	1.5	5250	0.12
1.6	3500	0.08	1.6	5600	0.13
1.7	3500	0.08	1.7	5950	0.14
1.8	3500	0.08	1.8	6300	0.14
1.9	3500	0.08	1.9	6650	0.15
2.0	3500	0.08	2.0	7000	0.16
2.1	3500	0.08	2.1	7350	0.17
2.2	3500	0.08	2.2	7700	0.18
2.3	3500	0.08	2.3	8050	0.18
2.4	3500	0.08	2.4	8400	0.19
2.5	3500	0.08	2.5	8750	0.20
2.6	3500	0.08	2.6	9100	0.21
2.7	3500	0.08	2.7	9450	0.22
2.8	3500	0.08	2.8	9800	0.22
2.9	3500	0.08	2.9	10150	0.23
3.0	3500	0.08	3.0	10500	0.24
3.1	3500	0.08	3.1	10850	0.25
3.2	3500	0.08	3.2	11200	0.26
3.3	3500	0.08	3.3	11550	0.27
3.4	3500	0.08	3.4	11900	0.27
3.5	3500	0.08	3.5	12250	0.28
3.6	3500	0.08	3.6	12600	0.29
3.7	3500	0.08	3.7	12950	0.30
3.8	3500	0.08	3.8	13300	0.31
3.9	3500	0.08	3.9	13650	0.31
4.0	3500	0.08	4.0	14000	0.32
4.1	3500	0.08	4.1	14350	0.33
4.2	3500	0.08	4.2	14700	0.34
4.3	3500	0.08	4.3	15050	0.35
4.4	3500	0.08	4.4	15400	0.35
4.5	3500	0.08	4.5	15750	0.36
4.6	3500	0.08	4.6	16100	0.37
4.7	3500	0.08	4.7	16450	0.38
4.8	3500	0.08	4.8	16800	0.39
4.9	3500	0.08	4.9	17150	0.39
5.0	3500	0.08	5.0	17500	0.40
5.1	3500	0.08	5.1	17850	0.41
5.2	3500	0.08	5.2	18200	0.42
5.3	3500	0.08	5.3	18550	0.43
5.4	3500	0.08	5.4	18900	0.43
5.5	3500	0.08	5.5	19250	0.44
5.6	3500	0.08	5.6	19600	0.45
5.7	3500	0.08	5.7	19950	0.46



5.8	3500	0.08	5.8	20300	0.47
5.9	3500	0.08	5.9	20650	0.47
6.0	3500	0.08	6.0	21000	0.48
6.1	3500	0.08	6.1	21350	0.49
6.2	3500	0.08	6.2	21700	0.50
6.3	3500	0.08	6.3	22050	0.51
6.4	3500	0.08	6.4	22400	0.51
6.5	3500	0.08	6.5	22750	0.52

Vault #2 WQ Discharge to the MWS BF-3-2 (was not included in detention calcs)

Vault #2 WQ Discharge

Discharge vs Elevation Table

Low orifice:	2.3 "
Number:	1
Cg-low:	0.61
invert elev:	0.00 ft

h (ft)	H/D-low -	H/D-mid -	H/D-top -	Qlow-orif (cfs)	Qlow-weir (cfs)	Qtot-low (cfs)	Qmid-orif (cfs)	Qmid-weir (cfs)	Qtot-med (cfs)	Qtop-orif (cfs)	Qtop-weir (cfs)	Qtot-top (cfs)	Qemerg (cfs)	Qtot (cfs)
0.0	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.1	0.52	0.00	0.15	0.009	0.013	0.013	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.013
0.2	1.04	0.00	0.30	0.046	0.045	0.045	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.045
0.3	1.57	0.00	0.45	0.064	0.079	0.064	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.064
0.4	2.09	0.00	0.60	0.078	0.104	0.078	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.078
0.5	2.61	0.00	0.75	0.090	0.113	0.090	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.090
0.6	3.13	0.00	0.90	0.100	0.114	0.100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.100
0.7	3.65	0.00	1.05	0.110	0.138	0.110	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.110
0.8	4.17	0.00	1.20	0.119	0.235	0.119	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.119
0.9	4.70	0.00	1.35	0.127	0.494	0.127	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.127
1.0	5.22	0.00	1.50	0.134	1.035	0.134	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.134
1.1	5.74	0.00	1.65	0.142	2.027	0.142	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.142
1.2	6.26	0.00	1.80	0.148	3.686	0.148	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.148
1.3	6.78	0.00	1.95	0.155	6.283	0.155	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.155
1.4	7.30	0.00	2.10	0.161	10.153	0.161	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.161
1.5	7.83	0.00	2.25	0.167	15.695	0.167	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.167
1.6	8.35	0.00	2.40	0.173	23.385	0.173	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.173
1.7	8.87	0.00	2.55	0.179	33.776	0.179	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.179
1.8	9.39	0.00	2.70	0.184	47.508	0.184	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.184
1.9	9.91	0.00	2.85	0.190	65.312	0.190	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.190
2.0	10.43	0.00	3.00	0.195	88.015	0.195	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.195
2.1	10.96	0.00	3.15	0.200	116.550	0.200	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.200
2.2	11.48	0.00	3.30	0.205	151.957	0.205	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.205
2.3	12.00	0.00	3.45	0.210	195.393	0.210	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.210
2.4	12.52	0.00	3.60	0.214	248.135	0.214	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.214
2.5	13.04	0.00	3.75	0.219	311.587	0.219	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.219

WQ Volume

Total Vault Draw Down

Elevation	Q_{AVG} (CFS)	DV (CF)	DT (HR)	Total T
0.1	0.01	350	14.58	39.00
0.2	0.03	350	3.35	24.43
0.3	0.05	350	1.79	21.08
0.4	0.07	350	1.37	19.29
0.5	0.08	350	1.16	17.92
0.6	0.10	350	1.02	16.76
0.7	0.11	350	0.93	15.73
0.8	0.11	350	0.85	14.81
0.9	0.12	350	0.79	13.96
1.0	0.13	350	0.75	13.16
1.1	0.14	350	0.70	12.42
1.2	0.14	350	0.67	11.71
1.3	0.15	350	0.64	11.04
1.4	0.16	350	0.61	10.40
1.5	0.16	350	0.59	9.79
1.6	0.17	350	0.57	9.19
1.7	0.18	350	0.55	8.62
1.8	0.18	350	0.54	8.07
1.9	0.19	350	0.52	7.54
2.0	0.19	350	0.51	7.02
2.1	0.20	350	0.49	6.51
2.2	0.20	350	0.48	6.02
2.3	0.21	350	0.47	5.54
2.4	0.21	350	0.46	5.07
2.5	0.22	350	0.45	4.61
2.6	0.22	350	0.44	4.16
2.7	0.23	350	0.42	3.72
2.8	0.25	350	0.38	3.30
2.9	0.28	350	0.35	2.92
3.0	0.29	350	0.33	2.57
3.1	0.31	350	0.32	2.24
3.2	0.32	350	0.30	1.92
3.3	0.33	350	0.29	1.62
3.4	0.34	350	0.28	1.33
3.5	0.43	350	0.23	1.04
3.6	0.72	350	0.14	0.82
3.7	1.15	350	0.08	0.68
3.8	1.51	350	0.06	0.60
3.9	1.75	350	0.06	0.53
4.0	1.96	350	0.05	0.48
4.1	2.14	350	0.05	0.43
4.2	2.31	350	0.04	0.38
4.3	2.47	350	0.04	0.34
4.4	2.61	350	0.04	0.30

4.5	2.75	350	0.04	0.26
4.6	2.88	350	0.03	0.23
4.7	3.00	350	0.03	0.19
4.8	3.12	350	0.03	0.16
4.9	3.23	350	0.03	0.13
5.0	3.34	350	0.03	0.10
5.1	4.50	350	0.02	0.07
5.2	7.66	350	0.01	0.05
5.3	12.30	350	0.01	0.04
5.4	17.81	350	0.01	0.03
5.5	24.01	350	0.00	0.02
5.6	30.86	350	0.00	0.02
5.7	38.32	350	0.00	0.02
5.8	46.34	350	0.00	0.01
5.9	54.89	350	0.00	0.01
6.0	63.93	350	0.00	0.01
6.1	73.92	350	0.00	0.01
6.2	85.26	350	0.00	0.01
6.3	97.70	350	0.00	0.01
6.4	111.02	350	0.00	0.00
6.5	125.14	350	0.00	0.00
6.6	139.99	350	0.00	0.00
6.7	155.52	350	0.00	0.00
6.8	171.70	350	0.00	0.00
6.9	188.50	350	0.00	0.00
7.0	203.93	350	0.00	0.00

LAS POSAS - Post-project Condition

Node Inflow Summary

Node	Type	Maximum Lateral Inflow CFS	Maximum Total Inflow CFS	Day of Maximum Inflow	Hour of Maximum Inflow	Lateral Inflow Volume 10^6 gal	Total Inflow Volume 10^6 gal	Flow Balance Error Percent
Attenuated-flow -Vault2	OUTFALL	0.00	5.85	0	04:22	0	0.227	0.000
Attenuated-flow-vault1	OUTFALL	0.00	2.79	0	04:20	0	0.12	0.000
Node108	STORAGE	13.44	13.44	0	04:14	0.227	0.295	0.006
Node204	STORAGE	8.05	8.05	0	04:13	0.12	0.159	0.006

LAS POSAS - Post-project Condition

Node Depth Summary

Node	Type	Average Depth Feet	Maximum Depth Feet	Maximum HGL Feet	Day of Maximum Depth	Hour of Maximum Depth	Maximum Reported Depth Feet
Node108	STORAGE	2.60	5.83	5.83	0	04:22	4.43
Node204	STORAGE	2.50	5.21	5.21	0	04:20	3.87

CHAPTER 6
HYDRAULIC ANALYSIS TO CHECK THE CAPACITY OF THE PROPOSED 24" PIPE AT THE DISCHARGE LOCATION (TO NODE 1)

HEC-RAS ANALYSIS FOR LAS POSAS CREEK AT THE CROSS SECTION AT TH GRADING AREA

CHAPTER 6 - 1
HYDRAULIC ANALYSIS TO CHECK THE CAPACITY OF THE PROPOSED 24" PIPE AT THE DISCHARGE LOCATION (TO NODE 1)

Channel Report

Hydraflow Express Extension for Autodesk® AutoCAD® Civil 3D® by Autodesk, Inc. Wednesday, Aug 25 2021

Proposed Storm Drain at the discharge location to the Headwall

Circular

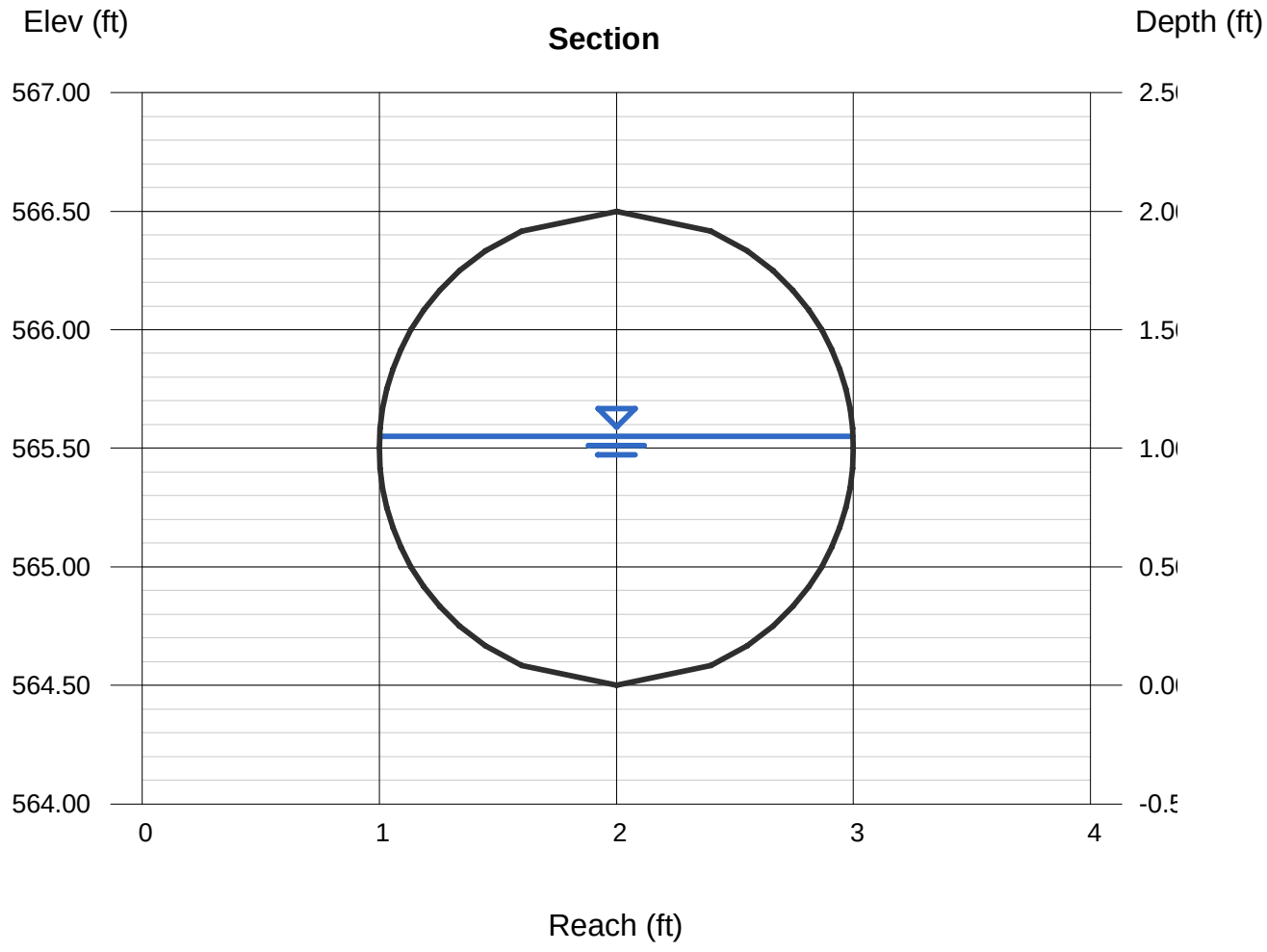
Diameter (ft)	= 2.00
Invert Elev (ft)	= 564.50
Slope (%)	= 0.83
N-Value	= 0.013

Calculations

Compute by:	Known Q
Known Q (cfs)	= 11.18

Highlighted

Depth (ft)	= 1.05
Q (cfs)	= 11.18
Area (sqft)	= 1.68
Velocity (ft/s)	= 6.66
Wetted Perim (ft)	= 3.25
Crit Depth, Yc (ft)	= 1.20
Top Width (ft)	= 2.00
EGL (ft)	= 1.74

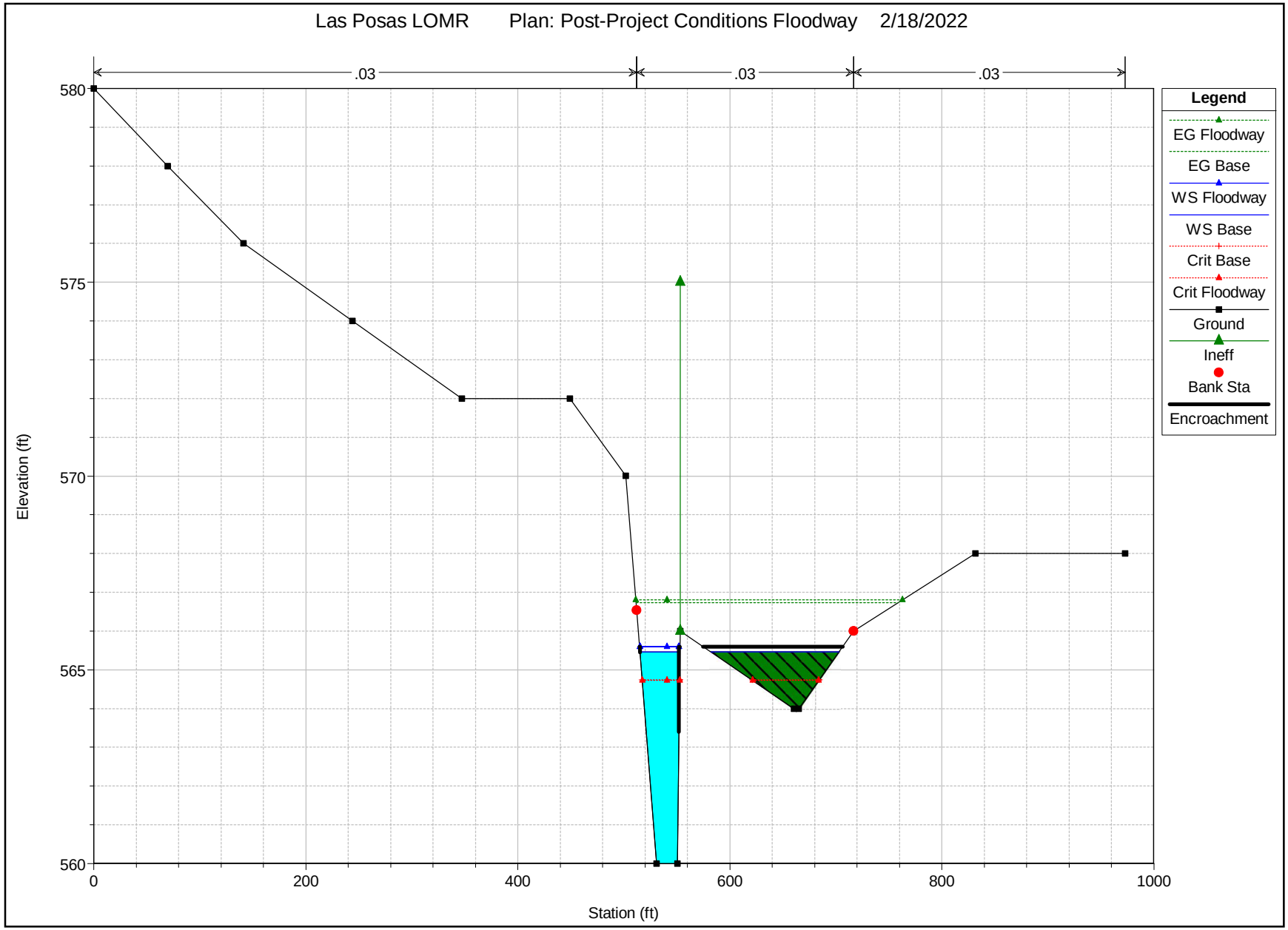


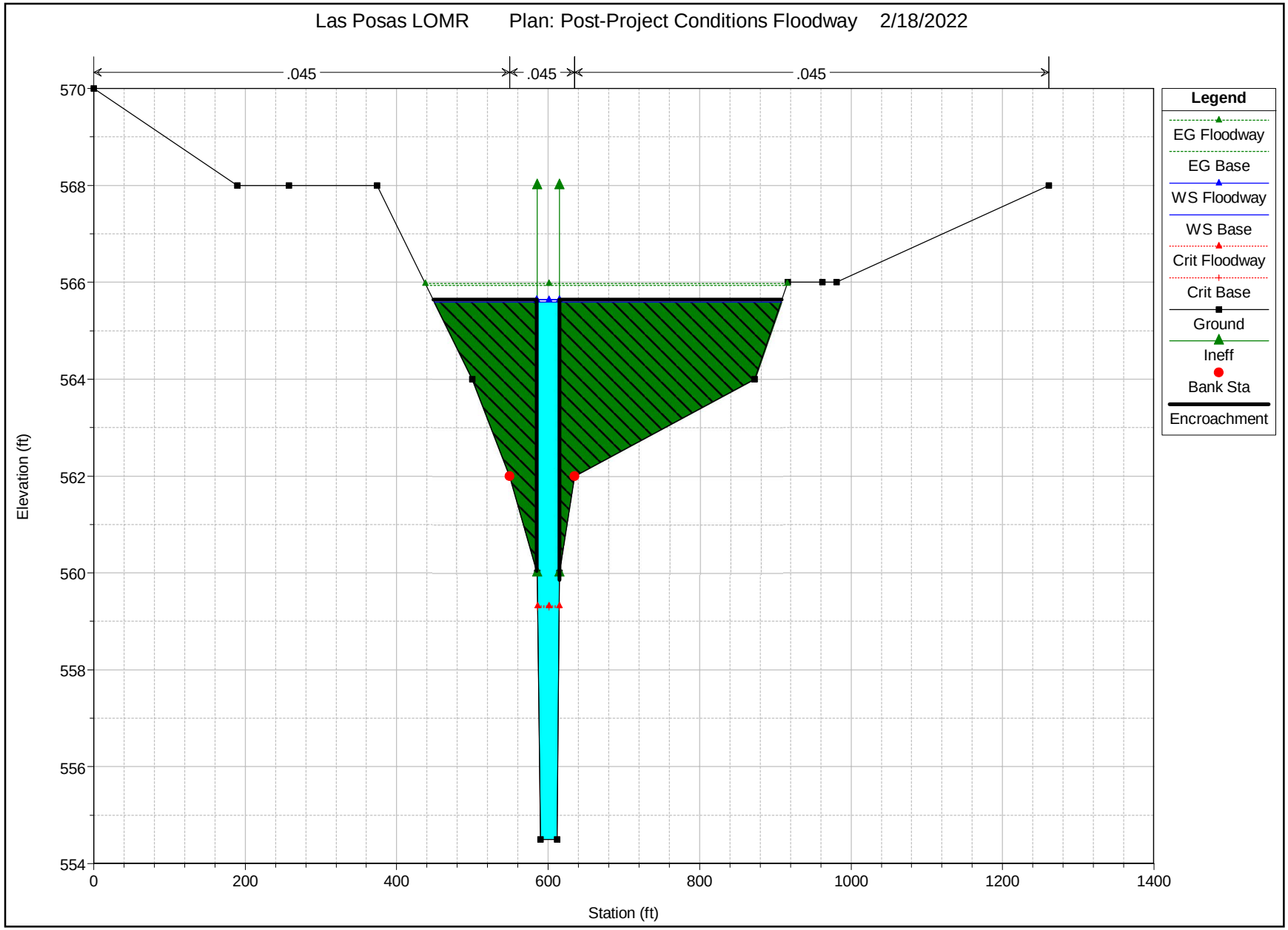
CHAPTER 6 -2
HEC-RAS ANALYSIS FOR LAS POSAS CREEK AT THE CROSS SECTION AT TH GRADING AREA

Existing Conditions

HEC-RAS Plan: Plan 08 River: Las Posas Reach: Desc. - SR 78

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
Desc. - SR 78	1300	Base	1417.00	564.30	569.37		570.65	0.006269	9.06	156.39	42.25	0.83
Desc. - SR 78	1300	Floodway	1417.00	564.30	569.73	569.67	572.38	0.012995	13.06	108.51	20.00	0.99
Desc. - SR 78	1200	Base	1417.00	560.00	565.46	564.74	566.73	0.005806	9.04	156.80	158.32	0.78
Desc. - SR 78	1200	Floodway	1417.00	560.00	565.60	564.72	566.80	0.005318	8.79	161.15	36.86	0.74
Desc. - SR 78	1100	Base	1417.00	554.50	565.60	559.29	565.93	0.001112	4.64	305.19	457.94	0.25
Desc. - SR 78	1100	Floodway	1417.00	554.50	565.64	559.31	565.97	0.001344	4.63	305.92	30.00	0.25
Desc. - SR 78	1050		Culvert									
Desc. - SR 78	1000	Base	1417.00	554.08	557.85	557.85	559.70	0.002128	10.93	129.62	165.23	1.00
Desc. - SR 78	1000	Floodway	1417.00	554.08	557.90	557.90	559.80	0.002724	11.06	128.18	34.00	1.00
Desc. - SR 78	900	Base	1417.00	554.00	556.78	556.78	557.96	0.002713	8.71	162.64	70.00	1.01
Desc. - SR 78	900	Floodway	1417.00	554.00	556.78	556.78	557.96	0.002711	8.71	162.67	70.00	1.01
Desc. - SR 78	855	Base	1417.00	550.85	555.17	555.17	556.61	0.002663	9.60	147.63	52.45	1.01
Desc. - SR 78	855	Floodway	1417.00	550.85	555.17	555.17	556.61	0.002664	9.60	147.61	52.45	1.01
Desc. - SR 78	800	Base	1417.00	550.70	554.82	553.75	555.55	0.000874	6.84	207.04	316.55	0.62
Desc. - SR 78	800	Floodway	1417.00	550.70	554.83	553.77	555.55	0.000952	6.84	207.12	54.00	0.62
Desc. - SR 78	793	Base	1417.00	550.40	554.49	553.88	555.52	0.001378	8.14	174.15	208.10	0.76
Desc. - SR 78	793	Floodway	1417.00	550.40	554.49	553.88	555.52	0.001499	8.13	174.19	49.00	0.76
Desc. - SR 78	780	Base	917.00	550.95	554.25	554.25	555.48	0.002278	8.92	105.08	274.00	0.94
Desc. - SR 78	780	Floodway	917.00	550.95	554.25	554.25	555.48	0.002512	8.89	105.39	48.10	0.94
Desc. - SR 78	775	Base	917.00	550.00	553.17	553.17	554.26	0.002591	8.35	109.83	67.33	1.00
Desc. - SR 78	775	Floodway	917.00	550.00	553.17	553.17	554.26	0.002723	8.35	109.83	50.41	1.00
Desc. - SR 78	725	Base	917.00	549.00	550.29	550.29	550.55	0.003745	4.04	227.00	417.31	0.97
Desc. - SR 78	725	Floodway	917.00	549.00	551.11		551.69	0.001766	6.14	149.26	80.00	0.79
Desc. - SR 78	700	Base	917.00	548.00	549.66		549.73	0.000442	2.07	442.99	446.97	0.37
Desc. - SR 78	700	Floodway	917.00	548.53	550.58	550.58	551.50	0.002876	7.68	119.39	65.00	1.00
Desc. - SR 78	600	Base	917.00	544.00	549.70		549.71	0.000002	0.42	2850.09	1019.55	0.03
Desc. - SR 78	600	Floodway	917.00	544.00	549.70		549.71	0.000006	0.69	1345.32	275.00	0.05
Desc. - SR 78	500	Base	917.00	541.20	549.14	545.22	549.65	0.000213	5.75	159.51	1009.25	0.36
Desc. - SR 78	500	Floodway	917.00	541.20	549.14	545.22	549.65	0.000462	5.75	159.51	20.09	0.36
Desc. - SR 78	450		Culvert									
Desc. - SR 78	400	Base	917.00	537.40	541.45	541.45	543.47	0.002063	11.42	80.27	401.95	1.00
Desc. - SR 78	400	Floodway	917.00	537.40	541.45	541.45	543.47	0.002063	11.42	80.27	345.00	1.00
Desc. - SR 78	300	Base	917.00	538.00	540.03		540.11	0.000446	2.22	414.11	390.66	0.37
Desc. - SR 78	300	Floodway	917.00	538.00	540.80	540.80	542.17	0.002796	9.41	97.42	35.00	0.99
Desc. - SR 78	200	Base	1109.00	536.00	539.37	539.37	539.88	0.001426	6.77	237.35	232.50	0.76
Desc. - SR 78	200	Floodway	1109.00	536.00	539.38	539.38	539.87	0.001360	6.63	239.71	224.03	0.75

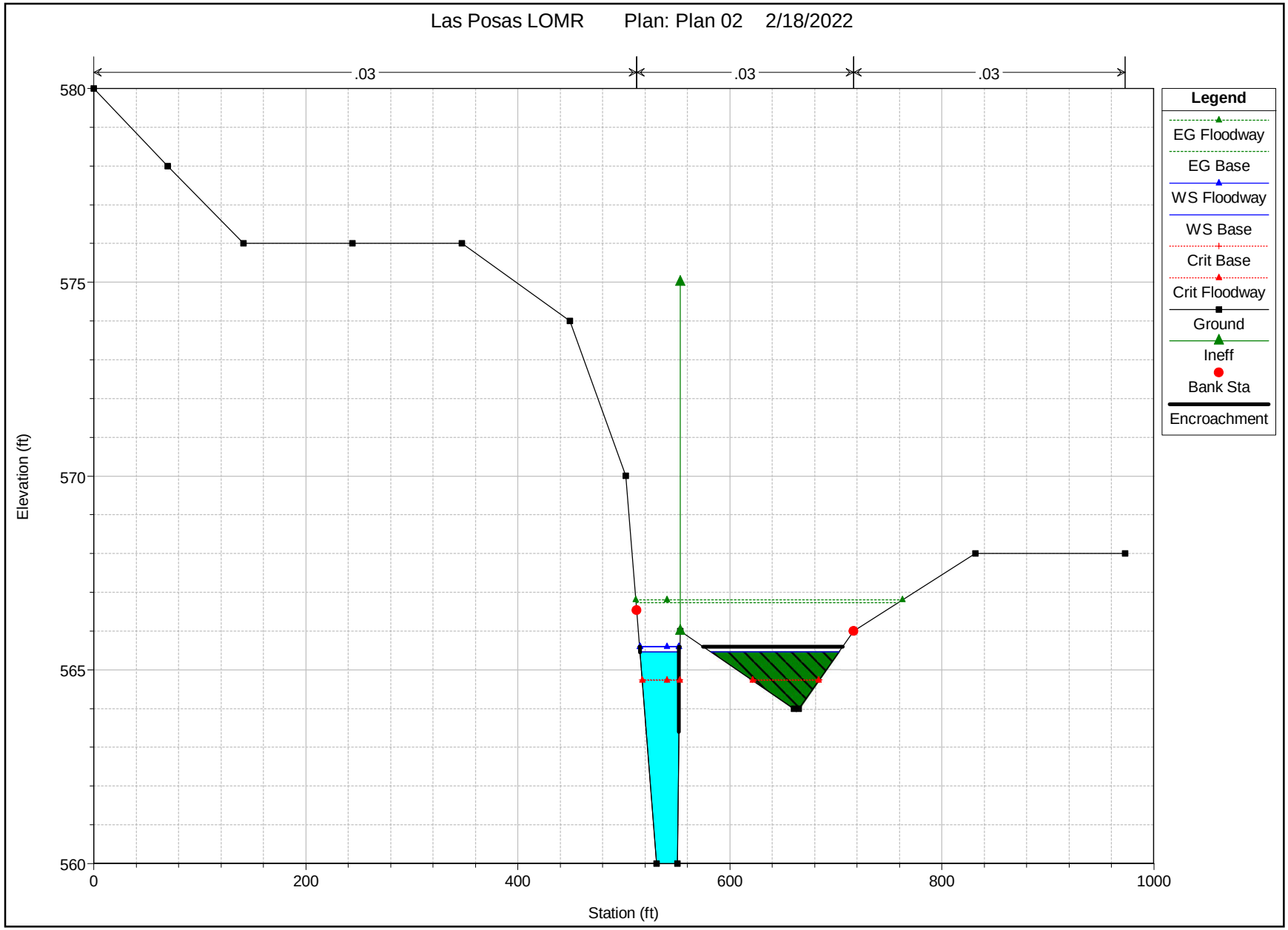

Las Posas LOMR
Plan: Post-Project Conditions Floodway
2/18/2022
.03
.03
.03
580
575
570
565
560
Elevation (ft)
0
200
400
600
800
1000
Station (ft)
Legend
EG Floodway
EG Base
WS Floodway
WS Base
Crit Base
Crit Floodway
Ground
Ineff
Bank Sta
Encroachment

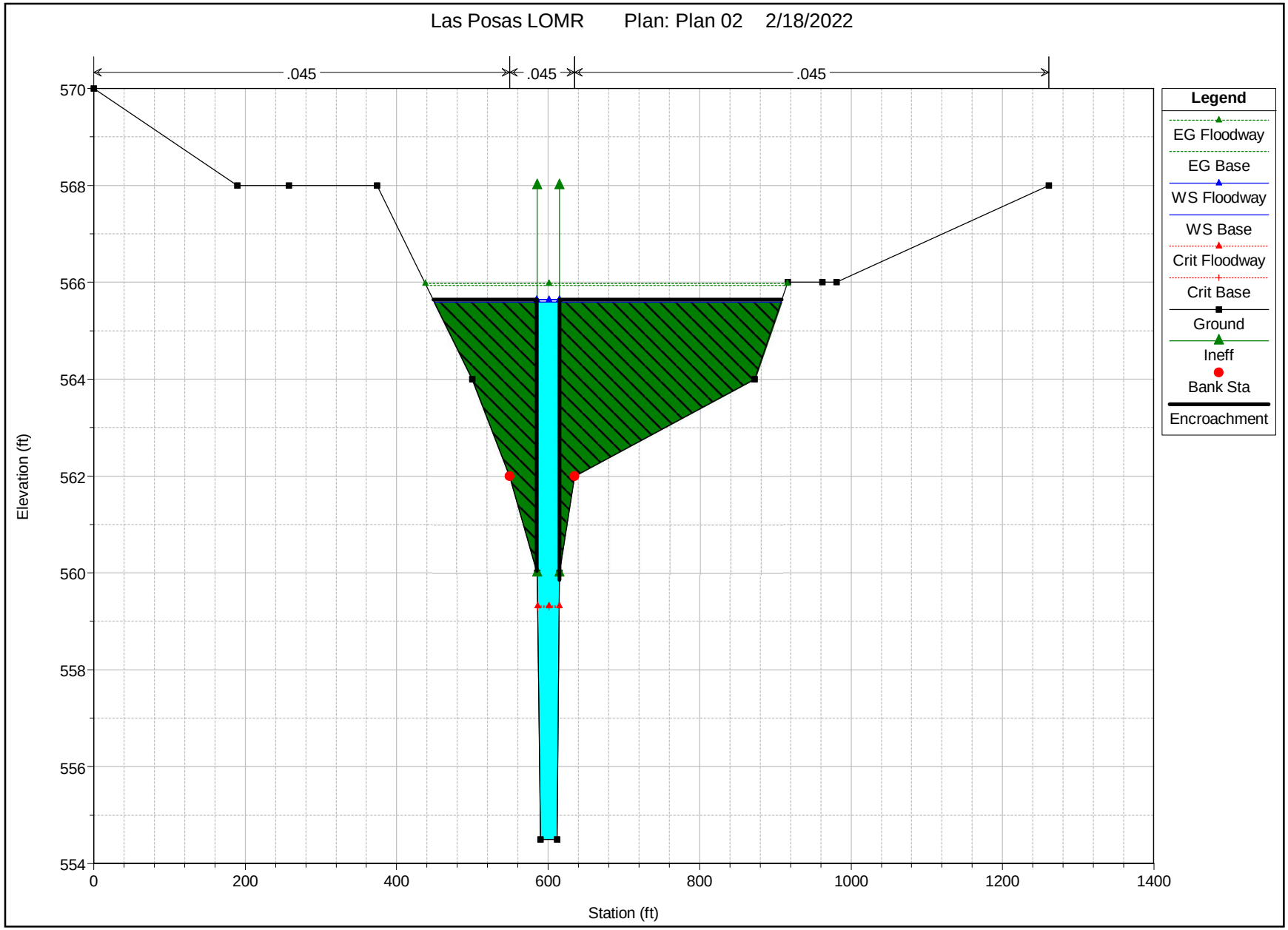

Las Posas LOMR Plan: Post-Project Conditions Floodway 2/18/2022
.045
.045
.045
570
568
566
564
562
560
558
556
554
Elevation (ft)
0
200
400
600
800
1000
1200
1400
Station (ft)
Legend
EG Floodway
EG Base
WS Floodway
WS Base
Crit Floodway
Crit Base
Ground
Ineff
Bank Sta
Encroachment

proposed Conditions

HEC-RAS Plan: P10 River: Las Posas Reach: Desc. - SR 78

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
Desc. - SR 78	1300	Base	1417.00	564.30	569.37		570.65	0.006269	9.06	156.39	42.25	0.83
Desc. - SR 78	1300	Floodway	1417.00	564.30	569.73	569.67	572.38	0.012995	13.06	108.51	20.00	0.99
Desc. - SR 78	1200	Base	1417.00	560.00	565.46	564.74	566.73	0.005806	9.04	156.80	158.32	0.78
Desc. - SR 78	1200	Floodway	1417.00	560.00	565.60	564.72	566.80	0.005318	8.79	161.15	36.86	0.74
Desc. - SR 78	1100	Base	1417.00	554.50	565.60	559.29	565.93	0.001112	4.64	305.19	457.94	0.25
Desc. - SR 78	1100	Floodway	1417.00	554.50	565.64	559.31	565.97	0.001344	4.63	305.92	30.00	0.25
Desc. - SR 78	1050		Culvert									
Desc. - SR 78	1000	Base	1417.00	554.08	557.85	557.85	559.70	0.002128	10.93	129.62	165.23	1.00
Desc. - SR 78	1000	Floodway	1417.00	554.08	557.90	557.90	559.80	0.002724	11.06	128.18	34.00	1.00
Desc. - SR 78	900	Base	1417.00	554.00	556.78	556.78	557.96	0.002713	8.71	162.64	70.00	1.01
Desc. - SR 78	900	Floodway	1417.00	554.00	556.78	556.78	557.96	0.002711	8.71	162.67	70.00	1.01
Desc. - SR 78	855	Base	1417.00	550.85	555.17	555.17	556.61	0.002663	9.60	147.63	52.45	1.01
Desc. - SR 78	855	Floodway	1417.00	550.85	555.17	555.17	556.61	0.002664	9.60	147.61	52.45	1.01
Desc. - SR 78	800	Base	1417.00	550.70	554.82	553.75	555.55	0.000874	6.84	207.04	316.55	0.62
Desc. - SR 78	800	Floodway	1417.00	550.70	554.83	553.77	555.55	0.000952	6.84	207.12	54.00	0.62
Desc. - SR 78	793	Base	1417.00	550.40	554.49	553.88	555.52	0.001378	8.14	174.15	208.10	0.76
Desc. - SR 78	793	Floodway	1417.00	550.40	554.49	553.88	555.52	0.001499	8.13	174.19	49.00	0.76
Desc. - SR 78	780	Base	917.00	550.95	554.25	554.25	555.48	0.002278	8.92	105.08	274.00	0.94
Desc. - SR 78	780	Floodway	917.00	550.95	554.25	554.25	555.48	0.002512	8.89	105.39	48.10	0.94
Desc. - SR 78	775	Base	917.00	550.00	553.17	553.17	554.26	0.002591	8.35	109.83	67.33	1.00
Desc. - SR 78	775	Floodway	917.00	550.00	553.17	553.17	554.26	0.002723	8.35	109.83	50.41	1.00
Desc. - SR 78	725	Base	917.00	549.00	550.29	550.29	550.55	0.003745	4.04	227.00	417.31	0.97
Desc. - SR 78	725	Floodway	917.00	549.00	551.11		551.69	0.001766	6.14	149.26	80.00	0.79
Desc. - SR 78	700	Base	917.00	548.00	549.66		549.73	0.000442	2.07	442.99	446.97	0.37
Desc. - SR 78	700	Floodway	917.00	548.53	550.58	550.58	551.50	0.002876	7.68	119.39	65.00	1.00
Desc. - SR 78	600	Base	917.00	544.00	549.70		549.71	0.000002	0.42	2850.09	1019.55	0.03
Desc. - SR 78	600	Floodway	917.00	544.00	549.70		549.71	0.000006	0.69	1345.32	275.00	0.05
Desc. - SR 78	500	Base	917.00	541.20	549.14	545.22	549.65	0.000213	5.75	159.51	1009.25	0.36
Desc. - SR 78	500	Floodway	917.00	541.20	549.14	545.22	549.65	0.000462	5.75	159.51	20.09	0.36
Desc. - SR 78	450		Culvert									
Desc. - SR 78	400	Base	917.00	537.40	541.45	541.45	543.47	0.002063	11.42	80.27	401.95	1.00
Desc. - SR 78	400	Floodway	917.00	537.40	541.45	541.45	543.47	0.002063	11.42	80.27	345.00	1.00
Desc. - SR 78	300	Base	917.00	538.00	540.03		540.11	0.000446	2.22	414.11	390.66	0.37
Desc. - SR 78	300	Floodway	917.00	538.00	540.80	540.80	542.17	0.002796	9.41	97.42	35.00	0.99
Desc. - SR 78	200	Base	1109.00	536.00	539.37	539.37	539.88	0.001426	6.77	237.35	232.50	0.76
Desc. - SR 78	200	Floodway	1109.00	536.00	539.38	539.38	539.87	0.001360	6.63	239.71	224.03	0.75


Las Posas LOMR Plan: Plan 02 2/18/2022
.03
.03
.03
580
575
570
565
560
Elevation (ft)
0
200
400
600
800
1000
Station (ft)
Legend
EG Floodway
EG Base
WS Floodway
WS Base
Crit Base
Crit Floodway
Ground
Ineff
Bank Sta
Encroachment

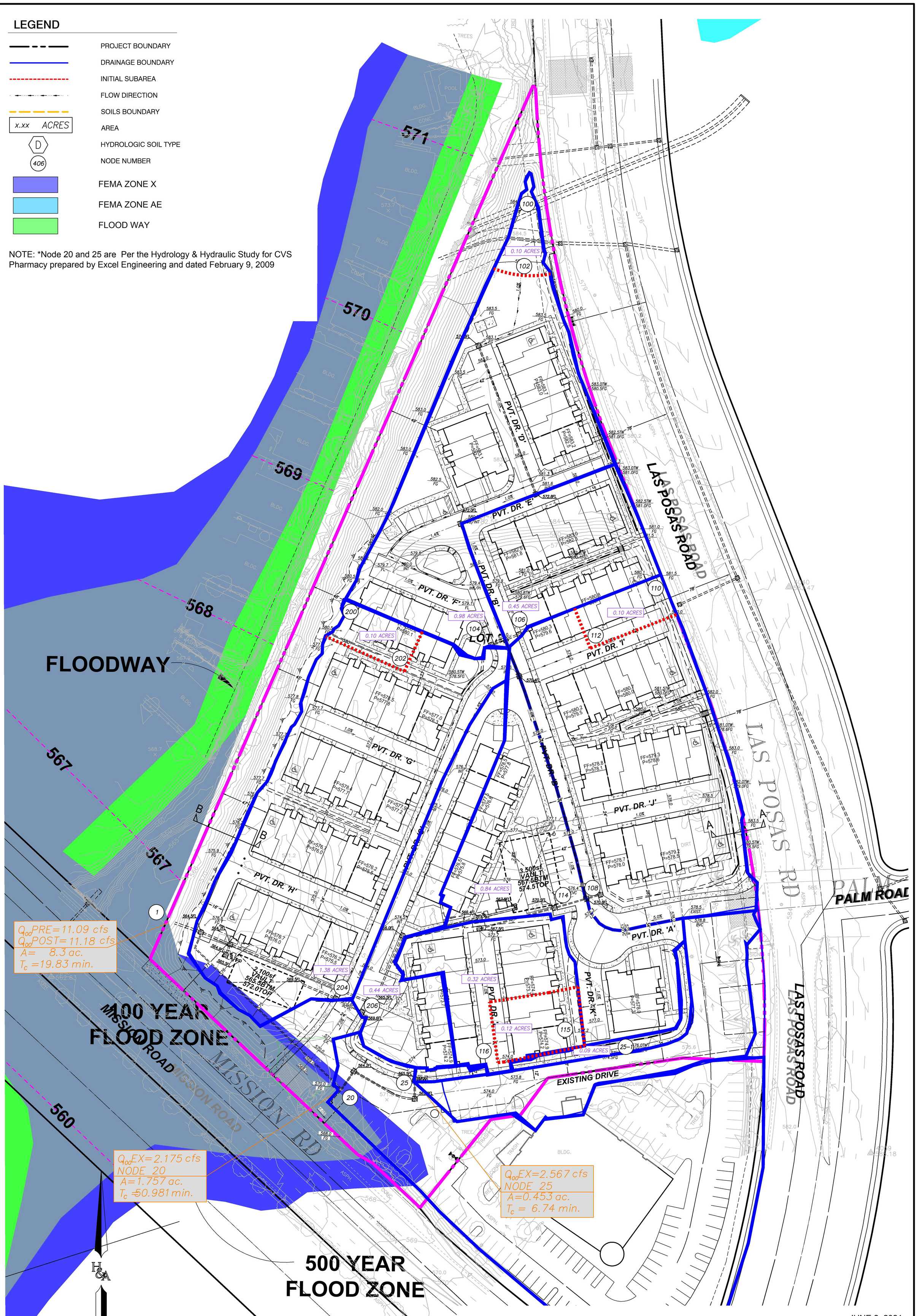

Las Posas LOMR Plan: Plan 02 2/18/2022
.045
.045
.045
570
568
566
564
562
560
558
556
554
Elevation (ft)
0
200
400
600
800
1000
1200
1400
Station (ft)
Legend
EG Floodway
EG Base
WS Floodway
WS Base
Crit Floodway
Crit Base
Ground
Ineff
Bank Sta
Encroachment

CHAPTER 7
HYDROLOGY MAPS

LEGEND

- PROJECT BOUNDARY
- DRAINAGE BOUNDARY
- INITIAL SUBAREA
- FLOW DIRECTION
- SOILS BOUNDARY
- x.xx ACRES — AREA
- D — HYDROLOGIC SOIL TYPE
- 406 — NODE NUMBER
- FEMA ZONE X
- FEMA ZONE AE
- FLOOD WAY

NOTE: *Node 20 and 25 are Per the Hydrology & Hydraulic Study for CVS Pharmacy prepared by Excel Engineering and dated February 9, 2009



JUNE 2, 2021

PREPARED BY:
HUNSAKER & ASSOCIATES SAN DIEGO, INC.
PLANNING 9707 Waples Street
ENGINEERING San Diego, Ca 92121
SURVEYING PH(858)558-4500 · FX(858)558-1414

DRAINAGE MAP PROPOSED CODITIONS

LAS POSAS

CITY OF SAN MARCOS, CALIFORNIA

SHEET 1 OF 1

W.O. 3087-0007

R:\1482\&Hyd\Hydrology\MAPs\1482-HYD-PR.dwg[]Feb-21-2022:12:56

Chapter 7
FEMA MAP

NOTES TO USERS

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The **community map repository** should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where **Base Flood Elevations** (BFEs) and/or **floodways** have been determined, users are encouraged to consult the Flood Profiles and Floodway Data and/or Summary of Stillwater Elevations tables contained within the Flood Insurance Study (FIS) report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

Coastal Base Flood Elevations (BFEs) shown on this map apply only landward of 0.0' North American Vertical Datum of 1988 (NAVD 88). Users of this FIRM should be aware that coastal flood elevations are also provided in the Summary of Stillwater Elevations table in the Flood Insurance Study report for this jurisdiction. Elevations shown in the Summary of Stillwater Elevations table should be used for construction and/or floodplain management purposes when they are higher than the elevations shown on this FIRM.

Boundaries of the **floodways** were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by **flood control structures**. Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study report for information on flood control structures for this jurisdiction.

The **projection** used in the preparation of this map was Universal Transverse Mercator (UTM) Zone 11. The **horizontal datum** was NAD83, GRS1980 spheroid. Differences in datum, spheroid, projection or UTM zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

Flood elevations on this map are referenced to the North American Vertical Datum of 1988. These flood elevations must be compared to structure and ground elevations referenced to the same **vertical datum**. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at http://www.ngs.noaa.gov/ or contact the National Geodetic Survey at the following address:

NGS Information Services
NOAA, N/NGS12
National Geodetic Survey
SSMC-3, #9202
1315 East-West Highway
Silver Spring, Maryland 20910-3282
(301) 713-3242

To obtain current elevation, description, and/or location information for **bench marks** shown on this map, please contact the Information Services Branch of the National Geodetic Survey at **(301) 713-3242** or visit its website at http://www.ngs.noaa.gov/.

Base map information shown on this FIRM was provided in digital format by the USDA National Agriculture Imagery Program (NAIP). this information was photogrammetrically compiled at a scale of 1:24,000 from aerial photography dated 2009.

This map reflects more detailed and up-to-date **stream channel configurations** than those shown on the previous FIRM for this jurisdiction. The floodplains and floodways that were transferred from the previous FIRM may have been adjusted to conform to these new stream channel configurations. As a result, the Flood Profiles and Floodway Data tables *in the Flood Insurance Study report (which contains authoritative hydraulic data)* may reflect stream channel distances that differ from what is shown on this map.

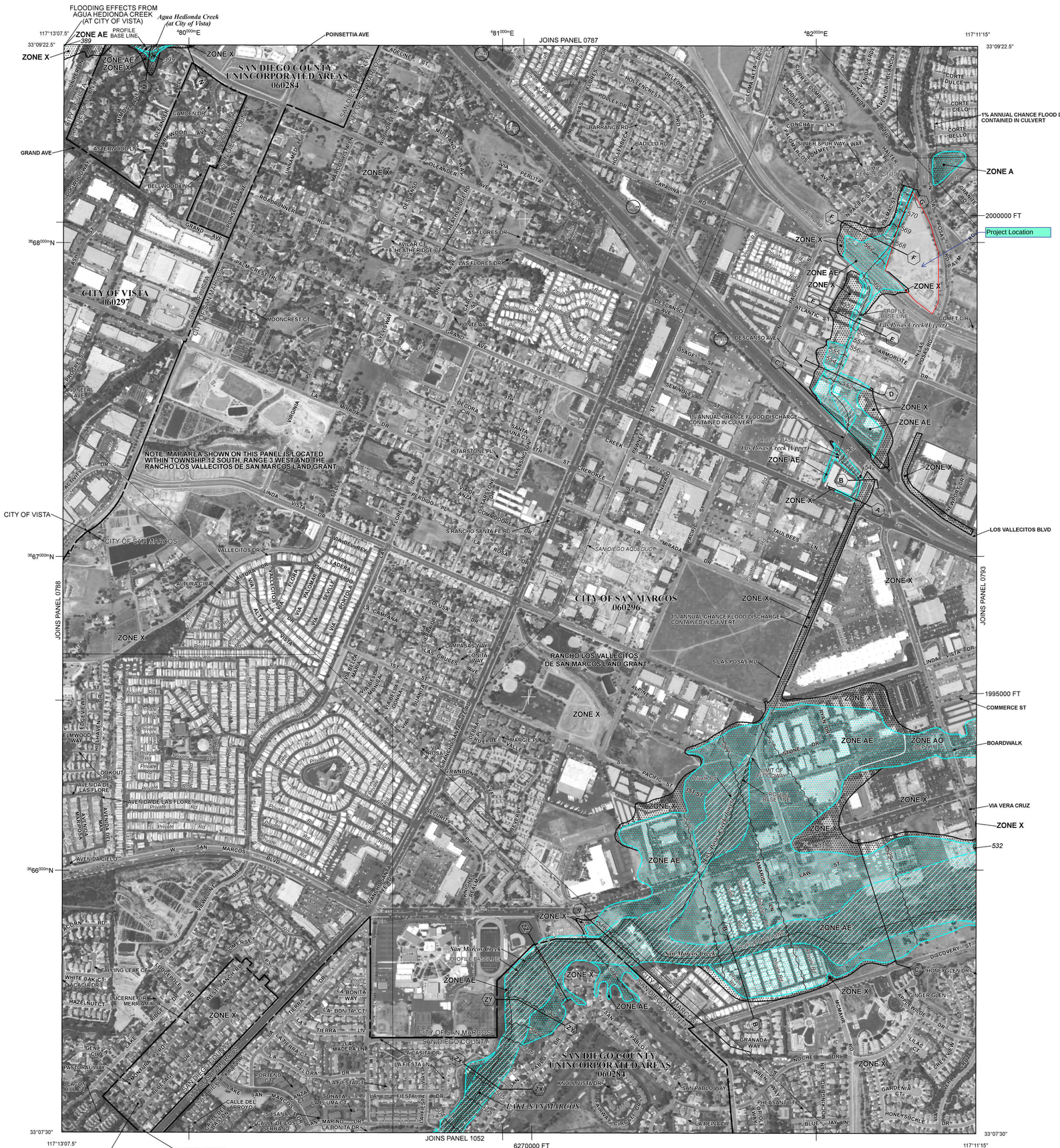
Corporate limits shown on this map are based on the best data available at the time of publication. Because changes due to annexations or de-annexations may have occurred after this map was published, map users should contact appropriate community officials to verify current corporate limit locations.

Please refer to the separately printed **Map Index** for an overview map of the county showing the layout of map panels; community map repository addresses; and a Listing of Communities table containing National Flood Insurance Program dates for each community as well as a listing of the panels on which each community is located.

Contact the **FEMA Map Service Center** at 1-877-FEMA MAP (1.877-336-2627) for information on available products associated with this FIRM. Available products may include previously issued Letters of Map Change, a Flood Insurance Study report, and/or digital versions of this map. The FEMA Map Service Center may also be reached by Fax at 1-800-358-9620 and its website at http://msc.fema.gov/.

If you have **questions about this map** or questions concerning the National Flood Insurance Program in general, please call **1-877-FEMA MAP** (1-877-336-2627) or visit the FEMA website at http://www.fema.gov/business/nfip/.

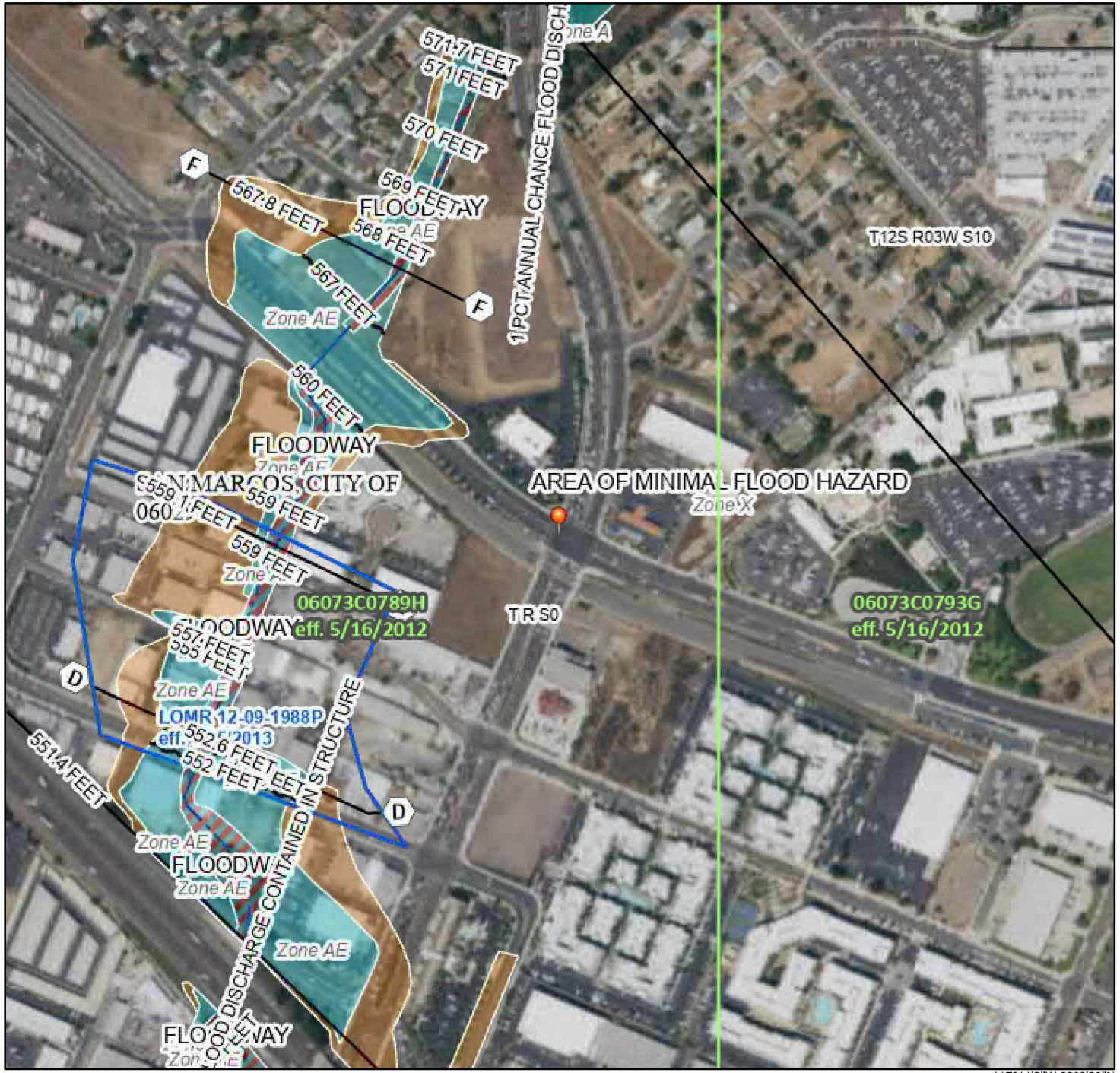
The **"profile base lines"** depicted on this map represent the hydraulic modeling baselines that match the flood profiles in the FIS report. As a result of improved topographic data, the "profile base line", in some cases, may deviate significantly from the channel centerline or appear outside the SFHA.


FLOODING EFFECTS FROM AGUA HEDIONDA CREEK (AT CITY OF VISTA)
Agua Hedionda Creek (at City of Vista)
PROFILE BASE LINE
117°13'07.5"
33°09'22.5"
ZONE AE
389
ZONE X
ZONE AE
ZONE X
399
POINSETTIA AVE
4680000mE
4681000mE
4682000mE
117°11'15"
JOINS PANEL 0787
SAN DIEGO COUNTY UNINCORPORATED AREAS 060284
ADELINE ST
MELROSE AVE
SAN DIEGO COUNTY
CITY OF SAN MARCOS
SAN DIEGO AQUEDUCT
HOLLENCREST RD
DELEONE RD
LOMA ALTA DR
CORTE CIELO
CORTE DULCE
CORTE BELLO
AVENIDA VERDE
AVENIDA BLANCO
1% ANNUAL CHANCE FLOOD DISCHARGE CONTAINED IN CULVERT
ZONE A
2000000 FT
Project Location
GRAND AVE
3668000mN
ZONE X
CITY OF VISTA 060297
CITY OF SAN MARCOS
CAMDEN DR
PARKWOOD AVE
ASTERWOOD LN
BELLWOOD LN
LOCKWOOD WAY
UNNAMED ST
MARCOS AVE
ROADRUNNER RD
PRINCETON AVE
PALMCREST RD
MOONCREST CT
SKYVIEW DR
PACIFIC ST
PIONEER AVE
VIRGINIA LA
MIRADA DR
ASHWIN PL
ASHWIN ST
ZONE X
OLEANDER AVE
DESCANSO AVE
HEATHERRIDGE RD
AVILAR CT
HEATHERRIDGE CT
LAS FLORES DR
PONTE AVE
CARLOS RD
PALOMAR ST
CAPALINA RD
BARRANCA RD
BADILLO RD
HOLLENBECK RD
POINLEY DR
MURTAND RD
VIA PERLITA
CONCHAT LN
SILVER SPUR WAY
WAY
PALMEROS AVE
SOMMET
PALMER
DRIVE-IN DEPOT SUD
ZONE AE
ZONE X
ATLANTIC ST
COMET CIR
PROFILE BASE LINE
Twin Peaks Creek (Upper)
ARMORITE DR
ALLAS ROSAS RD
ZONE X
ZONE AE
ZONE X
1% ANNUAL CHANCE FLOOD DISCHARGE CONTAINED IN CULVERT
PROFILE BASE LINE
Twin Peaks Creek (Upper)
ZONE AE
ZONE X
ZONE X
LOS VALLECITOS BLVD
NOTE: MAP AREA SHOWN ON THIS PANEL IS LOCATED WITHIN TOWNSHIP 12 SOUTH, RANGE 3 WEST AND THE RANCHO LOS VALLECITOS DE SAN MARCOS LAND GRANT.
CITY OF VISTA
CITY OF SAN MARCOS
3667000mN
VALLECITOS DR
ALTURA CIR
ALTURA DR
VIA ALTA
VIA FLORA
VIA PALOMAR
VIA SEVILLE
VIA PORTOLA
VIA VISTA
LA CAMPANA
LA COLUSA DR
LA SIERRA DR
LAMPASAS WAY
LOMITA WAY
LAS CRUCES
VIA ELSA MARIA
VIA MONICA
VIA LA JOLLA
VIA RUANITA
VIA ROSA
SAN MARCOS CREEK
CITY OF SAN MARCOS 060296
RANCHO LOS VALLECITOS DE SAN MARCOS LAND GRANT
ZONE X
1% ANNUAL CHANCE FLOOD DISCHARGE CONTAINED IN CULVERT
S LAS POSAS RD
LINDA VISTA DR
ZONE X
1995000 FT
COMMERCE ST
BOARDWALK
ZONE AE
ZONE AO
LIMIT OF FLOODWAY
PROFILE BASE LINE
ZONE X
ZONE X
VIA VERA CRUZ
ZONE X
532
ZONE AE
ZONE X
San Marcos Creek
PROFILE BASE LINE
ZONE AE
ZONE X
ZONE AE
CITY OF SAN MARCOS
SAN DIEGO COUNTY
SAN DIEGO COUNTY UNINCORPORATED AREAS 060284
LA GASITA DR
LA FIESTA LN
LA FIESTA WAY
LA FIESTA CT
LA MADERA LN
LA BONITA WAY
LA BONITA CT
LA TIERRA LN
LA TIERRA CT
LA TIERRA
LA FLORA DR
LA PLUMA CT
SONATA CT
SAN MARCOS LANZA
CALLE DEL ARROYO
CALLE DE LOS CERRADOS
SUSANA CIR
SAN MARINO DR
LA BONITA DR
ZONE X
ZONE X
KNOLL VISTA DR
SAN PABLO WAY
LA REINA DR
GRANADA WAY
NOCHE DR
WREN WAY
PHEASANT CT
MOCKINGBIRD LN
BLUE JAY LN
GARDENIA CT
HONEYSUCKLE DR
VERA CRUZ
GRESHAM CIR
LILAC CT
ZONE X
ZONE X
ZONE X

National Flood Hazard Layer FIRMette

FEMA

117°11'39"W 33°9'9"N



117°11'2"W 33°8'39"N

0 250 500 1,000 1,500 2,000 Feet

1:6,000

Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 Cross Sections with 1% Annual Chance
- 17.5 Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 6/28/2021 at 3:23 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

Chapter 9
REFERNCE REPORT AND MAP

HYDROLOGY& HYDRAULIC STUDY FOR
CVS PHARMACY

NORTH LAS POSAS AND WEST MISSION ROAD,
SAN MARCOS, CA

ENGINEER OF WORK

EXCEL ENGINEERING
440 State Place
Escondido, CA 92029
(760) 745-8118
Project No. 05-036

December 19, 2008
Revision 1: January 13, 2009
Revision 2: February 9, 2009

6.3 Runoff Calculation using Rational Method

Runoff coefficient is obtained using Table 3-1 of San Diego County Hydrology Manual 2003, C= 0.35 is used for the undeveloped area and C= 0.79 for soil type D and commercial/Industrial area.

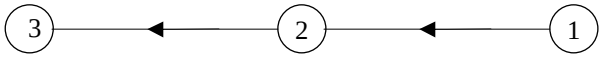


Figure A. Flow scheme for Pre-Development

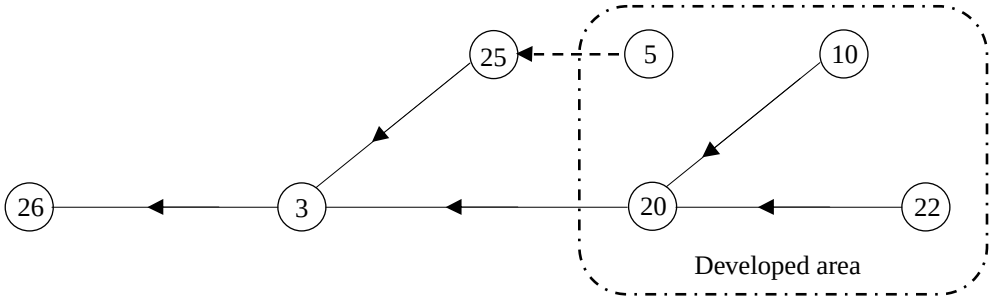


Figure B. Flow scheme for Post-Development

Schemes above show a simplified run-off flow node to node, node 10 represents flow from node 7 to 17 (1.50 acre), node 22 represents node 21 to 22 (0.257 acre). Node 25 represents flow from node 1 to 2 (6.717 acre =6.218 existing + 0.499 acre developed) which is the undeveloped area and combined with flow from the developed area nodes 4, 5 and 25 (0.499 acre). Please see "Existing Conditions Q100 Calculations" in Attachment H for the pre-development conditions and see "Existing + Project Conditions Q100 Calculations" in Attachment I for the post-development conditions.

EXISTING CONDITIONS Q100

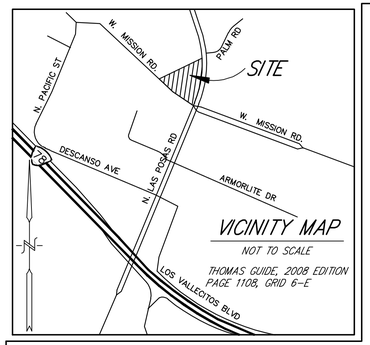
NODE	AREA (Ac)	Tc(MINS)	I (in/Hr)	C	Q (cfs)
3	8.681	19	3.649	0.35	**11.09**

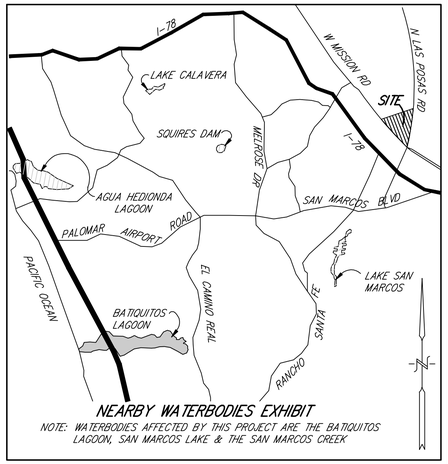
EXISTING + PROJECT CONDITIONS Q100

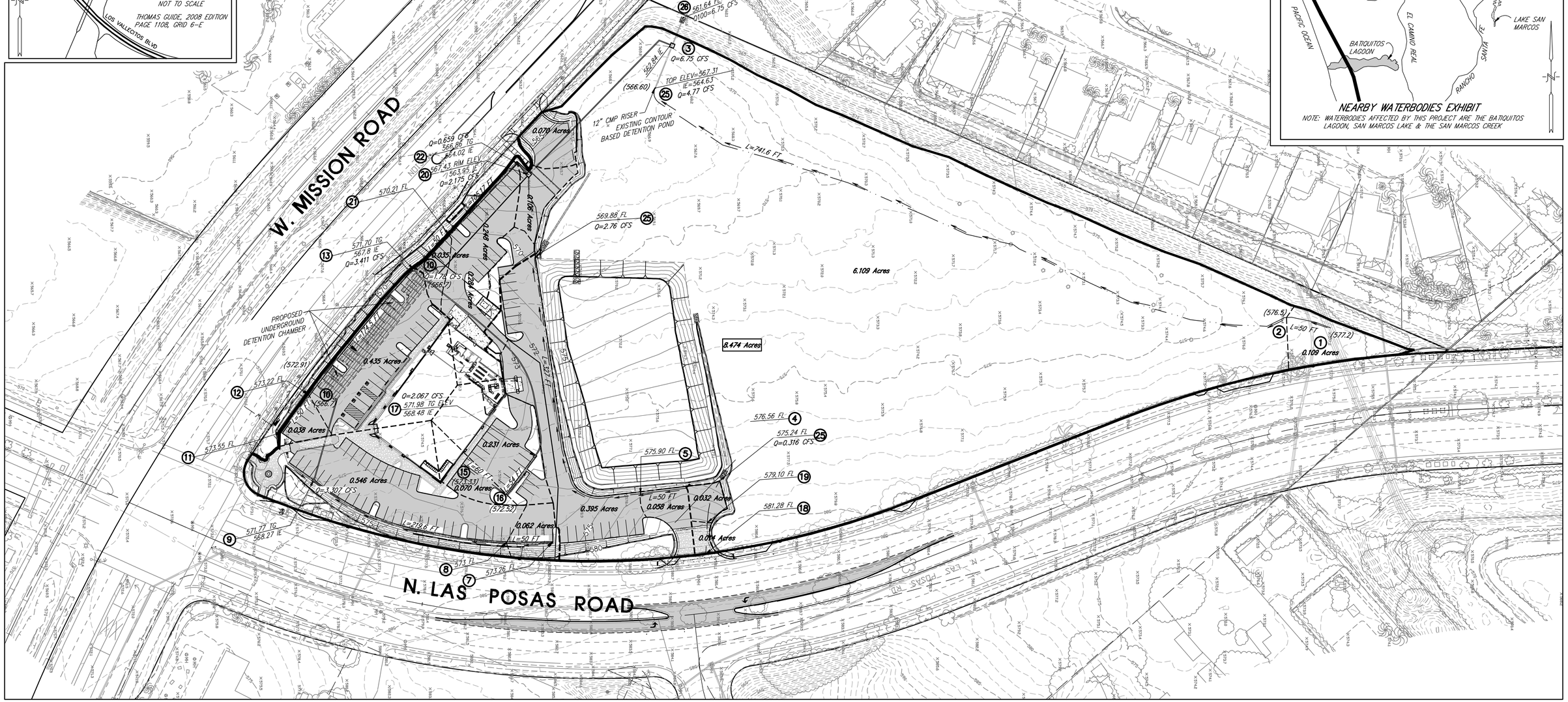
NODE	AREA (Ac)	Tc(MINS)	I (in/Hr)	C	Q (cfs)
10	1.500	50	1.98	0.6	1.78
22	0.257	22	3.25	0.79	0.659
20	CONFLUENCE NODE 10 AND 22				2.17
25	6.717	60	1.751	0.406	4.77
3	CONFLUENCE NODE 25 AND 20				6.75
26	8.474	52	-	-	**6.75**

RUNOFF DECREASE 4.34

Decrease of runoff is due to the implementation of sand filter and the StormChamber™.





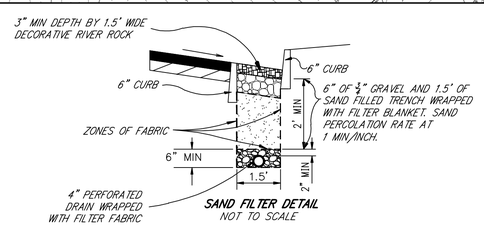




LEGEND

WATERCOURSE	
WATERSHED BOUNDARY	
SUBAREA BOUNDARY	
NODE NUMBER	(1)
ELEVATION	(XXX)
TOTAL STUDY AREA (ACRES)	X.XX
WATERCOURSE LENGTH	L=XXX
SAND FILTER	

*ROTATE VIEW



SAND FILTER DETAIL
NOT TO SCALE

CVS PHARMACY
WATERSHED TOPOGRAPHIC MAP
EXISTING + PROJECT CONDITIONS
SAN MARCOS, CALIFORNIA

Appendix H

Storm Water Quality Management Plan

CITY OF SAN MARCOS

PRIORITY DEVELOPMENT PROJECT (PDP)
STORM WATER QUALITY MANAGEMENT PLAN (SWQMP)
FOR
Gran Vista
TSM21-0003 | MFS21-0001 | SP 21-0003

219-121-15-00 & 219-121-16-00
[SAN MARCOS, CA 92069]

ASSESSOR'S PARCEL NUMBER(S):
219-121-15-00 & 219-121-16-00

ENGINEER OF WORK:



Alisa S. Vialpando **47945**

[INSERT CIVIL ENGINEER'S NAME AND PE NUMBER HERE, PROVIDE WET SIGNATURE AND STAMP ABOVE LINE]

PREPARED FOR:

WPI-LAS POSAS/MISSION, LLC
ANDREW SUN
C/O WORLD PREMIER INVESTMENTS, INC.
[INSERT ADDRESS]
18300 VON KARMAN AVE., SUITE 880, IRVINE, CA 92612
949-943-8550 Ext. 850

PDP SWQMP PREPARED BY:

HUNSAKER& ASSOCIATES - SAN DIEGO, INC.
9707 WAPLES ST.
SAN DIEGO, CALIFORNIA 92121
(858) 558-4500

DATE OF SWQMP:
May 20, 2022

PLANS PREPARED BY:
Hunsaker & Associates San Diego, Inc.
9707 Waples Street, San Diego, CA 92121
(858) 558-4500

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ACRONYMS

APN	Assessor's Parcel Number
BMP	Best Management Practice
HMP	Hydromodification Management Plan
HSG	Hydrologic Soil Group
MS4	Municipal Separate Storm Sewer System
N/A	Not Applicable
NRCS	Natural Resources Conservation Service
PDP	Priority Development Project
PE	Professional Engineer
SC	Source Control
SD	Site Design
SDRWQCB	San Diego Regional Water Quality Control Board
SIC	Standard Industrial Classification
SWQMP	Storm Water Quality Management Plan

PDP SWQMP PREPARER'S CERTIFICATION PAGE

Project Name: Gran Vista

Permit Application Number: TSM21-0003 | MFS21-0001 | SP 21-0003

PREPARER'S CERTIFICATION

I hereby declare that I am the Engineer in Responsible Charge of design of storm water best management practices (BMPs) for this project, and that I have exercised responsible charge over the design of the BMPs as defined in Section 6703 of the Business and Professions Code, and that the design is consistent with the PDP requirements of the [INSERT AGENCY NAME] BMP Design Manual, which is a design manual for compliance with local [INSERT AGENCY NAME] and regional MS4 Permit (California Regional Water Quality Control Board San Diego Region Order No. R9-2015-0100) requirements for storm water management.

I have read and understand that the [City Engineer] has adopted minimum requirements for managing urban runoff, including storm water, from land development activities, as described in the BMP Design Manual. I certify that this PDP SWQMP has been completed to the best of my ability and accurately reflects the project being proposed and the applicable BMPs proposed to minimize the potentially negative impacts of this project's land development activities on water quality. I understand and acknowledge that the plan check review of this PDP SWQMP by the [City Engineer] is confined to a review and does not relieve me, as the Engineer in Responsible Charge of design of storm water BMPs for this project, of my responsibilities for project design.

Alisa S. Vialpando 47945 12/31/2023

Engineer of Work's Signature, PE Number & Expiration Date

Alisa Vialpando

Print Name

Hunsaker & Associates SD

Company

05/20/2022

Date

Engineer's Seal:



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PDP SWQMP PROJECT OWNER'S CERTIFICATION PAGE

Project Name: Gran Vista
Permit Application Number: TSM21-0003 | MFS21-0001 | SP 21-0003

PROJECT OWNER'S CERTIFICATION

This PDP SWQMP has been prepared for WPI-LAS POSAS/MISSION, LLC by Hunsaker and Associates SD, Inc.. The PDP SWQMP is intended to comply with the PDP requirements of the City of San Marcos BMP Design Manual, which is a design manual for compliance with local City of San Marcos and regional MS4 Permit (California Regional Water Quality Control Board San Diego Region Order No. R9-2015-0100) requirements for storm water management.

The undersigned, while it owns the subject property, is responsible for the implementation of the provisions of this plan. Once the undersigned transfers its interests in the property, its successor-in-interest shall bear the aforementioned responsibility to implement the best management practices (BMPs) described within this plan, including ensuring on-going operation and maintenance of structural BMPs. A signed copy of this document shall be available on the subject property into perpetuity.

DocuSigned by:
Andrew Sun
6D6D3758443146D...

DocuSigned by:
E1A76CECB6E34C7...

Project Owner's Signature

Andrew Sun John Young

Print Name

WPI-LAS POSAS/MISSION, LLC

Company

2/25/2022

Date

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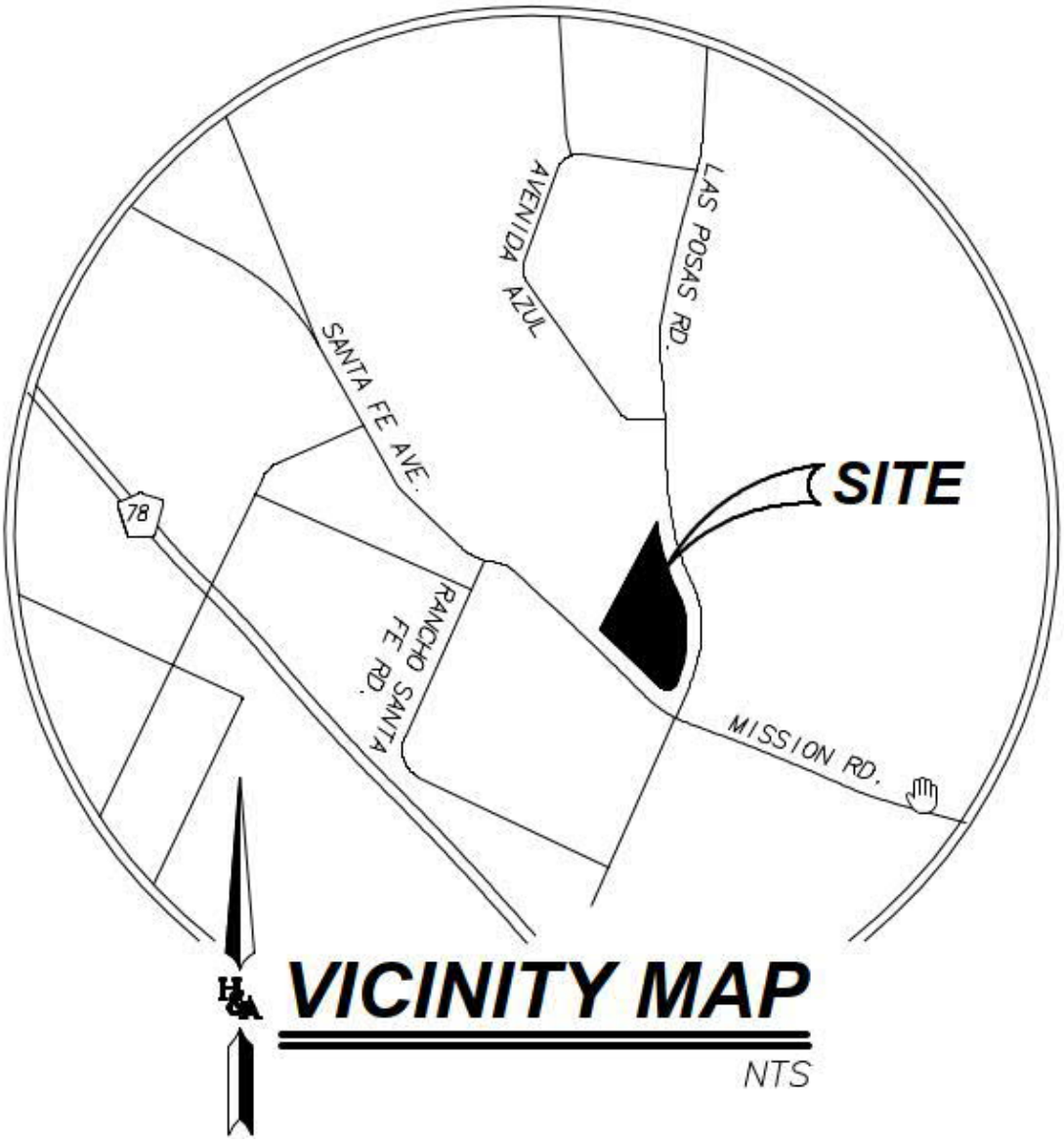
SUBMITTAL RECORD

Use this Table to keep a record of submittals of this PDP SWQMP. Each time the PDP SWQMP is re-submitted, provide the date and status of the project. In column 4 summarize the changes that have been made or indicate if response to plancheck comments is included. When applicable, insert response to plancheck comments behind this page.

Submittal Number	Date	Project Status	Summary of Changes
1	8/26/2021	☒ Preliminary Design / Planning/ CEQA ☐ Final Design	Initial Submittal
2	02/21/2022	☒ Preliminary Design / Planning/ CEQA ☐ Final Design	Address City comments
3	05/20/2022	☒ Preliminary Design / Planning/ CEQA ☐ Final Design	Address City comments
4		☐ Preliminary Design / Planning/ CEQA ☐ Final Design	

PROJECT VICINITY MAP

Project Name: Gran Vista
Permit Application Number: TSM21-0003 | MFS21-0001 | SP 21-0003



Applicability of Storm Water Best Management Practices (BMP) Requirements

(Storm Water Intake Form for all Development Permit Applications)
For detailed information please visit:
http://www.san-marcos.net/departments/development-services/stormwater/development-planning

Form I-1
[March 15, 2016]

Project Identification

Project Name: Gran Vista

Description: Proposes 120 three story, for-sale townhome units (Occupancy: R3 Townhome/U; Construction Type V-B) with a maximum permitted density of 15.7 units per acre with associated parking areas, streets and utilities.

Permit Application Number (if applicable): TSM21-0003 | MFS21-0001 | SP 21-0003 | Date: 8/25/2021

Project Address: 219-121-15-00 and 219-121-16-00

Determination of Requirements

This form is required as part of the City's application process. The purpose of this form is to identify potential land development planning storm water requirements that apply to development projects.

Development projects are defined as construction, rehabilitation, redevelopment, or reconstruction of any public or private projects. In addition, the identification of a development project, as it relates to storm water regulations, would truly apply to development and redevelopment activities that have the potential to contact storm water and contribute a source of pollutants, or reduce the natural absorption and infiltration abilities of the land.

To access the BMP Design Manual, Storm Water Quality Management Plan (SWQMP) templates, and other pertinent information related to this program please refer to:
http://www.san-marcos.net/departments/development-services/stormwater/development-planning

Please answer each of the following steps below, starting with Step 1 and progressing through each step until reaching "Stop".

Step	Answer	Progression
Step 1: Based on the above, Is the project a "development project" (See definition above)? See Section 1.3 of the BMP Design Manual for further guidance if necessary.	☒ Yes	Go to Step 2.
	☐ No	Permanent BMP requirements do not apply. No SWQMP will be required. Provide brief discussion below. STOP.
Discussion / justification if the project is not a "development project" (e.g., the project includes only interior remodels within an existing building):		
Step 2: Is the project a Standard Project, Priority Development Project (PDP), or exception to PDP definitions? To answer this item, complete Form I-2, Project Type Determination. See Section 1.4 of the BMP Design Manual in its entirety for guidance. In addition to Section 1.4, please refer to the City's SWQMP Submittal Requirements form.	☐ Standard Project	Only Standard Project requirements apply, including Standard Project SWQMP. STOP.
	☒ PDP	Standard and PDP requirements apply, including PDP SWQMP. Go to Step 3 on the following page.
	☐ Exception to PDP definitions	Standard Project requirements apply, and any additional requirements specific to the type of project. Provide discussion and list any additional requirements below. Prepare Standard Project SWQMP. STOP.

Discussion / justification, and additional requirements for exceptions to PDP definitions, if applicable:		

Form I-1 Page 2, Form Date: March 15, 2016		
Step 3 (PDPs only). Please answer the list of questions in this section to determine if hydromodification requirements reply to the proposed PDP. Does the project:		
Step 3a. Discharge storm water runoff directly to the Pacific Ocean?	☐ Yes	STOP. Hydromodification requirements do not apply.
	☒ No	Continue to Step 3b.
Step 3b. Discharge storm water runoff directly to an enclosed embayment, not within protected areas?	☐ Yes	STOP. Hydromodification requirements do not apply.
	☒ No	Continue to Step 3c.
Step 3c. Discharge storm water runoff directly to a water storage reservoir or lake, below spillway or normal operating level?	☐ Yes	STOP. Hydromodification requirements do not apply.
	☒ No	Continue to Step 3d.
Step 3d. Discharge storm water runoff directly to an area identified in WMAA?	☐ Yes	STOP. Hydromodification requirements do not apply.
	☒ No	Hydromodification requirements apply to the project. Go to Step 4.
Discussion / justification if hydromodification control requirements do <u>not</u> apply:		

Step 4 (PDPs subject to hydromodification control requirements only). Does protection of critical coarse sediment yield areas apply based on review of WMAA Potential Critical Coarse Sediment Yield Area Map? See Section 6.2 of the BMP Design Manual for guidance.	☐ Yes	Management measures required for protection of critical coarse sediment yield areas (Chapter 6.2). Stop.
	☒ No	Management measures not required for protection of critical coarse sediment yield areas. Provide brief discussion below. Stop.

Project Type Determination Checklist			Form I-2 [March 15, 2016]
Project Information			
Project Name/Description: Gran Vista/ 120 three story residential units			
Permit Application Number (if applicable): TBD			Date: 8/25/2021
Project Address:			
Project Type Determination: Standard Project or Priority Development Project (PDP)			
The project is (select one): ☒ New Development ☐ Redevelopment			
The total proposed newly created or replaced impervious area is: 188530 sf (4.328 ac)			
Is the project in any of the following categories, (a) through (f)?			
Yes ☒	No ☐	(a)	New development projects that create 10,000 square feet or more of impervious surfaces (collectively over the entire project site). This includes commercial, industrial, residential, mixed-use, and public development projects on public or private land.
Yes ☐	No ☒	(b)	Redevelopment projects that create and/or replace 5,000 square feet or more of impervious surface (collectively over the entire project site on an existing site of 10,000 square feet or more of impervious surfaces). This includes commercial, industrial, residential, mixed-use, and public development projects on public or private land.
Yes ☒	No ☐	(c)	New and redevelopment projects that create and/or replace 5,000 square feet or more of impervious surface (collectively over the entire project site), and support one or more of the following uses: (i) Restaurants. This category is defined as a facility that sells prepared foods and drinks for consumption, including stationary lunch counters and refreshment stands selling prepared foods and drinks for immediate consumption (Standard Industrial Classification (SIC) code 5812). (ii) Hillside development projects. This category includes development on any natural slope that is twenty-five percent or greater. (iii) Parking lots. This category is defined as a land area or facility for the temporary parking or storage of motor vehicles used personally, for business, or for commerce. (iv) Streets, roads, highways, freeways, and driveways. This category is defined as any paved impervious surface used for the transportation of automobiles, trucks, motorcycles, and other vehicles.

<table>
<tr><th colspan="4">Form I-2 Page 2, Form Date: March 15, 2016</th></tr>
<tr><td>Yes
☐</td><td>No
☒</td><td>(d)</td><td>New or redevelopment projects that create and/or replace 2,500 square feet or more of impervious surface (collectively over the entire project site), and discharging directly to an Environmentally Sensitive Area (ESA). “Discharging directly to” includes flow that is conveyed overland a distance of 200 feet or less from the project to the ESA, or conveyed in a pipe or open channel any distance as an isolated flow from the project to the ESA (i.e. not commingled with flows from adjacent lands).
Note: ESAs are areas that include but are not limited to all Clean Water Act Section 303(d) impaired water bodies; areas designated as Areas of Special Biological Significance by the State Water Board and San Diego Water Board; State Water Quality Protected Areas; water bodies designated with the RARE beneficial use by the State Water Board and San Diego Water Board; and any other equivalent environmentally sensitive areas which have been identified by the Copermittees. See BMP Design Manual Section 1.4.2 for additional guidance.</td></tr>
<tr><td>Yes
☐</td><td>No
☒</td><td>(e)</td><td>New development projects, or redevelopment projects that create and/or replace 5,000 square feet or more of impervious surface, that support one or more of the following uses:
(i) Automotive repair shops. This category is defined as a facility that is categorized in any one of the following SIC codes: 5013, 5014, 5541, 7532-7534, or 7536-7539.
(ii) Retail gasoline outlets (RGOs). This category includes RGOs that meet the following criteria: (a) 5,000 square feet or more or (b) a projected Average Daily Traffic (ADT) of 100 or more vehicles per day.</td></tr>
<tr><td>Yes
☒</td><td>No
☐</td><td>(f)</td><td>New or redevelopment projects that result in the disturbance of one or more acres of land and are expected to generate pollutants post construction.
Note: See BMP Design Manual Section 1.4.2 for additional guidance.</td></tr>
<tr><td colspan="4">Does the project meet the definition of one or more of the Priority Development Project categories (a) through (f) listed above?
☐ No – the project is <u>not</u> a Priority Development Project (Standard Project).
☒ Yes – the project is a Priority Development Project (PDP).</td></tr>
<tr><td colspan="4">The following is for redevelopment PDPs only:

The area of existing (pre-project) impervious area at the project site is: ft^2 (A)
The total proposed newly created or replaced impervious area is ft^2 (B)
Percent impervious surface created or replaced (B/A)*100: __%
The percent impervious surface created or replaced is (select one based on the above calculation):
☐ less than or equal to fifty percent (50%) – only new impervious areas are considered PDP
OR
☐ greater than fifty percent (50%) – the entire project site is a PDP</td></tr>
</table>

Site Information Checklist For PDPs	Form I-3B (PDPs) [March 15, 2016]
Project Summary Information	
Project Name	Gran Vista
Project Address	
Assessor's Parcel Number(s) (APN(s))	219-121-15-00, 219-121-16-00
Permit Application Number	TSM21-0003\MFS21-0001\ SP 21-0003
Project Hydrologic Unit	Select One: ☐ Santa Margarita 902 ☐ San Luis Rey 903 ☒ Carlsbad 904 ☐ San Dieguito 905 ☐ Penasquitos 906 ☐ San Diego 907 ☐ Pueblo San Diego 908 ☐ Sweetwater 909 ☐ Otay 910 ☐ Tijuana 911
Project Watershed (Complete Hydrologic Unit, Area, and Subarea Name with Numeric Identifier)	San Marcos Creek-Frontal Gulf of Santa Catalina, Carlsbad, San Marcos, Richland #904.52
Parcel Area (total area of Assessor's Parcel(s) associated with the project)	7.59 Acres (330,787 Square Feet)
Area to be Disturbed by the Project (Project Area)	6.12 Acres (266,737 Square Feet)
Project Proposed Impervious Area (subset of Project Area)	4.36 Acres (190,295 Square Feet)
Project Proposed Pervious Area (subset of Project Area)	1.76 Acres (76,666 Square Feet)
Note: Proposed Impervious Area + Proposed Pervious Area = Area to be Disturbed by the Project. This may be less than the Parcel Area.	

Description of Existing Site Condition

Current Status of the Site (select all that apply):

- ☐ Existing development
- ☒ Previously graded but not built out
- ☐ Demolition completed without new construction
- ☐ Agricultural or other non-impervious use
- ☒ Vacant, undeveloped/natural

Description / Additional Information:
The site is previously graded into two separate development pads. The pad located in the northerly portion of the planning is elevated above North Las Posas Road and is higher than the remaining portion of the planning area. The lower pad, located in the southerly portion of the site, is elevated above West Mission Road.

Existing Land Cover Includes (select all that apply):

- ☒ Vegetative Cover
- ☒ Non-Vegetated Pervious Areas
- ☐ Impervious Areas

Description / Additional Information:
Vegetation on the site is limited to grasses and small shrubs. A few trees are located along the periphery of the site, adjacent to the channel and North Las Posas

Underlying Soil belongs to Hydrologic Soil Group (select all that apply):

- ☐ NRCS Type A
- ☐ NRCS Type B
- ☒ NRCS Type C
- ☒ NRCS Type D

Approximate Depth to Groundwater (GW):

- ☐ GW Depth < 5 feet
- ☐ 5 feet < GW Depth < 10 feet
- ☒ 10 feet < GW Depth < 20 feet
- ☐ GW Depth > 20 feet

Existing Natural Hydrologic Features (select all that apply):

- ☐ Watercourses
- ☐ Seeps
- ☐ Springs
- ☐ Wetlands
- ☒ None

Description / Additional Information:
There is no hydrologic feature onsite

Description of Existing Site Drainage Patterns

How is storm water runoff conveyed from the site? At a minimum, this description should answer:
(1) whether existing drainage conveyance is natural or urban;
(2) Is runoff from offsite conveyed through the site? if yes, quantify all offsite drainage areas, design flows, and locations where offsite flows enter the project site, and summarize how such flows are conveyed through the site;
(3)Provide details regarding existing project site drainage conveyance network, including any existing storm drains, concrete channels, swales, detention facilities, storm water treatment facilities, natural or constructed channels; and
(4) Identify all discharge locations from the existing project site along with a summary of conveyance system size and capacity for each of the discharge locations. Provide summary of the pre-project drainage areas and design flows to each of the existing runoff discharge locations.

Describe existing site drainage patterns:

.

The runoff from the project site, in its existing conditions, flows from the north and the east to the southwest corner where it is routed via an existing 12" CMP riser to a 12" existing corrugated metal pipe. After comingling with the total flow from the commercial parcel south of the project, total flow is conveyed to the storm channel west via 12" pipe which ultimately discharges into Lake San Marcos

The existing drainage conveyance is natural and there is no runoff from offsite conveyed through the site. Runoff onsite is mostly sheet flow discharging into the channel along the western boundary of the project site

Description of Proposed Site Development

Project Description / Proposed Land Use and/or Activities:
The post-developed condition of the site will consist of 120 three story, townhome units (Occupancy: R3 Townhome/U; Construction Type V-B) with a maximum permitted density of 15.7 units per acre, streets and associated utilities including a storm drain system necessary to convey site runoff through the project area. In addition, two underground vaults located southwest and southeast of the site will be constructed for hydromodification, and peak flow detention purposes.

List/describe proposed impervious features of the project (e.g., buildings, roadways, parking lots, courtyards, athletic courts, other impervious features):

The impervious features onsite will consist of the building roofs, roads, sidewalks and parking lots .

List/describe proposed pervious features of the project (e.g., landscape areas):

Landscaped areas

Does the project include grading and changes to site topography?
☒ Yes
☐ No

Description / Additional Information:

The site topography will be very close to the existing conditions. However, a cut of approximately 9,335 CY and fill of 9,335 CY will be needed for the earthwork

Description of Proposed Site Drainage Patterns

Does the project include changes to site drainage (e.g., installation of new storm water conveyance systems)?

☒ Yes

☐ No

If yes, provide details regarding the proposed project site drainage conveyance network, including storm drains, concrete channels, swales, detention facilities, storm water treatment facilities, natural or constructed channels, and the method for conveying offsite flows through or around the proposed project site. Identify all discharge locations from the proposed project site along with a summary of the conveyance system size and capacity for each of the discharge locations. Provide a summary of pre- and post-project drainage areas and design flows to each of the runoff discharge locations. Reference the drainage study for detailed calculations.

Describe proposed site drainage patterns::

The stormwater runoff will be collected by inlets , and routed via storm drain pipes towards the vaults and Modular wetland units.

Identify whether any of the following features, activities, and/or pollutant source areas will be present (select all that apply):

- ☒ On-site storm drain inlets
- ☐ Interior floor drains and elevator shaft sump pumps
- ☒ Interior parking garages
- ☒ Need for future indoor & structural pest control
- ☒ Landscape/Outdoor Pesticide Use
- ☐ Pools, spas, ponds, decorative fountains, and other water features
- ☐ Food service
- ☒ Refuse areas
- ☐ Industrial processes
- ☐ Outdoor storage of equipment or materials
- ☐ Vehicle and Equipment Cleaning
- ☐ Vehicle/Equipment Repair and Maintenance
- ☐ Fuel Dispensing Areas
- ☐ Loading Docks
- ☒ Fire Sprinkler Test Water
- ☐ Miscellaneous Drain or Wash Water
- ☒ Plazas, sidewalks, and parking lots

Description / Additional Information:

Identification and Narrative of Receiving Water and Pollutants of Concern

Describe flow path of storm water from the project site discharge location(s), through urban storm conveyance systems as applicable, to receiving creeks, rivers, and lagoons as applicable, and ultimate discharge to the Pacific Ocean (or bay, lagoon, lake or reservoir, as applicable):

The site will discharge to an existing channel at the southwest corner of the site. The discharge from the site will enter the enclosed storm drain system via 3X8 box culvert that runs southerly crossing W Mission Rd. The site discharge will be conveyed via lined channels and enclosed storm drain to ultimately discharges into the HMP exempted Lake San Marcos , except for a small portion of unlined open channel with a medium erosion susceptibility. The Channel analysis was prepared by Delane Engineering and approved by the City. The study is saved in the City files.

List any 303(d) impaired water bodies within the path of storm water from the project site to the Pacific Ocean (or bay, lagoon, lake or reservoir, as applicable), identify the pollutant(s)/stressor(s) causing impairment, and identify any TMDLs and/or Highest Priority Pollutants from the WQIP for the impaired water bodies:

303(d) Impaired Water Body	Pollutant(s)/Stressor(s)	TMDLs / WQIP Highest Priority Pollutant
San Marcos Creek	Benthic Community Effects, DDE, Indicator Bacteria, Phosphorus, Selenium, Toxicity	Bacteria and Nutrients
Batiquitos Lagoon	Toxicity	Bacteria and Nutrients

Identification of Project Site Pollutants*

*Identification of project site pollutants is only required if flow-thru treatment BMPs are implemented onsite in lieu of retention or biofiltration BMPs (note the project must also participate in an alternative compliance program unless prior lawful approval to meet earlier PDP requirements is demonstrated)

Identify pollutants expected from the project site based on all proposed use(s) of the site (see BMP Design Manual Appendix B.6):

Pollutant	Not Applicable to the Project Site	Expected from the Project Site	Also a Receiving Water Pollutant of Concern
Sediment			
Nutrients			
Heavy Metals			
Organic Compounds			
Trash & Debris			
Oxygen Demanding Substances			
Oil & Grease			
Bacteria & Viruses			
Pesticides			

Hydromodification Management Requirements

Do hydromodification management requirements apply (see Section 1.6 of the BMP Design Manual)?

- ☒ Yes, hydromodification management flow control structural BMPs required.
- ☐ No, the project will discharge runoff directly to existing underground storm drains discharging directly to water storage reservoirs, lakes, enclosed embayments, or the Pacific Ocean.
- ☐ No, the project will discharge runoff directly to conveyance channels whose bed and bank are concrete-lined all the way from the point of discharge to water storage reservoirs, lakes, enclosed embayments, or the Pacific Ocean.
- ☐ No, the project will discharge runoff directly to an area identified as appropriate for an exemption by the WMAA for the watershed in which the project resides.

Description / Additional Information (to be provided if a 'No' answer has been selected above):

Critical Coarse Sediment Yield Areas*

*This Section only required if hydromodification management requirements apply

Based on the maps provided within the WMAA, do potential critical coarse sediment yield areas exist within the project drainage boundaries?

- ☐ Yes
- ☒ No, No critical coarse sediment yield areas to be protected based on WMAA maps

If yes, have any of the optional analyses presented in Section 6.2 of the BMP Design Manual been performed?

- ☐ 6.2.1 Verification of Geomorphic Landscape Units (GLUs) Onsite
- ☐ 6.2.2 Downstream Systems Sensitivity to Coarse Sediment
- ☐ 6.2.3 Optional Additional Analysis of Potential Critical Coarse Sediment Yield Areas Onsite
- ☒ No optional analyses performed, the project will avoid critical coarse sediment yield areas identified based on WMAA maps

If optional analyses were performed, what is the final result?

- ☐ No critical coarse sediment yield areas to be protected based on verification of GLUs onsite
- ☐ Critical coarse sediment yield areas exist but additional analysis has determined that protection is not required. Documentation attached in Attachment 2.b of the SWQMP.
- ☐ Critical coarse sediment yield areas exist and require protection. The project will implement management measures described in Sections 6.2.4 and 6.2.5 as applicable, and the areas are identified on the SWQMP Exhibit.

Discussion / Additional Information:

Flow Control for Post-Project Runoff*

*This Section only required if hydromodification management requirements apply

List and describe point(s) of compliance (POCs) for flow control for hydromodification management (see Section 6.3.1). For each POC, provide a POC identification name or number correlating to the project's HMP Exhibit and a receiving channel identification name or number correlating to the project's HMP Exhibit.

There will be one point of compliance (POC 1) located at the southwest corner of the site at the Box Culvert

Has a geomorphic assessment been performed for the receiving channel(s)?

☐ No, the low flow threshold is 0.1Q2 (default low flow threshold)

☐ Yes, the result is the low flow threshold is 0.1Q2

☒ Yes, the result is the low flow threshold is 0.3Q2

☐ Yes, the result is the low flow threshold is 0.5Q2

If a geomorphic assessment has been performed, provide title, date, and preparer:

The site will discharge to an existing channel at the southwest corner of the site. The discharge from the site will enter the enclosed storm drain system via 3X8 box culvert that runs southerly crossing W Mission Rd. The site discharge will be conveyed via lined channels and enclosed storm drain to ultimately discharges into the HMP exempted Lake San Marcos , except for a small portion of unlined open channel with a medium erosion susceptibility. The Channel analysis was prepared by Delane Engineering and approved by the City. The study is saved in the City files.

Discussion / Additional Information: (optional)

Other Site Requirements and Constraints
When applicable, list other site requirements or constraints that will influence storm water management design, such as zoning requirements including setbacks and open space, or local codes governing minimum street width, sidewalk construction, allowable pavement types, and drainage requirements.

Optional Additional Information or Continuation of Previous Sections As Needed
This space provided for additional information or continuation of information from previous sections as needed.

Source Control BMP Checklist for All Development Projects (Standard Projects and Priority Development Projects)	Form I-4 [March 15, 2016]

Project Identification

Project Name: Gran Vista

Permit Application Number: TBD

Source Control BMPs

All development projects must implement source control BMPs SC-1 through SC-6 where applicable and feasible. See Chapter 4 and Appendix E of the Model BMP Design Manual for information to implement source control BMPs shown in this checklist.

Answer each category below pursuant to the following.

- "Yes" means the project will implement the source control BMP as described in Chapter 4 and/or Appendix E of the Model BMP Design Manual. Discussion / justification is not required.
- "No" means the BMP is applicable to the project but it is not feasible to implement. Discussion / justification must be provided.
- "N/A" means the BMP is not applicable at the project site because the project does not include the feature that is addressed by the BMP (e.g., the project has no outdoor materials storage areas). Discussion / justification may be provided.

Source Control Requirement	Applied?		
SC-1 Prevention of Illicit Discharges into the MS4	☒ Yes	☐ No	☐ N/A
Discussion / justification if SC-1 not implemented:			
SC-2 Storm Drain Stenciling or Signage	☒ Yes	☐ No	☐ N/A
Discussion / justification if SC-2 not implemented:			
SC-3 Protect Outdoor Materials Storage Areas from Rainfall, Run-On, Runoff, and Wind Dispersal	☐ Yes	☐ No	☒ N/A
Discussion / justification if SC-3 not implemented:			
SC-4 Protect Materials Stored in Outdoor Work Areas from Rainfall, Run-On, Runoff, and Wind Dispersal	☐ Yes	☐ No	☒ N/A
Discussion / justification if SC-4 not implemented:			

Source Control Requirement	Applied?		
SC-5 Protect Trash Storage Areas from Rainfall, Run-On, Runoff, and Wind Dispersal	☒ Yes	☐ No	☐ N/A
Discussion / justification if SC-5 not implemented:			
SC-6 Additional BMPs Based on Potential Sources of Runoff Pollutants (must answer for each source listed below)			
☐ On-site storm drain inlets	☒ Yes	☐ No	☐ N/A
☐ Interior floor drains and elevator shaft sump pumps	☒ Yes	☐ No	☐ N/A
☐ Interior parking garages	☒ Yes	☐ No	☐ N/A
☐ Need for future indoor & structural pest control	☒ Yes	☐ No	☐ N/A
☐ Landscape/Outdoor Pesticide Use	☒ Yes	☐ No	☐ N/A
☐ Pools, spas, ponds, decorative fountains, and other water features	☐ Yes	☐ No	☒ N/A
☐ Food service	☐ Yes	☐ No	☒ N/A
☐ Refuse areas	☒ Yes	☐ No	☐ N/A
☐ Industrial processes	☐ Yes	☐ No	☒ N/A
☐ Outdoor storage of equipment or materials	☐ Yes	☐ No	☒ N/A
☐ Vehicle and Equipment Cleaning	☐ Yes	☐ No	☒ N/A
☐ Vehicle/Equipment Repair and Maintenance	☐ Yes	☐ No	☒ N/A
☐ Fuel Dispensing Areas	☐ Yes	☐ No	☒ N/A
☐ Loading Docks	☐ Yes	☐ No	☒ N/A
☐ Fire Sprinkler Test Water	☒ Yes	☐ No	☐ N/A
☐ Miscellaneous Drain or Wash Water	☐ Yes	☐ No	☒ N/A
☐ Plazas, sidewalks, and parking lots	☒ Yes	☐ No	☐ N/A
Discussion / justification if SC-6 not implemented. Clearly identify which sources of runoff pollutants are discussed. Justification must be provided for all "No" answers shown above.			

Site Design BMP Checklist for All Development Projects (Standard Projects and Priority Development Projects)	Form I-5 [March 15, 2016]

Project Identification

Project Name: Gran Vista

Permit Application Number: TBD

Site Design BMPs

All development projects must implement site design BMPs SD-1 through SD-8 where applicable and feasible. See Chapter 4 and Appendix E of the Model BMP Design Manual for information to implement site design BMPs shown in this checklist.

Answer each category below pursuant to the following.

- "Yes" means the project will implement the site design BMP as described in Chapter 4 and/or Appendix E of the Model BMP Design Manual. Discussion / justification is not required.
- "No" means the BMP is applicable to the project but it is not feasible to implement. Discussion / justification must be provided.
- "N/A" means the BMP is not applicable at the project site because the project does not include the feature that is addressed by the BMP (e.g., the project site has no existing natural areas to conserve). Discussion / justification may be provided.

Site Design Requirement	Applied?		
SD-1 Maintain Natural Drainage Pathways and Hydrologic Features	☒ Yes	☐ No	☐ N/A
Discussion / justification if SD-1 not implemented:			
SD-2 Conserve Natural Areas, Soils, and Vegetation	☒ Yes	☐ No	☐ N/A
Discussion / justification if SD-2 not implemented: Where applicable			
SD-3 Minimize Impervious Area	☒ Yes	☐ No	☐ N/A
Discussion / justification if SD-3 not implemented:			
SD-4 Minimize Soil Compaction	☒ Yes	☐ No	☐ N/A
Discussion / justification if SD-4 not implemented: Where applicable			
SD-5 Impervious Area Dispersion	☒ Yes	☐ No	☐ N/A
Discussion / justification if SD-5 not implemented: Impervious areas throughout the site will be collected via inlets per SD-6 below. Dispersion will occur at the discharge location.			

Form I-5 Page 2 of 2, Form Date: March 15, 2016			
Site Design Requirement	Applied?		
SD-6 Runoff Collection	☒ Yes	☐ No	☐ N/A
Discussion / justification if SD-6 not implemented:			
SD-7 Landscaping with Native or Drought Tolerant Species	☒ Yes	☐ No	☐ N/A
Discussion / justification if SD-7 not implemented: Where applicable			
SD-8 Harvesting and Using Precipitation	☐ Yes	☐ No	☒ N/A
Discussion / justification if SD-8 not implemented:			

Summary of PDP Structural BMPs	Form I-6 (PDPs) [March 15, 2016]
Project Identification	
Project Name: Gran Vista	
Permit Application Number: TBD	
PDP Structural BMPs	

All PDPs must implement structural BMPs for storm water pollutant control (see Chapter 5 of the BMP Design Manual). Selection of PDP structural BMPs for storm water pollutant control must be based on the selection process described in Chapter 5. PDPs subject to hydromodification management requirements must also implement structural BMPs for flow control for hydromodification management (see Chapter 6 of the BMP Design Manual). Both storm water pollutant control and flow control for hydromodification management can be achieved within the same structural BMP(s).

PDP structural BMPs must be verified by the local jurisdiction at the completion of construction. This may include requiring the project owner or project owner's representative and engineer of record to certify construction of the structural BMPs (see Section 1.12 of the BMP Design Manual). PDP structural BMPs must be maintained into perpetuity, and the local jurisdiction must confirm the maintenance (see Section 7 of the BMP Design Manual).

Use this form to provide narrative description of the general strategy for structural BMP implementation at the project site in the box below. Then complete the PDP structural BMP summary information sheet (page 3 of this form) for each structural BMP within the project (copy the BMP summary information page as many times as needed to provide summary information for each individual structural BMP).

Describe the general strategy for structural BMP implementation at the site. This information must describe how the steps for selecting and designing storm water pollutant control BMPs presented in Section 5.1 of the BMP Design Manual were followed, and the results (type of BMPs selected). For projects requiring hydromodification flow control BMPs, indicate whether pollutant control and flow control BMPs are integrated or separate.

STEP 1: Evaluate at DMA Scale

1a: After delineating the DMAs, SM-C has been identified as a self mitigating area (landscaped area that drains directly offsite and to the public Storm drain), and it meets all the requirements per section 5.2.1 from the BMP manual, and 208 sft of de minims sidewalk at the entrance has been delineated and meets the requirements per section 5.2.2.

Determine and delineate the remain areas the DMAs are not "Self-mitigating" or "De minimis" or "Self-retaining", to 1b.

1b: Break down pervious and impervious area, DCV for all DMAs were calculated using worksheet B.2-1. To Step 2.

STEP 2: Harvest and use is infeasible according to Form I-7. To Step 3.

STEP 3:

3a: Using Form I-8 to conduct a prelimary feasibility screening determined that no infiltration to be feasible.

3b: volume-based Proprietary Biofiltration MWS BMPs and flow-based Modular wetland (or equivalent) chosen.

3c: using Worksheet B.2.1 to calculate the DCV from each DMA.

For the proprietary biofiltration BMP, an underground storage is proposed upstream of the BMP to provided the 1.5 DCV for DMA-1 and DMA-2 . B-5-2 was used to calculate min retention

The MWS units BF-3-1 and BF-3-2 were sized to provide the required 1.5 design captured volume and to drawdown in 36 hrs. The unit is hydraulicly disconnected to the vaults

The generated flow from DMA-1 and DMA-2 will be routed to the vaults which have internal riser.

The vaults are utilized as a storage for the water qulaity design captured volume (1.5 DCV), in addition to the required storage for HMP and peak flow attenuation. The very low orifice in the risers is sized to draw down the 1.5 DCV (design captured volume) in 36 hrs. The flow from this orifice will be directed to a downstream volume based MWS unit to address water quality requirements. An internal surface control weir will be built inside the riser with an invert elevation set at the water surface elevation associated with the water quality volume in the vault. The riser internal weir will divert the flows below its invert towards the modular wetland unit downstream of the vault.

The low flow orifice that directs the flow to the MWS unit is modeled in the SWMM with a rating table up to the water quality HGL in the vault and labeled as WQ orifice.

The BF-3-3 flow-based is sized using B.6-1 Worksheet to replace the sand filter whic was treating the exisitng Drive (DMA3-C EX and DMA3-D-EX) and treat additional 0.09 acres (treat the undisturbed area that commingles with the proposed area)

BF-3-4 flow-based is sized using B.6.1 to treat WQ flow that is generated from DMA 4

BF-3-5 flow-based sized to treat flow from the onsite area DMA-5

STEP 4:

4a: Proposed BMPs treats 1.5 DCV and drawdown n 36 hrs and the flowbased unit treat 1.5 of the required water quality flow. Project meets pollutant control standards. To Step 6.

STEP 6: SWQMP prepared as step 6.

STEP 7:HMP volumes provided within proposed vaults and SWMM model has been prepared for the project

(Page reserved for continuation of description of general strategy for structural BMP implementation at the site)

(Continued from page 1)

Runoff generated from DMA 2 will be directed toward the underground Vault HMP-2 east and a volume based MWS unit BF-3-2 for pollutant control, HMP and detention, then conveyed west to commingle with the treated flow from DMA-5.

The flow from DMA-5 will be treated via MWS BF-3-5 which will address the pollutant control requirements, and will meet the hydromodification and detention requirements when measured at POC-1 by over detaining in the proposed two vault . The treated flow will be conveyed west to commingle with the treated flow from vault HMP-1\BF-3-1.

Runoff generated from DMA 1 will be directed towards the underground Vault HMP-1 and a volume based MWS unit BF-3-1 to address pollutant control, HMP and detention requirements, then conveyed to commingle with the treated flows from Vault HMP-2\ BF-3-2 and BF-3-5.

The flow then continues westerly to commingle with the existing treated and bypassed flows, and the treated flow from BF-3-3.

The BF-3-3 will treat the flow that is generated from the proposed DMA3 which includes sidewalk and driveways drain southerly and the existing undisturbed drive that was previously treated via sand filter. The sand filter will be removed and the flows from the DMA3-EX will commingle with the DMA3 proposed and drains towards the BF-3-3 that will treat the total generated runoff (Existing and proposed) and connects to the existing storm drain.

The flow from the DMA 4 (driveway, sidewalk and existing pavement that commingles with it) is routed via proposed BF-3-4 which will treat the WQ flow generated from the newly proposed area and existing area that commingles with it. The discharge from the site and the proposed BF-3-4 will continue towards the historical discharge location on the Las Posas Creek POC1.

Continues Simulation analysis (SWMM) has been provided at the POC1 location to confirm that the proposed project meets the HMP requirements.

Structural BMP Summary Information
(Copy this page as needed to provide information for each individual proposed structural BMP)

Structural BMP ID No. BF-3-1

Construction Plan Sheet No. TBD

Type of structural BMP:
- ☐ Retention by harvest and use (HU-1)
- ☐ Retention by infiltration basin (INF-1)
- ☐ Retention by bioretention (INF-2)
- ☐ Retention by permeable pavement (INF-3)
- ☐ Partial retention by biofiltration with partial retention (PR-1)
- ☐ Biofiltration (BF-1)
- ☐ Biofiltration with Nutrient Sensitive Media Design (BF-2)
- ☒ Proprietary Biofiltration (BF-3) meeting all requirements of Appendix F
- ☐ Flow-thru treatment control with prior lawful approval to meet earlier PDP requirements (provide BMP type/description in discussion section below)
- ☐ Flow-thru treatment control included as pre-treatment/forebay for an onsite retention or biofiltration BMP (provide BMP type/description and indicate which onsite retention or biofiltration BMP it serves in discussion section below)
- ☐ Flow-thru treatment control with alternative compliance (provide BMP type/description in discussion section below)
- ☐ Detention pond or vault for hydromodification management
- ☐ Other (describe in discussion section below)

Purpose:
- ☒ Pollutant control only
- ☐ Hydromodification control only
- ☐ Combined pollutant control and hydromodification control
- ☐ Pre-treatment/forebay for another structural BMP
- ☐ Other (describe in discussion section below)

Who will certify construction of this BMP? Provide name and contact information for the party responsible to sign BMP verification forms if required by the [City Engineer] (See Section 1.12 of the BMP Design Manual)	Alisa S. Vialpando, RCE #47945 Hunsaker & Associates San Diego, Inc. 9707 Waples Street San Diego, CA 92121 Telephone: (858) 558-4500
Who will be the final owner of this BMP?	WPI-Las Posas/Mission, LLC Andrew Sun c/o World Premier Investments, Inc.
Who will maintain this BMP into perpetuity?	WPI-Las Posas/Mission, LLC Andrew Sun c/o World Premier Investments, Inc.
What is the funding mechanism for maintenance?	HOA

Structural BMP ID No. BF-3-1

Construction Plan Sheet No. TBD

Discussion (as needed):
Using B-2-1, DCV has been calculated to be 3,441 CFT
1.5 DCV = 5,161 CFT'
Vault1 (HMP1) provides the required volume with 2.5 ft associated WSE
1.6" water quality orifice in the riser within the vault1 at elevation 0 (measured form the vault's bottom) has been sized to drawdown the 1.5 DCV in 36 hrs.
The flow from this orifice will be directed to a downstream volume based MWS unit BF-3-1 to address water quality requirements. An internal surface control weir will be built inside the riser with an invert elevation set at the water surface elevation associated with the water quality volume in the vault. The riser internal weir will divert the flows below its invert towards the modular wetland unit downstream of the vault.
The BF-3-1 has been sized to be L-8-8 per the sizing letter and MWS detail from bioclean see attachment 1e.

Structural BMP Summary Information
(Copy this page as needed to provide information for each individual proposed structural BMP)

Structural BMP ID No. BF-3-2

Construction Plan Sheet No. TBD

Type of structural BMP:
- ☐ Retention by harvest and use (HU-1)
- ☐ Retention by infiltration basin (INF-1)
- ☐ Retention by bioretention (INF-2)
- ☐ Retention by permeable pavement (INF-3)
- ☐ Partial retention by biofiltration with partial retention (PR-1)
- ☐ Biofiltration (BF-1)
- ☐ Biofiltration with Nutrient Sensitive Media Design (BF-2)
- ☒ Proprietary Biofiltration (BF-3) meeting all requirements of Appendix F
- ☐ Flow-thru treatment control with prior lawful approval to meet earlier PDP requirements (provide BMP type/description in discussion section below)
- ☐ Flow-thru treatment control included as pre-treatment/forebay for an onsite retention or biofiltration BMP (provide BMP type/description and indicate which onsite retention or biofiltration BMP it serves in discussion section below)
- ☐ Flow-thru treatment control with alternative compliance (provide BMP type/description in discussion section below)
- ☐ Detention pond or vault for hydromodification management
- ☐ Other (describe in discussion section below)

Purpose:
- ☒ Pollutant control only
- ☐ Hydromodification control only
- ☐ Combined pollutant control and hydromodification control
- ☐ Pre-treatment/forebay for another structural BMP
- ☐ Other (describe in discussion section below)

Who will certify construction of this BMP? Provide name and contact information for the party responsible to sign BMP verification forms if required by the [City Engineer] (See Section 1.12 of the BMP Design Manual)	Alisa S. Vialpando, RCE #47945 Hunsaker & Associates San Diego, Inc. 9707 Waples Street San Diego, CA 92121 Telephone: (858) 558-4500
Who will be the final owner of this BMP?	WPI-Las Posas/Mission, LLC Andrew Sun c/o World Premier Investments, Inc.
Who will maintain this BMP into perpetuity?	WPI-Las Posas/Mission, LLC Andrew Sun c/o World Premier Investments, Inc.
What is the funding mechanism for maintenance?	HOA

Structural BMP ID No. BF-3-2

Construction Plan Sheet No. TBD

Discussion (as needed):

Using B-2-1, DCV has been calculated to be 5,859 CFT

1.5 DCV = 8,789 CFT'

Vault2 (HMP2) provides the required volume with 2.6 ft associated WSE

2.3" water quality orifice in the riser within the vault1 at elevation 0 (measured form the vault's bottom) has been sized to drawdown the 1.5 DCV in 36 hrs.

The flow from this orifice will be directed to a downstream volume based MWS unit BF-3-2 to address water quality requirements. An internal surface control weir will be built inside the riser with an invert elevation set at the water surface elevation associated with the water quality volume in the vault. The riser internal weir will divert the flows below its invert towards the modular wetland unit downstream of the vault.

The BF-3-2 has been sized to be L-8-12 per the sizing letter and MWS detail from bioclean. see attachment 1e

Form I-6 Page 5 of 12 (Copy as many asneeded) Form Date: March 15, 2016	
Structural BMP Summary Information **(Copy this page as needed to provide information for each individual proposed structural BMP)**	
Structural BMP ID No. BF-3-3	
Construction Plan Sheet No.	
Type of structural BMP: ☐ Retention by harvest and use (HU-1) ☐ Retention by infiltration basin (INF-1) ☐ Retention by bioretention (INF-2) ☐ Retention by permeable pavement (INF-3) ☐ Partial retention by biofiltration with partial retention (PR-1) ☐ Biofiltration (BF-1) ☐ Biofiltration with Nutrient Sensitive Media Design (BF-2) ☑ Proprietary Biofiltration (BF-3) meeting all requirements of Appendix F ☐ Flow-thru treatment control with prior lawful approval to meet earlier PDP requirements (provide BMP type/description in discussion section below) ☐ Flow-thru treatment control included as pre-treatment/forebay for an onsite retention or biofiltration BMP (provide BMP type/description and indicate which onsite retention or biofiltration BMP it serves in discussion section below) ☐ Flow-thru treatment control with alternative compliance (provide BMP type/description in discussion section below) ☐ Detention pond or vault for hydromodification management ☐ Other (describe in discussion section below)	
Purpose: ☑ Pollutant control only ☐ Hydromodification control only Combined pollutant control and hydromodification control ☐ Pre-treatment/forebay for another structural BMP ☐ Other (describe in discussion section below)	
Who will certify construction of this BMP? Provide name and contact information for the party responsible to sign BMP verification forms if required by the [City Engineer] (See Section 1.12 of the BMP Design Manual)	Alisa S. Vialpando 9707 WAPLES SAN DIEGO, CA 92121 (858) 558-4500
Who will be the final owner of this BMP?	WPI-Las Posas/Mission, LLC Andrew Sun c/o World Premier Invest-ments, Inc.
Who will maintain this BMP into perpetuity?	WPI-Las Posas/Mission, LLC Andrew Sun c/o World Premier Investments, Inc.
What is the funding mechanism for maintenance?	Privately maintained by WPI- Las Posas/Mission, LLC

Form I-6 Page 6 of 12 (Copy as many as needed) , Form Date: March 15, 2016
Structural BMP ID No. BF-3-3
Construction Plan Sheet No.
Discussion (as needed): BF-3-3 has been sized to replace the sand filter which is treating an existing driveway and parking area 0.453 acs with 0.79 runoff factor per WQTR prepared by Excel Engineering and dated July 10, 2009. See the reference calcs in attachment 1e The required water quality treated flow has been calculated using B.6.1 to be 0.107 CFS (1.5 X d X CX i) In addition, there are a small area 0.086 acres from the proposed development (DMA 3) will be draining towards the existing DMA3-EX and will be treated via BF-3-3 The required water quality treated flow for DMA 3 has been calculated using B.6.1 to be 0.015 CFS (1.5 X d X CX i) BF-3-3 total required capcity = 0.015+ 0.107 = 0.122 L-6-8 Curb type MWS has been proposed. For the sizing letter and MWS detail from bioclean, see attachment 1e

Form I-6 Page 5 of 12 (Copy as many asneeded) Form Date: March 15, 2016	
Structural BMP Summary Information **(Copy this page as needed to provide information for each individual proposed structural BMP)**	
Structural BMP ID No. BF-3-4	
Construction Plan Sheet No.	
Type of structural BMP: ☐ Retention by harvest and use (HU-1) ☐ Retention by infiltration basin (INF-1) ☐ Retention by bioretention (INF-2) ☐ Retention by permeable pavement (INF-3) ☐ Partial retention by biofiltration with partial retention (PR-1) ☐ Biofiltration (BF-1) ☐ Biofiltration with Nutrient Sensitive Media Design (BF-2) ☑ Proprietary Biofiltration (BF-3) meeting all requirements of Appendix F ☐ Flow-thru treatment control with prior lawful approval to meet earlier PDP requirements (provide BMP type/description in discussion section below) ☐ Flow-thru treatment control included as pre-treatment/forebay for an onsite retention or biofiltration BMP (provide BMP type/description and indicate which onsite retention or biofiltration BMP it serves in discussion section below) ☐ Flow-thru treatment control with alternative compliance (provide BMP type/description in discussion section below) ☐ Detention pond or vault for hydromodification management ☐ Other (describe in discussion section below)	
Purpose: ☑ Pollutant control only ☐ Hydromodification control only Combined pollutant control and hydromodification control ☐ Pre-treatment/forebay for another structural BMP ☐ Other (describe in discussion section below)	
Who will certify construction of this BMP? Provide name and contact information for the party responsible to sign BMP verification forms if required by the [City Engineer] (See Section 1.12 of the BMP Design Manual)	Alisa S. Vialpando 9707 WAPLES SAN DIEGO, CA 92121 (858) 558-4500
Who will be the final owner of this BMP?	WPI-Las Posas/Mission, LLC Andrew Sun c/o World Premier Invest-ments, Inc.
Who will maintain this BMP into perpetuity?	WPI-Las Posas/Mission, LLC Andrew Sun c/o World Premier Investments, Inc.
What is the funding mechanism for maintenance?	Privately maintained by WPI- Las Posas/Mission, LLC

Form I-6 Page 6 of 12 (Copy as many as needed) , Form Date: March 15, 2016
Structural BMP ID No. BF-3-4
Construction Plan Sheet No.
Discussion (as needed): BF-3-4 has been sized to treat the flow generated from the onsite driveway and sidewalk DMA-4. The required water quality treated flow has been calculated using B.6.1 to be 0.024 CFS (1.5 X d X CX i) L-4-6 Curb type MWS has been proposed. For the sizing letter and MWS detail from bioclean, see attachment 1e

Structural BMP Summary Information
(Copy this page as needed to provide information for each individual proposed structural BMP)

Structural BMP ID No. BF-3-5

Construction Plan Sheet No.

Type of structural BMP:
☐ Retention by harvest and use (HU-1)
☐ Retention by infiltration basin (INF-1)
☐ Retention by bioretention (INF-2)
☐ Retention by permeable pavement (INF-3)
☐ Partial retention by biofiltration with partial retention (PR-1)

☐ Biofiltration (BF-1)
☐ Biofiltration with Nutrient Sensitive Media Design (BF-2)
☑ Proprietary Biofiltration (BF-3) meeting all requirements of Appendix F
☐ Flow-thru treatment control with prior lawful approval to meet earlier PDP requirements (provide BMP type/description in discussion section below)
☐ Flow-thru treatment control included as pre-treatment/forebay for an onsite retention or biofiltration BMP (provide BMP type/description and indicate which onsite retention or biofiltration BMP it serves in discussion section below)
☐ Flow-thru treatment control with alternative compliance (provide BMP type/description in discussion section below)
☐ Detention pond or vault for hydromodification management
☐ Other (describe in discussion section below)

Purpose:
☑ Pollutant control only
☐ Hydromodification control only
Combined pollutant control and hydromodification control
☐ Pre-treatment/forebay for another structural BMP
☐ Other (describe in discussion section below)

Who will certify construction of this BMP? Provide name and contact information for the party responsible to sign BMP verification forms if required by the [City Engineer] (See Section 1.12 of the BMP Design Manual)	Alisa S. Vialpando 9707 WAPLES SAN DIEGO, CA 92121 (858) 558-4500
Who will be the final owner of this BMP?	WPI-Las Posas/Mission, LLC Andrew Sun c/o World Premier Invest-ments, Inc.
Who will maintain this BMP into perpetuity?	WPI-Las Posas/Mission, LLC Andrew Sun c/o World Premier Investments, Inc.
What is the funding mechanism for maintenance?	Privately maintained by WPI- Las Posas/Mission, LLC

Form I-6 Page 6 of 12 (Copy as many as needed) , Form Date: March 15, 2016
Structural BMP ID No. BF-3-5
Construction Plan Sheet No.
Discussion (as needed): BF-3-4 has been sized to treat the WQ flow generated from the onsite developed area DMA-5. The required water quality treated flow has been calculated using B.6.1 to be 0.099 CFS (1.5 X d X CX i) L-4-8 Curb type MWS has been proposed. For the sizing letter and MWS detail from bioclean, see attachment 1e

Structural BMP Summary Information
(Copy this page as needed to provide information for each individual proposed structural BMP)

Structural BMP ID No. HMP-1

Construction Plan Sheet No. TBD

Type of structural BMP:
- ☐ Retention by harvest and use (HU-1)
- ☐ Retention by infiltration basin (INF-1)
- ☐ Retention by bioretention (INF-2)
- ☐ Retention by permeable pavement (INF-3)
- ☐ Partial retention by biofiltration with partial retention (PR-1)
- ☐ Proprietarily Biofiltration (BF-3)
- ☐ Biofiltration with Nutrient Sensitive Media Design (BF-2)
- ☐ Proprietary Biofiltration (BF-3) meeting all requirements of Appendix F
- ☐ Flow-thru treatment control with prior lawful approval to meet earlier PDP requirements (provide BMP type/description in discussion section below)
- ☐ Flow-thru treatment control included as pre-treatment/forebay for an onsite retention or biofiltration BMP (provide BMP type/description and indicate which onsite retention or biofiltration BMP it serves in discussion section below)
- ☐ Flow-thru treatment control with alternative compliance (provide BMP type/description in discussion section below)
- ☒ Detention pond or vault for hydromodification management
- ☐ Other (describe in discussion section below)

Purpose:
- ☐ Pollutant control only
- ☒ Hydromodification control only
- ☐ Combined pollutant control and hydromodification control
- ☐ Pre-treatment/forebay for another structural BMP
- ☐ Other (describe in discussion section below)

Who will certify construction of this BMP? Provide name and contact information for the party responsible to sign BMP verification forms if required by the [City Engineer] (See Section 1.12 of the BMP Design Manual)	Alisa S. Vialpando, RCE #47945 Hunsaker & Associates San Diego, Inc. 9707 Waples Street San Diego, CA 92121 Telephone: (858) 558-4500
Who will be the final owner of this BMP?	WPI-Las Posas/Mission, LLC Andrew Sun c/o World Premier Investments, Inc.
Who will maintain this BMP into perpetuity?	WPI-Las Posas/Mission, LLC Andrew Sun c/o World Premier Investments, Inc.
What is the funding mechanism for maintenance?	HOA

Form I-6 Page 4 of X (Copy as many as needed) , Form Date: March 15, 2016 Structural
BMP ID No. HMP-1
Construction Plan Sheet No. TBD
Discussion (as needed): SWMM 5.1 Was used to size the vault to meet flow control requirements. Vault-1 has been sized to detain the flows from DMA-1 and over detain for DMA-5,4 and 3, so the proposed project meets the HMP requirements when measured at the POC1.

Structural BMP Summary Information
(Copy this page as needed to provide information for each individual proposed structural BMP)

Structural BMP ID No. HMP-2

Construction Plan Sheet No. TBD

Type of structural BMP:
☐ Retention by harvest and use (HU-1)
☐ Retention by infiltration basin (INF-1)
☐ Retention by bioretention (INF-2)
☐ Retention by permeable pavement (INF-3)
☐ Partial retention by biofiltration with partial retention (PR-1)
☐ Proprietarily Biofiltration (BF-3)
☐ Biofiltration with Nutrient Sensitive Media Design (BF-2)
☐ Proprietary Biofiltration (BF-3) meeting all requirements of Appendix F
☐ Flow-thru treatment control with prior lawful approval to meet earlier PDP requirements (provide BMP type/description in discussion section below)
☐ Flow-thru treatment control included as pre-treatment/forebay for an onsite retention or biofiltration BMP (provide BMP type/description and indicate which onsite retention or biofiltration BMP it serves in discussion section below)
☐ Flow-thru treatment control with alternative compliance (provide BMP type/description in discussion section below)
☒ Detention pond or vault for hydromodification management
☐ Other (describe in discussion section below)

Purpose:
☐ Pollutant control only
☒ Hydromodification control only
☐ Combined pollutant control and hydromodification control
☐ Pre-treatment/forebay for another structural BMP
☐ Other (describe in discussion section below)

Who will certify construction of this BMP? Provide name and contact information for the party responsible to sign BMP verification forms if required by the [City Engineer] (See Section 1.12 of the BMP Design Manual)	Alisa S. Vialpando, RCE #47945 Hunsaker & Associates San Diego, Inc. 9707 Waples Street San Diego, CA 92121 Telephone: (858) 558-4500
Who will be the final owner of this BMP?	WPI-Las Posas/Mission, LLC Andrew Sun c/o World Premier Investments, Inc.
Who will maintain this BMP into perpetuity?	WPI-Las Posas/Mission, LLC Andrew Sun c/o World Premier Investments, Inc.
What is the funding mechanism for maintenance?	HOA

Structural BMP ID No. HMP-2

Construction Plan Sheet No. TBD

Discussion (as needed):
SWMM 5.1 Was used to size the vault to meet flow control requirements. Vault-2 has been sized to detain the flows from DMA-2 and over detain for DMA-5,4 and 3, so the proposed project meets the HMP requirements when measures at the POC1.

ATTACHMENT 1
BACKUP FOR PDP POLLUTANT CONTROL BMPS

This is the cover sheet for Attachment 1.

Indicate which Items are Included behind this cover sheet:

Attachment Sequence	Contents	Checklist
Attachment 1a	DMA Exhibit (Required) See DMA Exhibit Checklist on the back of this Attachment cover sheet.	☒ Included
Attachment 1b	Tabular Summary of DMAs Showing DMA ID matching DMA Exhibit, DMA Area, and DMA Type (Required)* *Provide table in this Attachment OR on DMA Exhibit in Attachment 1a	☒ Included on DMA Exhibit in Attachment 1a ☐ Included as Attachment 1b, separate from DMA Exhibit
Attachment 1c	Form I-7, Harvest and Use Feasibility Screening Checklist (Required unless the entire project will use infiltration BMPs) Refer to Appendix B.3-1 of the BMP Design Manual to complete Form I-7.	☒ Included ☐ Not included because the entire project will use infiltration BMPs
Attachment 1d	Form I-8, Categorization of Infiltration Feasibility Condition (Required unless the project will use harvest and use BMPs) Refer to Appendices C and D of the BMP Design Manual to complete Form I-8.	☒ Included ☐ Not included because the entire project will use harvest and use BMPs
Attachment 1e	Pollutant Control BMP Design Worksheets / Calculations (Required) Refer to Appendices B and E of the BMP Design Manual for structural pollutant control BMP design guidelines	☒ Included

Use this checklist to ensure the required information has been included on the DMA Exhibit:

The DMA Exhibit must identify:

☒ Underlying hydrologic soil group
☒ Approximate depth to groundwater
☒ Existing natural hydrologic features (watercourses, seeps, springs, wetlands)
☒ Critical coarse sediment yield areas to be protected
☒ Existing topography and impervious areas
☒ Existing and proposed site drainage network and connections to drainage offsite
☒ Proposed demolition
☒ Proposed grading
☒ Proposed impervious features
☒ Proposed design features and surface treatments used to minimize imperviousness
☒ Drainage management area (DMA) boundaries, DMA ID numbers, and DMA areas (square footage or acreage), and DMA type (i.e., drains to BMP, self-retaining, or self-mitigating)
☒ Potential pollutant source areas and corresponding required source controls (see Chapter 4, Appendix E.1, and Form I-3B)
☒ Structural BMPs (identify location, type of BMP, and size/detail)

ATTACHMENT 1a
DMA EXHIBIT

LEGEND

SOIL TYPE BOUNDARY

PROJECT BOUNDARY

DMA BOUNDARY

XX.XX *ACRES* — SUBAREA ACREAGE

DMA 1 — DMA ICON

IMPERVIOUS - ROAD/ DRIVEWAY (SOIL C\ SOIL D)

IMPERVIOUS - SIDEWALK

ROOFS

PERVIOUS - LANDSCAPE

SELF-MITIGATING AREA

EXISITNG OFFSITE AREA 0.453 AC WITH 0.79 RUNOFF FACTOR
PER WQTR FOR CVS PHARMACY PREPARED BY EXCEL ENGINEERING

D — HYDROLOGIC SOIL TYPE

X — POINT OF COMPLIANCE

STRUCTURAL BMPS

BIOFILTRATION BASIN

UNDISTURBED\ EXISTING DRIVEWAY
TO BE TREATED WITH BF-3-2

DE MINIMIS AREA = 208 SFT

EXISTING UNDISTURBED AREA AND NOT
COMMINGLED WITH PROPOSED IMPERVIOUS AREA
TREATED BY EXISTING SAND FILTER AND INLET FILTER
PER WQTR FOR CVS PHARMACY
PREPARED PY EXCEL ENGINEERING AND
DATED JULY 10, 2009



SOURCE CONTROL BMPS:

SC-1 PREVENTION OF ILLICIT DISCHARGES INTO THE MS4
- -Smart Irrigation Systems

SC-2 STORM DRAIN STENCILING OR SIGNAGE

SC-5 PROTECT TRASH STORAGE AREAS FROM RAINFALL
- -Trash Storage Containers Will Be Required to Have Lids

SC-6 ON-SITE STORM DRAIN INLETS
- -Maintain Inlets

SC-6 NEED FOR FUTURE INDOOR & STRUCTURAL PEST CONTROL
- -Provide Integrated Pest Management Information to Owners

SC-6 LANDSCAPE/OUTDOOR PESTICIDE USE
- -Maintain Landscaping Using Minimum or No Pesticides

SC-6 POOLS, SPAS, PONDS, DECORATIVE FOUNTAINS
- -Maintain Onsite Pool

SC-6 FOOD SERVICE
- -Connect Indoor floor drains to sewer line
- -Protect trash enclosures from rainfall runoff.

SC-6 PLAZAS, SIDEWALKS AND PARKING LOTS
- -Sweep Streets Regularly

SITE DESIGN / LID BMPS:

SD-1 MAINTAIN NATURAL DRAINAGE PATHWAYS
- -Conserve Natural Existing Drainage Patterns Where Possible

SD-2 CONSERVE NATURAL AREAS, SOILS, AND VEGETATION
- -Conserve Natural Areas Along Site's Exterior Where Possible

SD-3 MINIMIZE IMPERVIOUS AREA
- -Maximize the Amount of Open Space and Landscaping

SD-4 MINIMIZE SOIL COMPACTION
- -Where Feasible, Use Minimum Compaction

SD-5 IMPERVIOUS AREA DISPERSION
- -Use Splash Pads At Downspout Discharge Points

SD-6 RUNOFF COLLECTION
- -Where Possible, Direct Downspout Discharge to Biofiltration Areas

SD-7 LANDSCAPING WITH NATIVE OR DROUGHT TOLERANT SPECIES

SOURCE CONTROL BMPS SEE FORM I-4 IN SWQMP

- PREVENTION OF ILLICIT DISCHARGE TO THE MS4

NOTES

- 20 FEET >GROUNDWATER DEPTH > 10 FEET
- NO CCSYAS PRESENT ONSITE OR DRAINING THROUGH THE PROJECT BOUNDARY PER WMAA MAP

0.19 *ACRES*

		DMA 1.C	DMA 1.D	Total Area	BF-3-1	DMA 2.C	DMA 2.D	Total Area	BF-3-2	DMA 3.C	DMA 3.D	Total Area	BF-3-3	DMA 4.C	DMA4.D	Total Area	BF-3-4	DMA 5.C	DMA5.D	Total Area	BF-3-5	SM-C	de Minimis
	Runoff	Area	Area		Summation	Area	Area		Summation	Area	Area		Summation	Area	Area		Summation	Area	Area		Summation RF	ac.	SFT
	Factor	(ac.)	(ac.)	(ac.)	RF x A	(ac.)	(ac.)	(ac.)	RF x A	(ac.)	(ac.)	(ac.)		(ac.)	(ac.)	(ac.)	RF x A	(ac.)	(ac.)	(ac.)	x A		
Roofs	0.90	0.73	0.10	0.83	0.75	0.13	1.15	1.28	1.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24	0.00	0.24	0.22	0.12	208.00
Concrete or Asphalt	0.90	0.54	0.08	0.62	0.56	0.15	1.02	1.17	1.05	0.03	0.02	0.04	0.04	0.08	0.00	0.08	0.08	0.11	0.00	0.11	0.10		
Landscaped area (C Soil)	0.10	0.38	0.00	0.38	0.04	0.14	0.00	0.14	0.01	0.02	0.00	0.02	0.002	0.03	0.00	0.03	0.0030	0.09	0.00	0.09	0.01		
Landscaped area (D Soil)	0.10	0.00	0.09	0.09	0.01	0.00	0.87	0.87	0.09	0.00	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
		1.65	**0.27**	**1.92**	1.35	**0.43**	**3.03**	**3.46**	2.31	**0.05**	**0.04**	**0.086**	0.04	**0.11**	**0.00**	**0.11**	0.08	**0.44**	**0.00**	**0.44**	0.33		
					0.71				**0.67**				**0.52**				**0.69**				**0.74**		
	Imp=	77.05%	66.93%		75.65%	66.15%	71.40%		70.75%	59.57%	43.44%		52.27%			73.42%		80.10%	0.00%		80.10%		

PREPARED BY:

HUNSAKER & ASSOCIATES
SAN DIEGO, INC

PLANNING 9707 Waples Street
ENGINEERING San Diego, Ca 92121
SURVEYING PH(858)558-4500· FX(858)558-1414

DMA MAP

LAS POSAS

CITY OF SAN MARCOS, CALIFORNIA

SHEET 1 OF 1

W.O. 3087-0007

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ATTACHMENT 1b
TABULAR SUMMARY OF DMAs

		DMA 1.C	DMA 1.D	Total Area	BF-3-1	DMA 2.C	DMA 2.D	Total Area	BF-3-2	DMA 3.C	DMA 3.D	Total Area	BF-3-3	DMA 4.C	DMA4.D	Total Area	BF-3-4	DMA 5.C	DMA5.D	Total Area	BF-3-5	SM-C	de Minimis
	Runoff	Area	Area		Summation	Area	Area		Summation	Area	Area		Summation	Area	Area		Summation	Area	Area		Summation RF	ac.	SFT
	Factor	(ac.)	(ac.)	(ac.)	RF x A	(ac.)	(ac.)	(ac.)	RF x A	(ac.)	(ac.)	(ac.)		(ac.)	(ac.)	(ac.)	RF x A	(ac.)	(ac.)	(ac.)	x A		
Roofs	0.90	0.73	0.10	0.83	0.75	0.13	1.15	1.28	1.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24	0.00	0.24	0.22	0.12	208.00
Concrete or Asphalt	0.90	0.54	0.08	0.62	0.56	0.15	1.02	1.17	1.05	0.03	0.02	0.04	0.04	0.08	0.00	0.08	0.08	0.11	0.00	0.11	0.10		
Landscaped area (C Soil)	0.10	0.38	0.00	0.38	0.04	0.14	0.00	0.14	0.01	0.02	0.00	0.02	0.002	0.03	0.00	0.03	0.0030	0.09	0.00	0.09	0.01		
Landscaped area (D Soil)	0.10	0.00	0.09	0.09	0.01	0.00	0.87	0.87	0.09	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
		1.65	0.27	1.92	1.35	0.43	3.03	3.46	2.31	0.05	0.04	0.086	0.04	0.11	0.00	0.11	0.08	0.44	0.00	0.44	0.33		
					0.71				0.67				0.52				0.69				0.74		
	Imp=	77.05%	66.93%		75.65%	66.15%	71.40%		70.75%	59.57%	43.44%		52.27%			73.42%		80.10%	0.00%		80.10%		

Note: * DMA 2-D impervious area includes 0.023 ac of undisturbed exisitng pavement with runoff commingles with the proposed impervious area

ATTACHMENT 1c

FORM I-7, HARVEST AND USE FEASIBLITY SCREENING CHECKLIST

Worksheet B.3-1. Harvest and Use Feasibility Screening

Harvest and Use Feasibility Screening	Worksheet B.3-1

1. Is there a demand for harvested water (check all that apply) at the project site that is reliably present during the wet season?

☑ Toilet and urinal flushing
☑ Landscape irrigation
☐ Other:_____

2. If there is a demand; estimate the anticipated average wet season demand over a period of 36 hours. Guidance for planning level demand calculations for toilet/urinal flushing and landscape irrigation is provided in Section B.3.2.

land use: Residential use. 36 hr: 9.3 gal/per resident* 120 * 3 people/unit = 3348 gal = 447.5 cubic feet

Generate landscape: moderate plant use. 1470 gal/ac * 1.71ac = 2514 gal = 336 cubic feet

Total = 447.5+336 = 783.5 cubic-feet

3. Calculate the DCV using worksheet B-2.1.

DCV = 10,955 cubic-feet
0.25 DCV = 2,714 cubic-feet

3a. Is the 36-hour demand greater than or equal to the DCV?	3b. Is the 36-hour demand greater than 0.25DCV but less than the full DCV?	3c. Is the 36-hour demand less than 0.25DCV?
Yes / (No) ⇨	Yes / (No) ⇨	(Yes) ⇩
Harvest and use appears to be feasible. Conduct more detailed evaluation and sizing calculations to confirm that DCV can be used at an adequate rate to meet drawdown criteria.	Harvest and use may be feasible. Conduct more detailed evaluation and sizing calculations to determine feasibility. Harvest and use may only be able to be used for a portion of the site, or (optionally) the storage may need to be upsized to meet long term capture targets while draining in longer than 36 hours.	Harvest and use is considered to be infeasible.

ATTACHMENT 1d

FORM I-8, CATEGORIZATION OF INFILTRATION FEASIBILITY CONDITION

Categorization of Infiltration Feasibility Condition	Worksheet C.4-1

Part 1 - Full Infiltration Feasibility Screening Criteria

Would infiltration of the full design volume be feasible from a physical perspective without any undesirable consequences that cannot be reasonably mitigated?

Criteria	Screening Question	Yes	No
1	**Is the estimated reliable infiltration rate below proposed facility locations greater than 0.5 inches per hour?** The response to this Screening Question shall be based on a comprehensive evaluation of the factors presented in Appendix C.2 and Appendix D.		X

Based on the USDA Web Soil Survey, Soil C and D has low infiltration rate.& BASED ON INFILTRATION TESTING PER GEOTECHNICAL REPORT DATED 7/15/21.

2	**Can infiltration greater than 0.5 inches per hour be allowed without increasing risk of geotechnical hazards (slope stability, groundwater mounding, utilities, or other factors) that cannot be mitigated to an acceptable level?** The response to this Screening Question shall be based on a comprehensive evaluation of the factors presented in Appendix C.2.		X

Provide basis:

BASED ON INFILTRATION TESTING PER GEOTECHNICAL REPORT DATED 7/15/21.

Worksheet C.4-1 Page 2 of 4			
Criteria	Screening Question	**Yes**	**No**
3	**Can infiltration greater than 0.5 inches per hour be allowed without increasing risk of groundwater contamination (shallow water table, storm water pollutants or other factors) that cannot be mitigated to an acceptable level?** The response to this Screening Question shall be based on a comprehensive evaluation of the factors presented in Appendix C.3.		X
BASED ON INFILTRATION TESTING PER GEOTECHNICAL REPORT DATED 7/15/21.			
4	**Can infiltration greater than 0.5 inches per hour be allowed without causing potential water balance issues such as change of seasonality of ephemeral streams or increased discharge of contaminated groundwater to surface waters?** The response to this Screening Question shall be based on a comprehensive evaluation of the factors presented in Appendix C.3.	X	
Provide basis: BASED ON INFILTRATION TESTING PER GEOTECHNICAL REPORT DATED 7/15/21.			
Part 1 Result*	If all answers to rows 1 - 4 are "**Yes**" a full infiltration design is potentially feasible. The feasibility screening category is **Full Infiltration** If any answer from row 1-4 is "**No**", infiltration may be possible to some extent but would not generally be feasible or desirable to achieve a "full infiltration" design. Proceed to Part 2		Full Infiltration not Feasible

*To be completed using gathered site information and best professional judgment considering the definition of MEP in the MS4 Permit. Additional testing and/or studies may be required by the City to substantiate findings.

Worksheet C.4-1 Page 3 of 4

Part 2 – Partial Infiltration vs. No Infiltration Feasibility Screening Criteria

Would infiltration of water in any appreciable amount be physically feasible without any negative consequences that cannot be reasonably mitigated?

Criteria	Screening Question	Yes	No
5	**Do soil and geologic conditions allow for infiltration in any appreciable rate or volume?** The response to this Screening Question shall be based on a comprehensive evaluation of the factors presented in Appendix C.2 and Appendix D.		X

BASED ON INFILTRATION TESTING PER GEOTECHNICAL REPORT DATED 7/15/21.

6	**Can Infiltration in any appreciable quantity be allowed without increasing risk of geotechnical hazards (slope stability, groundwater mounding, utilities, or other factors) that cannot be mitigated to an acceptable level**? The response to this Screening Question shall be based on a comprehensive evaluation of the factors presented in Appendix C.2.		X

Site is underlain by soil type C and D that has low infiltration characteristics, which could result in lateral migration of water into the adjacent roadway improvements and utilities causing settlement and water movement through utility lines.

Worksheet C.4-1 Page 4 of 4			
Criteria	Screening Question	**Yes**	**No**
7	**Can Infiltration in any appreciable quantity be allowed without posing significant risk for groundwater related concerns (shallow water table, storm water pollutants or other factors)?** The response to this Screening Question shall be based on a comprehensive evaluation of the factors presented in Appendix C.3.		X
8	**Can infiltration be allowed without violating downstream water rights**? The response to this Screening Question shall be based on a comprehensive evaluation of the factors presented in Appendix C.3.	X	
Part 2 Result*	If all answers from row 1-4 are yes then partial infiltration design is potentially feasible. The feasibility screening category is **Partial Infiltration.** If any answer from row 5-8 is no, then infiltration of any volume is considered to be **infeasible** within the drainage area. The feasibility screening category is **No Infiltration.**		Infiltration Not Feasible

*To be completed using gathered site information and best professional judgment considering the definition of MEP in the MS4 Permit. Additional testing and/or studies may be required by the City to substantiate findings.

LGC Geotechnical, Inc.

LGC has geotechnically reviewed this document and confirms that it is in general accordance with our report. The structural/civil design and/or code compliance of this document is not the purview of the geotechnical consultant, and therefore, were not reviewed by this office.

Signature: _____ Date: 2/22/2022

131 Calle Iglesia, Suite 200 • San Clemente, CA 92672 • 949-369-6141

ATTACHMENT 1e

POLLUTION CONTROL BMP DESIGN WORKSHEETS

DMA#1

DMA 1		Worksheet B-2.1		
1	85th percentile 24-hr storm depth from Figure B.1-1	d=	0.70	inches
2	Area tributary to BMP (s)	A=	1.92	acres
3	Area weighted runoff factor (estimate using Appendix B.1.1 and B.2.1)	C=	0.71	unitless
4	Street trees volume reduction (15 ft^3 x 440 trees)	TCV=	0.00	cubic-feet
5	Rain barrels volume reduction	RCV=	0.00	cubic-feet
6	Calculate DCV= (3630 x C x d x A) - TCV - RCV	DCV=	3,441	cubic-feet
		1.5 DCV=	5,161	

DMA#2

DMA 2		Worksheet B-2.1		
1	85th percentile 24-hr storm depth from Figure B.1-1	d=	0.70	inches
2	Area tributary to BMP (s)	A=	3.46	acres
3	B.1.1 and B.2.1)	C=	0.67	unitless
4	Street trees volume reduction (15ft^3 x 26 trees)	TCV=	0.00	cubic-feet
5	Rain barrels volume reduction	RCV=	0.00	cubic-feet
6	Calculate DCV= (3630 x C x d x A x M) - TCV - RCV	DCV=	5,859	cubic-feet
		1.5 DCV=	8,789	

DMA3

DMA 3		Worksheet B-2.1		
1	85th percentile 24-hr storm depth from Figure B.1-1	d=	0.70	inches
2	Area tributary to BMP (s)	A=	0.09	acres
3	Area weighted runoff factor (estimate using Appendix B.1.1 and B.2.1)	C=	0.52	unitless
4	Street trees volume reduction (15 ft^3 x 29 trees)	TCV=	0.00	cubic-feet
5	Rain barrels volume reduction	RCV=	0.00	cubic-feet
6	Calculate DCV= (3630 x C x d x A x M) - TCV - RCV	DCV=	113	cubic-feet

DMA 4		Worksheet B-2.1		
1	85th percentile 24-hr storm depth from Figure B.1-1	d=	0.70	inches
2	Area tributary to BMP (s)	A=	0.11	acres
3	Area weighted runoff factor (estimate using Appendix B.1.1 and B.2.1)	C=	0.69	unitless
4	Street trees volume reduction (15 ft^3 x 29 trees)	TCV=	0.00	cubic-feet
5	Rain barrels volume reduction	RCV=	0.00	cubic-feet
6	Calculate DCV= (3630 x C x d x A x M) - TCV - RCV	DCV=	199	cubic-feet

DMA 5		Worksheet B-2.1		
1	85th percentile 24-hr storm depth from Figure B.1-1	d=	0.70	inches
2	Area tributary to BMP (s)	A=	0.44	acres
3	Area weighted runoff factor (estimate using Appendix B.1.1 and B.2.1)	C=	0.74	unitless
4	Street trees volume reduction (15 ft^3 x 29 trees)	TCV=	0.00	cubic-feet
5	Rain barrels volume reduction	RCV=	0.00	cubic-feet
6	Calculate DCV= (3630 x C x d x A x M) - TCV - RCV	DCV=	837	cubic-feet

DMA 3-EX		Worksheet B-2.1		
1	85th percentile 24-hr storm depth from Figure B.1-1	d=	0.70	inches
2	Area tributary to BMP (s)	A=	0.453	acres
3	Area weighted runoff factor (estimate using Appendix B.1.1 and B.2.1)	C=	0.79	unitless
4	Street trees volume reduction (15 ft^3 x 29 trees)	TCV=	0.00	cubic-feet
5	Rain barrels volume reduction	RCV=	0.00	cubic-feet
6	Calculate DCV= (3630 x C x d x A x M) - TCV - RCV	DCV=	909	cubic-feet

DMA 3-EX
FLOW BASED BMP SIZING CALCULATION

DMA 3-EX: Flow Based BMP Design Flows (BF-3-3)		Worksheet B.6-1		
1	DCV	DCV	909	cubic-feet
2	DCV Retained (Treewell Reduction)	DCV Retained	0	cubic-feet
3	DCV Biofiltered	DCV Biofiltered	0.00	cubic-feet
4	DCV requiring flow-thru (Line 1 - Line 2 - 0.67*Line 3)	DCV flow-thru	909	cubic-feet
5	Adjustment Factor (Line 4 / Line1)	AF=	1.00	unitless
6	Design rainfall intensity	i=	0.20	in/hr
7	Area tributary to BMP(s)	A=	0.45	acres
8	Area-weighted runoff factor (estimate using Appendix B.2)	C=	0.79	unitless
9	Calculate Flow Rate = AF x (C x i x A)x1.5*	Q=	0.107	cfs

1) Adjustment factor shall be estimated considering only retention and biofiltration BMPs located upstream of flow-thru BMPs. That is, if the flow-thru BMP is upstream of the project's retention and biofiltration BMPs then the flow-thru BMP shall be sized using an adjustment factor of 1.

2) Volume based (e.g., dry extended detention basin) flow-thru treatment control BMPs shall be sized to the volume in Line 4 and dlow based)e.g., vegetated swales) shall be sized to flow rate in Line 9. Sand filter and media filter can be designed by either volume in :ie 4 or flow rate in Line 9

3) Propietary BMPs, if used, shall provide certified treatment capacity equal to or greater than the

4) Flow-thru treatment control BMPs shall be sized to filter or treat the maximum flow rate of runoff produced from a rainfaill intensity of 0.2 inch of rainfall per hour or each hour of every storm event

*1.5 Times Flow Rate Safety Factor

Bio Clean
A Forterra Company

MWS SIZING

Mike Billings
02/18/2022

398 Via El Centro, Oceanside, CA 92058
(469) 458-7973 • Fax (760) 433-3176
www.biocleanenvironmental.com

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To Whom It May Concern,

The MWS Linear will be sized in accordance with its TAPE GULD approval. The system is approved at a loading rate of 1 gpm/sq ft. The MWS Linear has General Use Level Designation at this loading rate for TSS (Basic), phosphorous and dissolved metals (Enhanced). For this project design, sizing, loading will be reviewed by a Modular Wetland representative for final approval to ensure the system is sized appropriately.

For this project we are sizing two of the MWS units to treat a volume and three units to treat a flow rate.

BF-3-1 Due to the volume treatment requirements of this unit, we are sizing these units with a loading rate of 0.52 gpm/sf. This amount is well below our TAPE GULD approved loading rate of 1 gmp/sq ft.
BF-3-2: Due to the volume treatment requirements of this unit, we are sizing these units with a loading rate of 0.67 gpm/sf. This amount is well below our TAPE GULD approved loading rate of 1 gmp/sq ft.

BF-3-3, BF-3-4, and BF-3-5: These units are sized to our TAPE GULD approved loading rate of 1gpm/sq ft.

All five of the MWS units use internal bypass for peak bypass flows. The MWS Linear unit uses the standard equations below for flow over a rectangular weir and orifice sizing as shown below:

HEAD OVER RECTANGULAR WEIR

$$Given\ that: Q = VA;\ \ Q = peak\ flow\ rate, V = c_d\sqrt{2gh}, A = W(dh)$$

$$c_d\ is\ the\ discharge\ coefficent, W\ is\ the\ width\ of\ the\ weir\ \&\ h\ is\ the\ peak\ HGL$$

$$dQ = c_d\sqrt{2gh}\,(W)(dh)$$

$$\int_0^Q dQ = c_d W\sqrt{2g}\int_0^h h^{1/2}\,dh$$

$$Q = c_d W\sqrt{2g}\,\frac{2}{3}\,h^{3/2}$$

$$h = \left(\frac{Q}{\frac{2}{3}c_d W\sqrt{2g}}\right)^{2/3}$$

$$Determine\ peak\ HGL\ by\ taking\ the\ sum: (outlet\ pipe\ elev.)$$
$$+ (1\ inch\ differential\ between\ discharge\ chamber\ and\ pretreatment\ chamber)$$
$$+ (weir\ height) + (head\ over\ weir)$$

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Unit BF-3-1 MWS-L-8-8-V-UG:

Given that: $Q_{peak} = 0.159\ cfs;\ \ W = 3.67'$

$$h = \left(\frac{0.159}{\frac{2}{3}(0.6076)(3.67)\sqrt{2(32.17)}}\right)^{2/3} = \boxed{0.06'}$$

Peak HGL = 564.90' + 0.08' + 3.10' + 0.06' = 568.06'

Unit BF-3-2 MWS-L-8-12-V-UG:

Given that: $Q_{peak} = 0.343\ cfs;\ \ W = 3.67'$

$$h = \left(\frac{0.349}{\frac{2}{3}(0.6076)(3.67)\sqrt{2(32.17)}}\right)^{2/3} = \boxed{0.09'}$$

Peak HGL = 566.70' + 0.08' + 3.40' + 0.09' = 570.19'

Unit BF-3-3 MWS-L-6-8-C-UG:

Given that: $Q_{peak} = 3.03\ cfs;\ \ W = 3.67'$

$$h = \left(\frac{3.03}{\frac{2}{3}(0.6076)(3.67)\sqrt{2(32.17)}}\right)^{2/3} = \boxed{0.40'}$$

Peak HGL = 567.71' + 0.08' + 2.80' + 0.40' = 570.89'

Unit BF-3-4 MWS-L-4-6-C-UG:

Given that: $Q_{peak} = 1.00\ cfs;\ \ W = 2.83'$

$$h = \left(\frac{1.00}{\frac{2}{3}(0.6076)(2.83)\sqrt{2(32.17)}}\right)^{2/3} = \boxed{0.23'}$$

Peak HGL = 557.96' + 0.08' + 1.67' + 0.23' = 559.94'

Unit BF-3-5 MWS-L-4-8-C-UG:

Given that: $Q_{peak} = 2.11\ cfs;\ \ W = 3.67'$

$$h = \left(\frac{2.11}{\frac{2}{3}(0.6076)(3.67)\sqrt{2(32.17)}}\right)^{2/3} = \boxed{0.32'}$$

Peak HGL = 567.91' + 0.08' + 2.90' + 0.32' = 571.17'

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MWS ORIFICE SIZING

$$Given\ that: Q = VA;\ \ Q = treatment\ flow\ rate, V = c_d\sqrt{2gh}, A = \frac{\pi D^2}{4}$$

c_d *is the discharge coefficent &* h *is the treatment HGL*

Rewrite to solve for the diameter of the orifice.

$$\left[A = \frac{Q}{V}\right] \xrightarrow[rewrite]{} \frac{\pi D^2}{4} = \frac{Q}{c_d\sqrt{2gh}}$$

$$D = \sqrt{\frac{4Q}{\pi c_d\sqrt{2gh}}};\ c_d = c_v c_c = (0.98)(0.62) = 0.6076$$

Unit BF-3-1 MWS-L-8-8-V-UG:

$$Given: Q = 0.107\ cfs, h = 3.1\ ft$$

$$D = \sqrt{\frac{4(0.107)}{\pi(0.6076)\sqrt{2(32.17)(3.1)}}} = 0.126' = \boxed{1.51"}$$

The diameter of the orifice needs to be 1.51" *in order to produce a head of* 3.1′ *in the MWS unit.*

Unit BF-3-2 MWS-L-8-12-V-UG:

$$Given: Q = 0.224\ cfs, h = 3.4\ ft$$

$$D = \sqrt{\frac{4(0.224)}{\pi(0.6076)\sqrt{2(32.17)(3.4)}}} = 0.178' = \boxed{2.14"}$$

The diameter of the orifice needs to be 2.14" *in order to produce a head of* 3.4′ *in the MWS unit.*

Unit BF-3-3 MWS-L-6-8-C-UG:

$$Given: Q = 0.12\ cfs, h = 2.8\ ft$$

$$D = \sqrt{\frac{4(0.12)}{\pi(0.6076)\sqrt{2(32.17)(2.8)}}} = 0.137' = \boxed{1.64"}$$

The diameter of the orifice needs to be 1.64" *in order to produce a head of* 2.8′ *in the MWS unit.*

Unit BF-3-4 MWS-L-4-6-C-UG:

$$Given: Q = 0.026\ cfs, h = 1.2\ ft$$

$$D = \sqrt{\frac{4(0.026)}{\pi(0.6076)\sqrt{2(32.17)(1.2)}}} = 0.078' = \boxed{0.94"}$$

The diameter of the orifice needs to be 0.94" *in order to produce a head of* 1.2′ *in the MWS unit.*

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Unit BF-3-5 MWS-L-4-8-C-UG:

$Given: Q = 0.10\ cfs\ , h = 2.9\ ft$

$$D = \sqrt{\frac{4(0.10)}{\pi(0.6076)\sqrt{2(32.17)(2.9)}}} = 0.123' = \boxed{1.48"}$$

The diameter of the orifice needs to be 1.48" *in order to produce a head of* 2.9′ *in the MWS unit.*

Please feel free to contact us at your convenience if you have any questions

Sincerely,

Mike Billings

Stormwater Engineer

398 Via El Centro, Oceanside, CA 92058
(469) 458-7973 • Fax (760) 433-3176
www.biocleanenvironmental.com



Volume Based Sizing

36 Hr

Many states require treatment of a water quality volume and do not offer the option of flow based design. The MWS Linear and its unique horizontal flow makes it the only biofilter that can be used in volume based design installed downstream of ponds, detention basins, and underground storage systems.

Model #	Treatment Capacity (cu. ft.) @ 24-Hour Drain Down	36 Hr	Treatment Capacity (cu. ft.) @ 48-Hour Drain Down
MWS-L-4-4	1140	1710	2280
MWS-L-4-6	1600	2400	3200
MWS-L-4-8	2518	3777	5036
MWS-L-4-13	3131	4696	6261
MWS-L-4-15	3811	5716	7623
MWS-L-4-17	4492	6738	8984
MWS-L-4-19	5172	7758	10345
MWS-L-4-21	5853	8779	11706
MWS-L-6-8	3191	4786	6382
MWS-L-8-8	5036	7554	10072
MWS-L-8-12	7554	11331	15109
MWS-L-8-16	10073	15109	20145
MWS-L-8-20	12560	18840	25120
MWS-L-8-24	15108	22662	30216

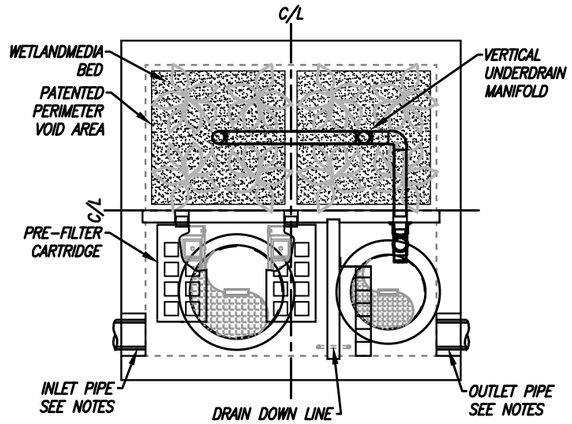
SITE SPECIFIC DATA			
PROJECT NUMBER		14942	
PROJECT NAME		GRAN VISTA	
PROJECT LOCATION		SAN MARCOS, CA	
STRUCTURE ID		BF-3-1	
TREATMENT REQUIRED			
VOLUME BASED (CF)		FLOW BASED (CFS)	
5,250		N/A	
TREATMENT HGL AVAILABLE (FT)			N/K
PEAK BYPASS REQUIRED (CFS) - IF APPLICABLE			0.159
PIPE DATA	I.E.	MATERIAL	DIAMETER
INLET PIPE 1	565.50	PVC	8"
INLET PIPE 2	N/A	N/A	N/A
OUTLET PIPE	564.90	PVC	8"
	PRETREATMENT	BIOFILTRATION	DISCHARGE
RIM ELEVATION	576.00	576.00	576.00
SURFACE LOAD	HS-20 INDIRECT	N/A	HS-20 INDIRECT
FRAME & COVER	ø30"	OPEN PLANTER	ø24"
WETLANDMEDIA VOLUME (CY)			11.17
ORIFICE SIZE (DIA. INCHES)			ø1.51"
NOTES: PRELIMINARY NOT FOR CONSTRUCTION.			

INSTALLATION NOTES

1. CONTRACTOR TO PROVIDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS REQUIRED TO OFFLOAD AND INSTALL THE SYSTEM AND APPURTENANCES IN ACCORDANCE WITH THIS DRAWING AND THE MANUFACTURERS' SPECIFICATIONS, UNLESS OTHERWISE STATED IN MANUFACTURER'S CONTRACT.
2. UNIT MUST BE INSTALLED ON LEVEL BASE. MANUFACTURER RECOMMENDS A MINIMUM 6" LEVEL ROCK BASE UNLESS SPECIFIED BY THE PROJECT ENGINEER. CONTRACTOR IS RESPONSIBLE FOR VERIFYING PROJECT ENGINEER'S RECOMMENDED BASE SPECIFICATIONS.
4. CONTRACTOR TO SUPPLY AND INSTALL ALL EXTERNAL CONNECTING PIPES. ALL PIPES MUST BE FLUSH WITH INSIDE SURFACE OF CONCRETE (PIPES CANNOT INTRUDE BEYOND FLUSH). INVERT OF OUTFLOW PIPE MUST BE FLUSH WITH DISCHARGE CHAMBER FLOOR. ALL PIPES SHALL BE SEALED WATERTIGHT PER MANUFACTURER'S STANDARD CONNECTION DETAIL.
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GENERAL NOTES

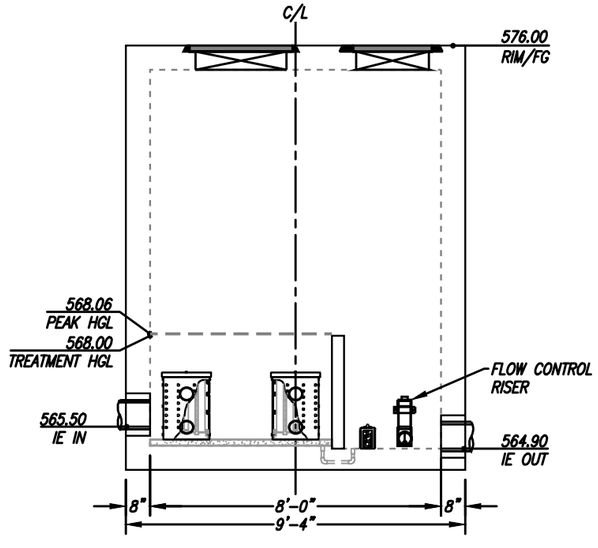
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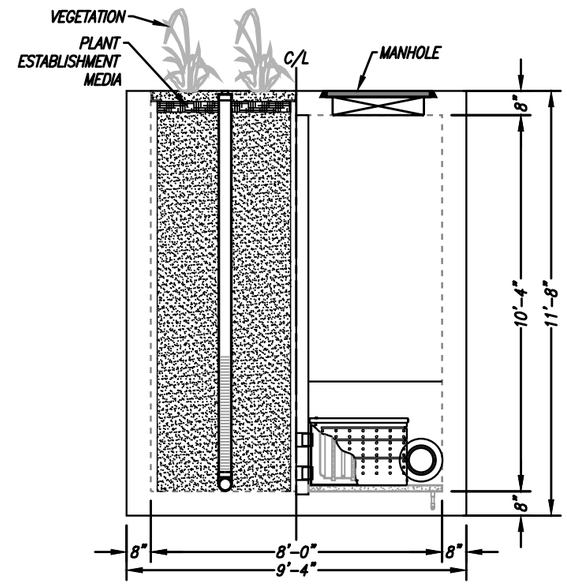
PLAN VIEW

INTERNAL BYPASS DISCLOSURE:

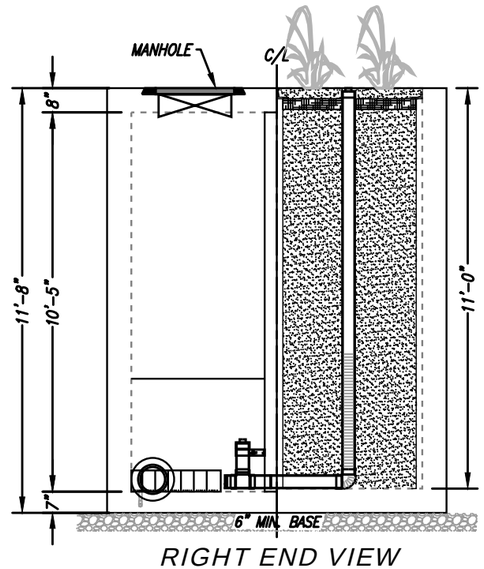
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ELEVATION VIEW



LEFT END VIEW



RIGHT END VIEW

REQUIRED TREATMENT VOLUME (CF)		5,250
DRAINDOWN DURATION (HOURS)		35
AVERAGE DISCHARGE RATE PER MWS UNIT(GPM)		47.99
OPERATING HEAD (FT)		3.1
WETLANDMEDIA INFILTRATION RATE (IN/HR)	OR	52.3
WETLANDMEDIA LOADING RATE (GPM/SF)		0.52

MODULAR WETLANDS

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Bio Clean
A Forterra Company

MWS-L-8-8-11'-0"-V
STORMWATER BIOFILTRATION SYSTEM
STANDARD DETAIL

4/28/22MRILINGS



Volume Based Sizing

36 Hr

Many states require treatment of a water quality volume and do not offer the option of flow based design. The MWS Linear and its unique horizontal flow makes it the only biofilter that can be used in volume based design installed downstream of ponds, detention basins, and underground storage systems.

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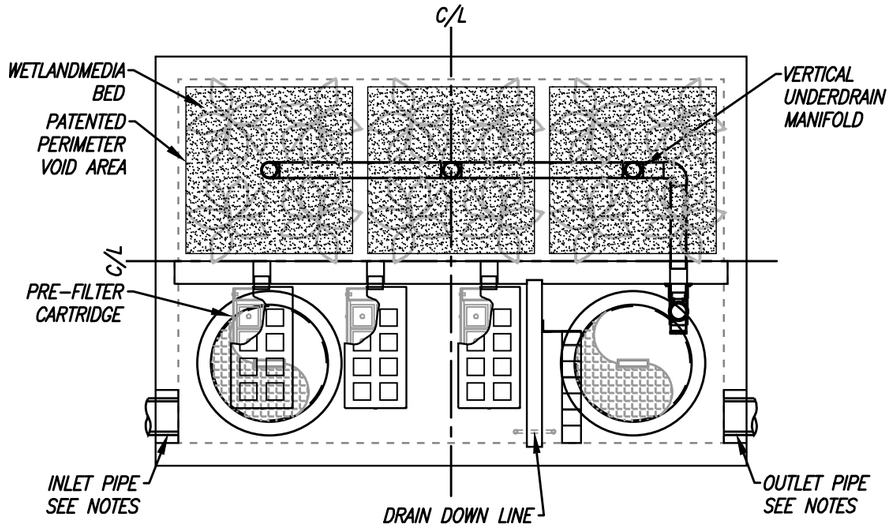
SITE SPECIFIC DATA			
PROJECT NUMBER		14942	
PROJECT NAME		GRAN VISTA	
PROJECT LOCATION		SAN MARCOS, CA	
STRUCTURE ID		BF-3-2	
TREATMENT REQUIRED			
VOLUME BASED (CF)		FLOW BASED (CFS)	
9,100		N/A	
TREATMENT HGL AVAILABLE (FT)			N/K
PEAK BYPASS REQUIRED (CFS) - IF APPLICABLE			0.343
PIPE DATA	I.E.	MATERIAL	DIAMETER
INLET PIPE 1	567.50	PVC	8"
INLET PIPE 2	N/A	N/A	N/A
OUTLET PIPE	566.70	PVC	8"
	PRETREATMENT	BIOFILTRATION	DISCHARGE
RIM ELEVATION	575.50	575.50	575.50
SURFACE LOAD	HS-20 INDIRECT	N/A	HS-20 INDIRECT
FRAME & COVER	2EA ø30"	OPEN PLANTER	ø30"
WETLANDMEDIA VOLUME (CY)			13.26
ORIFICE SIZE (DIA. INCHES)			ø2.14"
NOTES: PRELIMINARY NOT FOR CONSTRUCTION.			

INSTALLATION NOTES

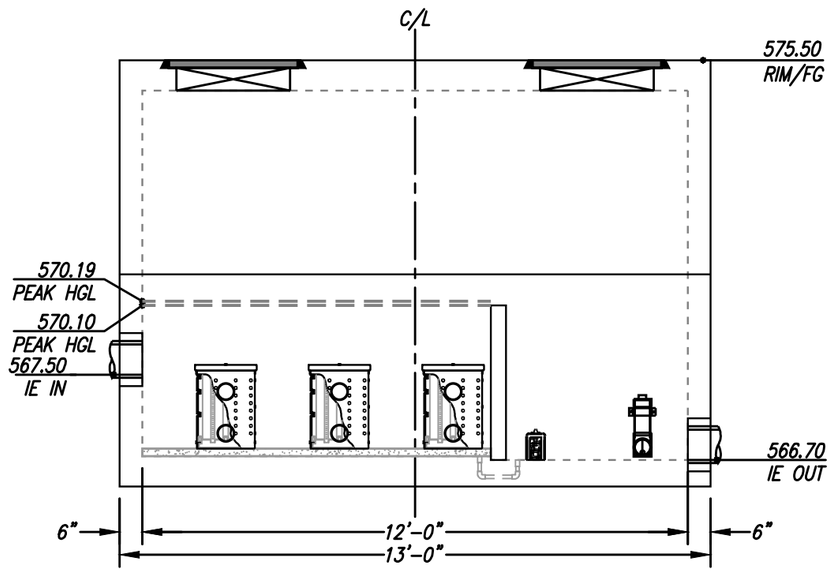
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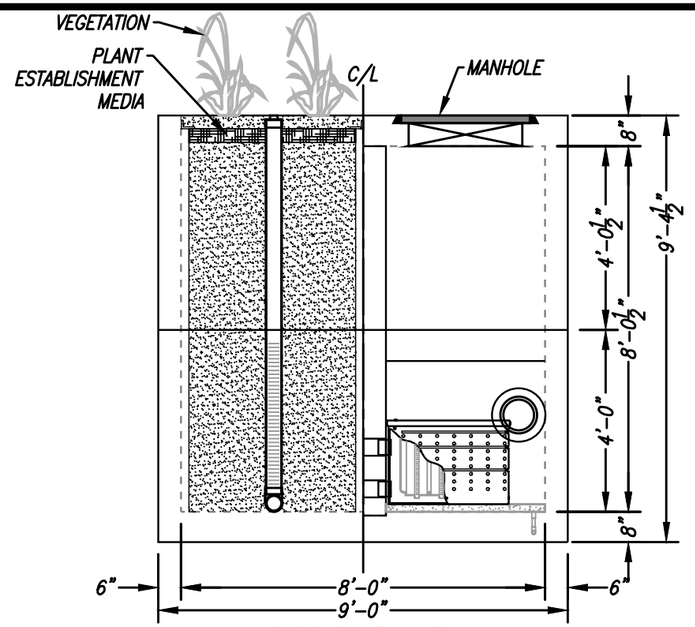
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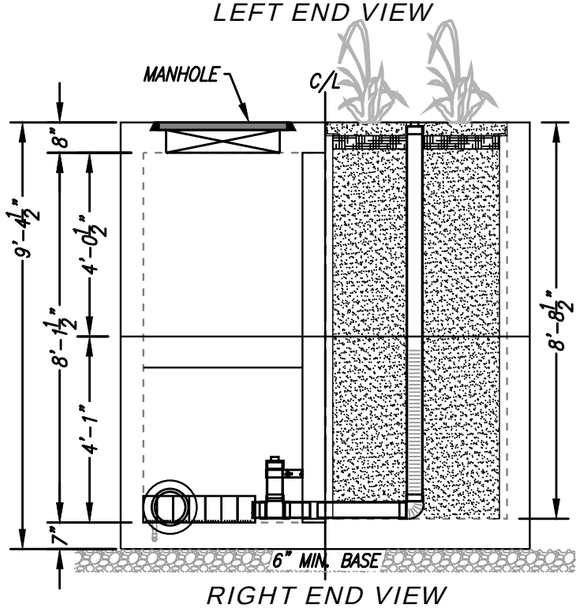
PLAN VIEW



ELEVATION VIEW



LEFT END VIEW



RIGHT END VIEW

INTERNAL BYPASS DISCLOSURE:

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REQUIRED TREATMENT VOLUME (CF)	9,100
DRAINDOWN DURATION (HOURS)	35
AVERAGE DISCHARGE RATE PER MWS UNIT(GPM)	100.54
OPERATING HEAD (FT)	3.4
WETLANDMEDIA INFILTRATION RATE (IN/HR) OR WETLANDMEDIA LOADING RATE (GPM/SF)	66.6 / 0.67

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A Forterra Company

MWS-L-8-12-8'-9"-V
STORMWATER BIOFILTRATION SYSTEM
STANDARD DETAIL

4/28/22MBILLINGS

DMA 3
FLOW BASED BMP SIZING CALCULATION

DMA 3: Flow Based BMP Design Flows (BF-3-3)		Worksheet B.6-1		
1	DCV	DCV	113	cubic-feet
2	DCV Retained (Treewell Reduction)	DCV Retained	0	cubic-feet
3	DCV Biofiltered	DCV Biofiltered	0.00	cubic-feet
4	DCV requiring flow-thru (Line 1 - Line 2 - 0.67*Line 3)	DCV flow-thru	113	cubic-feet
5	Adjustment Factor (Line 4 / Line1)	AF=	1.00	unitless
6	Design rainfall intensity	i=	0.20	in/hr
7	Area tributary to BMP(s)	A=	0.09	acres
8	Area-weighted runoff factor (estimate using Appendix B.2)	C=	0.52	unitless
9	Calculate Flow Rate = AF x (C x i x A)x1.5*	Q=	0.013	cfs

1) Adjustment factor shall be estimated considering only retention and biofiltration BMPs located upstream of flow-thru BMPs. That is, if the flow-thru BMP is upstream of the project's retention and biofiltration BMPs then the flow-thru BMP shall be sized using an adjustment factor of 1.

2) Volume based (e.g., dry extended detention basin) flow-thru treatment control BMPs shall be sized to the volume in Line 4 and dlow based)e.g., vegetated swales) shall be sized to flow rate in Line 9. Sand filter and media filter can be designed by either volume in :ie 4 or flow rate in Line 9

3) Propietary BMPs, if used, shall provide certified treatment capacity equal to or greater than the

4) Flow-thru treatment control BMPs shall be sized to filter or treat the maximum flow rate of runoff produced from a rainfaill intensity of 0.2 inch of rainfall per hour or each hour of every storm event

*1.5 Times Flow Rate Safety Factor

DMA 3-EX
FLOW BASED BMP SIZING CALCULATION

DMA 3-EX: Flow Based BMP Design Flows (BF-3-3)		Worksheet B.6-1		
1	DCV	DCV	909	cubic-feet
2	DCV Retained (Treewell Reduction)	DCV Retained	0	cubic-feet
3	DCV Biofiltered	DCV Biofiltered	0.00	cubic-feet
4	DCV requiring flow-thru (Line 1 - Line 2 - 0.67*Line 3)	DCV flow-thru	909	cubic-feet
5	Adjustment Factor (Line 4 / Line1)	AF=	1.00	unitless
6	Design rainfall intensity	i=	0.20	in/hr
7	Area tributary to BMP(s)	A=	0.45	acres
8	Area-weighted runoff factor (estimate using Appendix B.2)	C=	0.79	unitless
9	Calculate Flow Rate = AF x (C x i x A)x1.5*	Q=	0.107	cfs

1) Adjustment factor shall be estimated considering only retention and biofiltration BMPs located upstream of flow-thru BMPs. That is, if the flow-thru BMP is upstream of the project's retention and biofiltration BMPs then the flow-thru BMP shall be sized using an adjustment factor of 1.

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4) Flow-thru treatment control BMPs shall be sized to filter or treat the maximum flow rate of runoff produced from a rainfaill intensity of 0.2 inch of rainfall per hour or each hour of every storm event

*1.5 Times Flow Rate Safety Factor

PRIORITY PROJECT

WATER QUALITY TECHNICAL REPORT

FOR:
CVS PHARMACY
Las Posas Rd, San Marcos, CA

PREPARED FOR:
World Premier Investments
3 MacArthur Place, Suite 550
Santa Ana, CA 92707
714-662-6900
714-662-7788 FAX

PREPARED BY:
EXCEL ENGINEERING
440 State Place
Escondido, CA 92029
Tel: (760) 745-8118
Project No: 05-036

DATE PREPARED:
July 10, 2008
Revised: December 19, 2008
January 13, 2009
February 11, 2009
April 27, 2009
July 10, 2009

APPENDIX F

SITE PLAN
TOPOGRAPHIC MAPS

SITE DESIGN BMPs

(1) INCREASE RAINFALL INFILTRATION:
- UNDERGROUND DETENTION SYSTEM
- SAND FILTERS.

(2) MINIMIZING IMPERVIOUS AREAS

(3) INCORPORATE LANDSCAPE BUFFER AREA BETWEEN SIDEWALK AND STREET.

MINIMIZE DCIAs

(4) DRAINING ROOFTOP INTO SAND FILTERS AND UNDERGROUND DETENTION SYSTEM PRIOR TO THE STORMDRAIN.

SOURCE CONTROL BMPs

(5) TRASH STORAGE AREA IS PAVED WITH CONCRETE AND DESIGNED NOT TO ALLOW RUN-ON FROM ADJOINING AREAS, WALLED AND CONTAIN A ROOF OR AWNING.

TREATMENT CONTROL BMPs

(6) FLOGRARD+PLUS® CATCH BASIN INSERT

POLUTANT TYPES THAT ARE EXPECTED:
- SILT AND DEBRIS
- LOW TO MODERATE LEVELS OF PETROLEUM HYDROCARBON

FILTRATION SYSTEMS

(7) SEDIMENTCHAMBER

POLUTANT TYPES THAT ARE EXPECTED:
- SEDIMENT, NUTRIENTS, TRASH, METALS, BACTERIA, ORGANICS
- OIL AND GREASE

(8) SAND FILTRATION

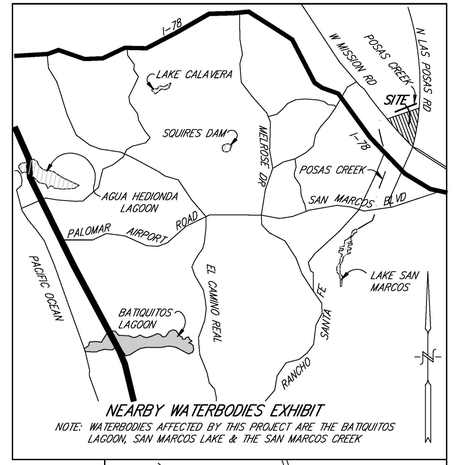
POLUTANT TYPES THAT ARE EXPECTED:
- SEDIMENT, NUTRIENTS, TRASH, METALS, BACTERIA, ORGANICS
- OIL AND GREASE

LEGEND

- DRAINAGE PATH
- SAND FILTER (SEE SHT. 2 FOR DETAILS)
- STORMDRAIN PIPE (PRIVATE)
- STORMDRAIN CLEANOUT (PRIVATE)
- STORMDRAIN INLET (PRIVATE)
- LIMITS OF SANDFILTER DRAINAGE AREA
- DRAINAGE AREA BOUNDARY

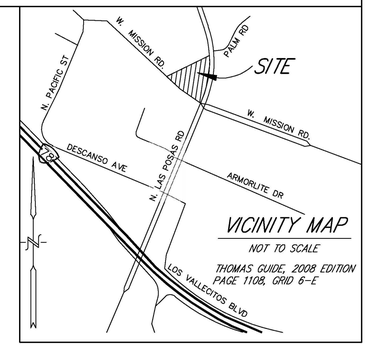
IMPERVIOUS AREAS
- A/C PAVEMENT
- PCC PAVEMENT
- DECORATIVE PAVEMENT
- DECORATIVE PAVEMENT
- ROOF AREA

PERVIOUS AREAS
- LANDSCAPE AREAS
- AREAS OF POTENTIAL EROSION



NEARBY WATERBODIES EXHIBIT

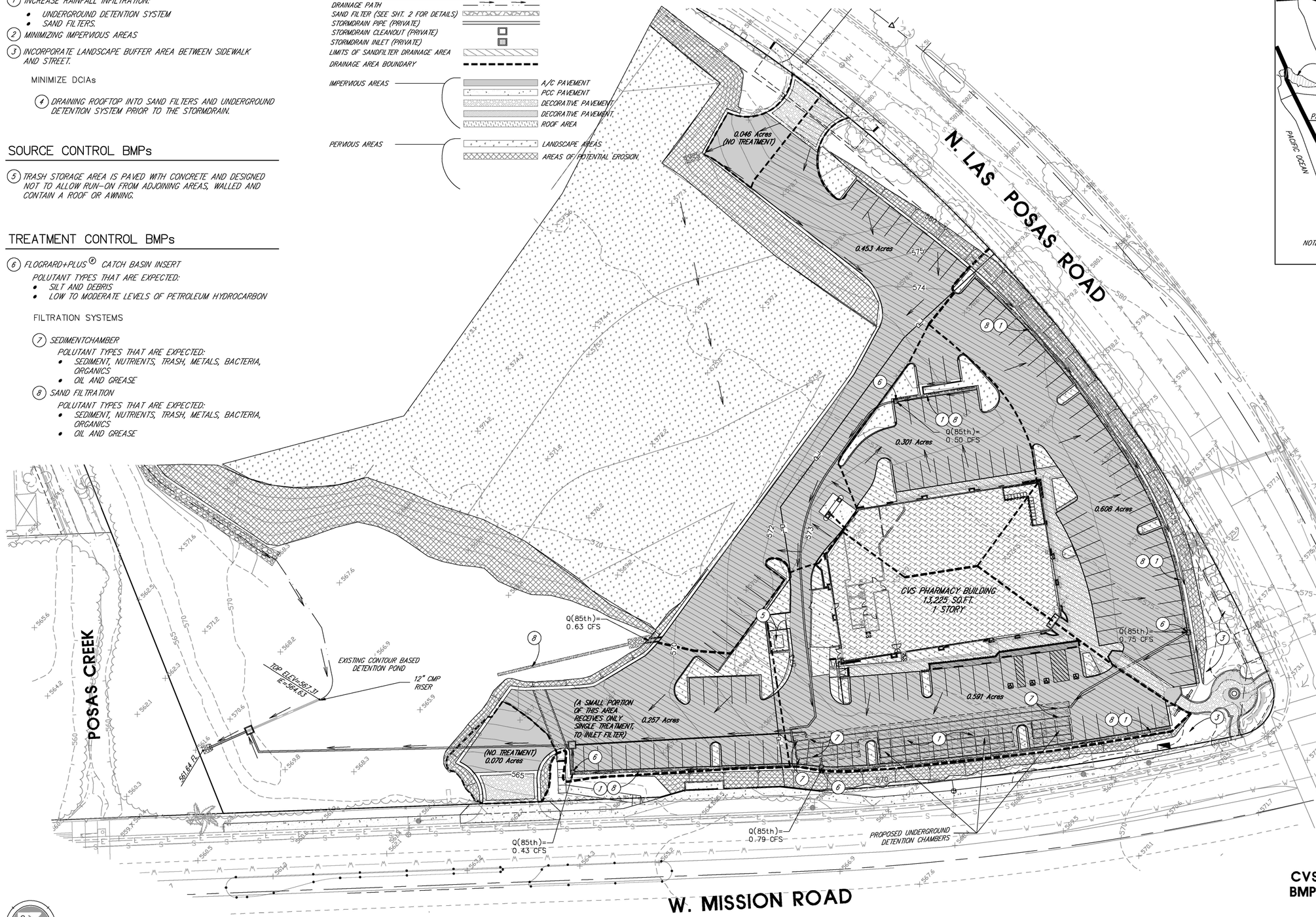
NOTE: WATERBODIES AFFECTED BY THIS PROJECT ARE THE BATIQUITOS LAGOON, SAN MARCOS LAKE & THE SAN MARCOS CREEK



VICINITY MAP

NOT TO SCALE

THOMAS GUIDE, 2008 EDITION
PAGE 1108, GRID 6-E



CVS PHARMACY
BMP SITE MAP PLANS

REGISTERED PROFESSIONAL ENGINEER
ROBERT D. DENTINO
No. 45629
Exp.12-31-10
CIVIL
STATE OF CALIFORNIA

SCALE: 1"=30'

0 30 60 90 120

PLOT DATE: Jul 13, 2009 - 10:54am

9.1.1.2 Proposed design of Sand Filter

The sand filter proposed in this project is located on one side of the parking lot. The street section has a 1% min slope from the high side to the lower side. Instead of a curb & gutter on the lower side, this project will implement a sand filter. This filter is design to be over the minimum requirements for water quality.

TABLE OF REQUIRED MINIMUM CONFIGURATIONS OF THE SAND FILTERS AND WHAT THE PROJECT IS PROVIDING

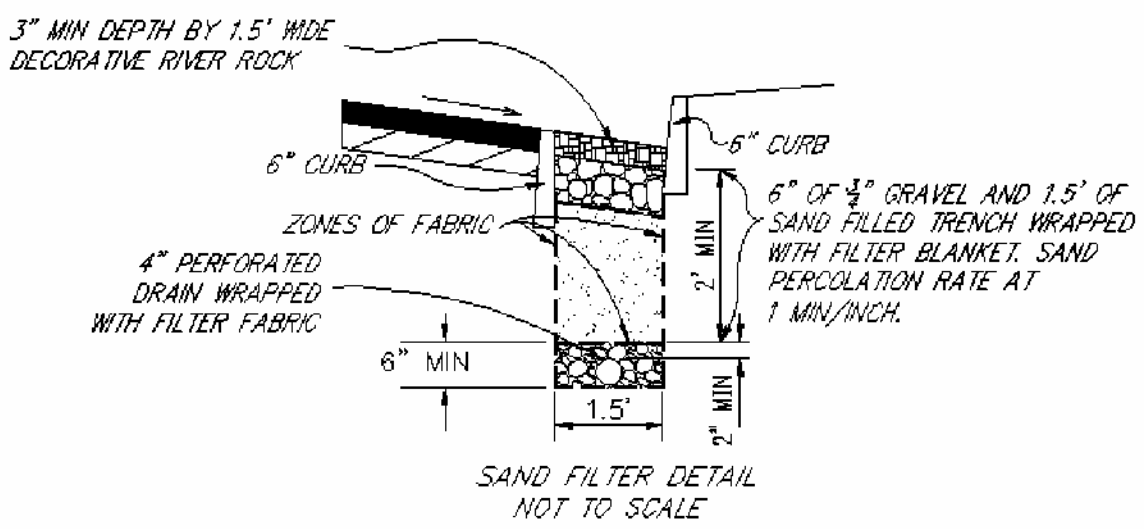
Nodes	Volume Required (cubic ft)	Min Bottom Area (sq. ft)	Min Length of 1.5 ft Wide Filter (ft)	Length Provided (ft)	Remarks
7 to 20	4,326.770	432.677	288.45	689.00	Exceeds min req.
15 to 17	699.170	69.917	46.61	54.00	Exceeds min req.
4 to 25	1,275.240	127.524	85.02	86.00	Exceeds min req.

9.1.2 Calculation of 85th percentile discharge rates

Use P=0.81 inch the precipitation 85th percentile storm event, and $I=7.44P\ Tc^{-0.645}$. The discharge rates that enter to each BMP are:

Tc(mins)	**C**	**I** (in/hr)	**A** (acre)	**Q** (cfs)	**Flow direction**
6.74	0.79	1.7602	0.453	0.630	Node 4 to 25
8.07	0.79	1.5672	0.608	0.753	Node 7 to 9
7.12	0.79	1.6991	0.591	0.793	Node 11 to 13
4.99	0.79	2.1369	0.257	0.434	Node 14 to 22
5.11	0.79	2.1044	0.301	0.500	Node 15 to17

Note: Please refer to BMP site plan for flow direction nodes



MWS Linear | *Sizing Options*



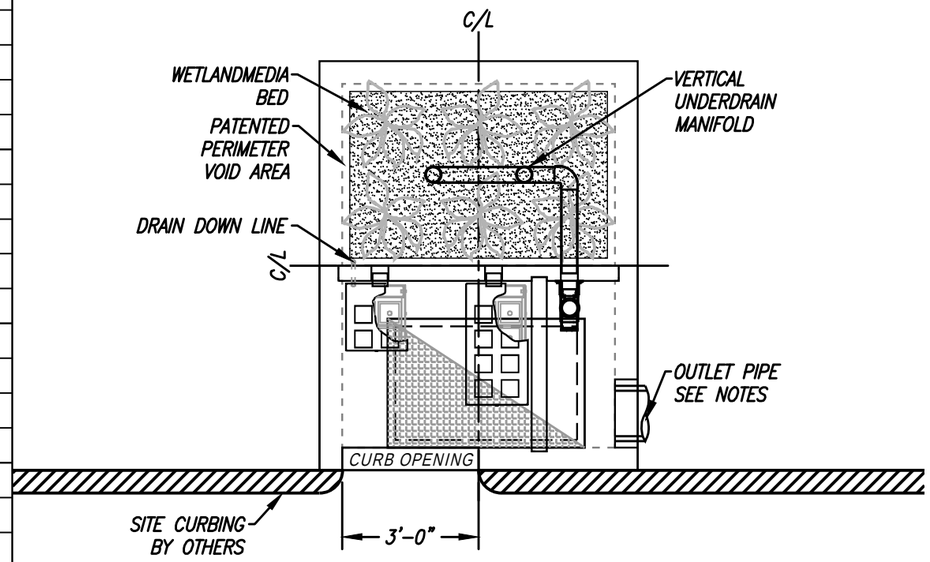
Flow Based Sizing

The MWS Linear can be used in stand alone applications to meet treatment flow requirements. Since the MWS Linear is the only biofiltration system that can accept inflow pipes several feet below the surface it can be used not only in decentralized design applications but also as a large central end-of-the-line application for maximum feasibility.

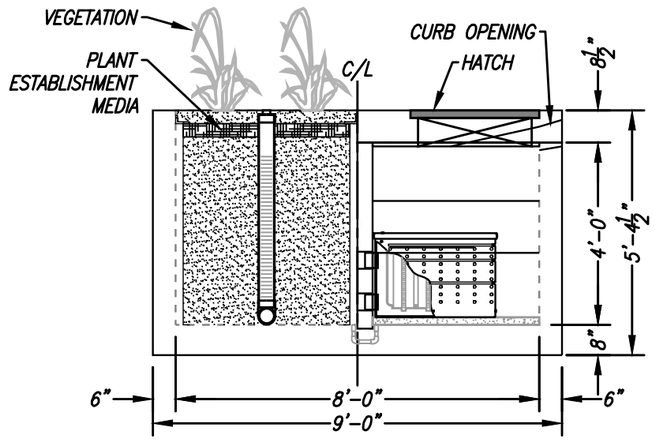
Model #	Dimensions	WetlandMEDIA Surface Area	Treatment Flow Rate (cfs)
MWS-L-4-4	4′ x 4′	23 sq. ft.	0.052
MWS-L-4-6	4′ x 6′	32 sq. ft.	0.073
MWS-L-4-8	4′ x 8′	50 sq. ft.	0.115
MWS-L-4-13	4′ x 13′	63 sq. ft.	0.144
MWS-L-4-15	4′ x 15′	76 sq. ft.	0.175
MWS-L-4-17	4′ x 17′	90 sq. ft.	0.206
MWS-L-4-19	4′ x 19′	103 sq. ft.	0.237
MWS-L-4-21	4′ x 21′	117 sq. ft.	0.268
MWS-L-6-8	7′ x 9′	64 sq. ft.	0.147
MWS-L-8-8	8′ x 8′	100 sq. ft.	0.230
MWS-L-8-12	8′ x 12′	151 sq. ft.	0.346
MWS-L-8-16	8′ x 16′	201 sq. ft.	0.462
MWS-L-8-20	9′ x 21′	252 sq. ft.	0.577
MWS-L-8-24	9′ x 25′	302 sq. ft.	0.693

Required flow to be treated =
0.107 +0.015= 0.122 cfs

SITE SPECIFIC DATA			
PROJECT NUMBER		14942	
PROJECT NAME		GRAN VISTA	
PROJECT LOCATION		SAN MARCOS, CA	
STRUCTURE ID		BF-3-3	
TREATMENT REQUIRED			
VOLUME BASED (CF)		FLOW BASED (CFS)	
N/A		0.12	
TREATMENT HGL AVAILABLE (FT)			N/K
PEAK BYPASS REQUIRED (CFS) – IF APPLICABLE			3.03
PIPE DATA	I.E.	MATERIAL	DIAMETER
INLET PIPE 1	N/A	N/A	N/A
INLET PIPE 2	N/A	N/A	N/A
OUTLET PIPE	567.71	PVC	12"
	PRETREATMENT	BIOFILTRATION	DISCHARGE
RIM ELEVATION	572.50	572.50	572.50
SURFACE LOAD	PEDESTRIAN	N/A	PEDESTRIAN
FRAME & COVER	30" X 48"	OPEN PLANTER	N/A
WETLANDMEDIA VOLUME (CY)			3.68
ORIFICE SIZE (DIA. INCHES)			ø1.64"
NOTES: PRELIMINARY NOT FOR CONSTRUCTION.			



PLAN VIEW



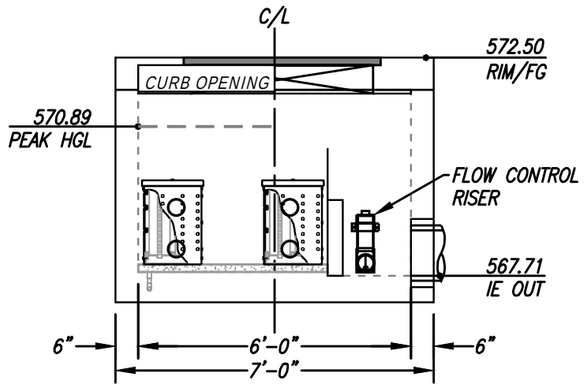
LEFT END VIEW

INSTALLATION NOTES

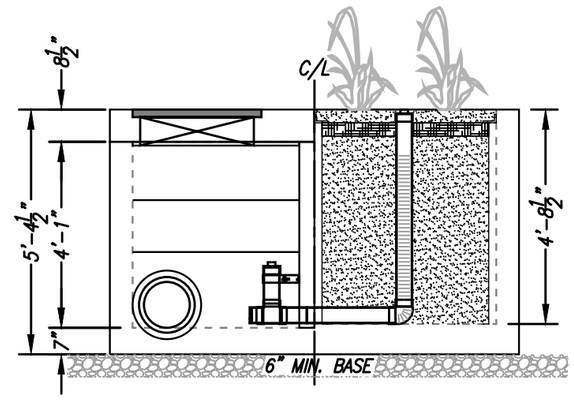
1. CONTRACTOR TO PROVIDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS REQUIRED TO OFFLOAD AND INSTALL THE SYSTEM AND APPURTENANCES IN ACCORDANCE WITH THIS DRAWING AND THE MANUFACTURERS' SPECIFICATIONS, UNLESS OTHERWISE STATED IN MANUFACTURER'S CONTRACT.
2. UNIT MUST BE INSTALLED ON LEVEL BASE. MANUFACTURER RECOMMENDS A MINIMUM 6" LEVEL ROCK BASE UNLESS SPECIFIED BY THE PROJECT ENGINEER. CONTRACTOR IS RESPONSIBLE FOR VERIFYING PROJECT ENGINEER'S RECOMMENDED BASE SPECIFICATIONS.
4. CONTRACTOR TO SUPPLY AND INSTALL ALL EXTERNAL CONNECTING PIPES. ALL PIPES MUST BE FLUSH WITH INSIDE SURFACE OF CONCRETE (PIPES CANNOT INTRUDE BEYOND FLUSH). INVERT OF OUTFLOW PIPE MUST BE FLUSH WITH DISCHARGE CHAMBER FLOOR. ALL PIPES SHALL BE SEALED WATERTIGHT PER MANUFACTURER'S STANDARD CONNECTION DETAIL.
5. CONTRACTOR RESPONSIBLE FOR INSTALLATION OF ALL PIPES, RISERS, MANHOLES, AND HATCHES. CONTRACTOR TO USE GROUT AND/OR BRICKS TO MATCH COVERS WITH FINISHED SURFACE UNLESS SPECIFIED OTHERWISE.
6. VEGETATION SUPPLIED AND INSTALLED BY OTHERS. ALL UNITS WITH VEGETATION MUST HAVE DRIP OR SPRAY IRRIGATION SUPPLIED AND INSTALLED BY OTHERS.
7. CONTRACTOR RESPONSIBLE FOR CONTACTING BIO CLEAN FOR ACTIVATION OF UNIT. MANUFACTURER'S WARRANTY IS VOID WITHOUT PROPER ACTIVATION BY A BIO CLEAN REPRESENTATIVE.

GENERAL NOTES

1. MANUFACTURER TO PROVIDE ALL MATERIALS UNLESS OTHERWISE NOTED.
2. ALL DIMENSIONS, ELEVATIONS, SPECIFICATIONS AND CAPACITIES ARE SUBJECT TO CHANGE. FOR PROJECT SPECIFIC DRAWINGS DETAILING EXACT DIMENSIONS, WEIGHTS AND ACCESSORIES PLEASE CONTACT BIO CLEAN.



ELEVATION VIEW



RIGHT END VIEW

INTERNAL BYPASS DISCLOSURE:

THE DESIGN AND CAPACITY OF THE PEAK CONVEYANCE METHOD TO BE REVIEWED AND APPROVED BY THE ENGINEER OF RECORD. HGL(S) AT PEAK FLOW SHALL BE ASSESSED TO ENSURE NO UPSTREAM FLOODING. PEAK HGL AND BYPASS CAPACITY SHOWN ON DRAWING ARE USED FOR GUIDANCE ONLY.

TREATMENT FLOW (CFS)	0.12
OPERATING HEAD (FT)	2.8
PRETREATMENT LOADING RATE (GPM/SF)	1.4
WETLAND MEDIA LOADING RATE (GPM/SF)	1.0

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Bio Clean
A Forterra Company

MWS-L-6-8-4'-8"-C
STORMWATER BIOFILTRATION SYSTEM
STANDARD DETAIL

4/28/22MBILLINGS

DMA4
FLOW BASED BMP SIZING CALCULATION

DMA4: Flow Based BMP Design Flows (BF-3-4)		Worksheet B.6-1		
1	DCV	DCV	199	cubic-feet
2	DCV Retained (Treewell Reduction)	DCV Retained	0	cubic-feet
3	DCV Biofiltered	DCV Biofiltered	0.00	cubic-feet
4	DCV requiring flow-thru (Line 1 - Line 2 - 0.67*Line 3)	DCV flow-thru	199	cubic-feet
5	Adjustment Factor (Line 4 / Line1)	AF=	1.00	unitless
6	Design rainfall intensity	i=	0.20	in/hr
7	Area tributary to BMP(s)	A=	0.11	acres
8	Area-weighted runoff factor (estimate using Appendix B.2)	C=	0.69	unitless
9	Calculate Flow Rate = AF x (C x i x A)x1.5*	Q=	0.024	cfs

1) Adjustment factor shall be estimated considering only retention and biofiltration BMPs located upstream of flow-thru BMPs. That is, if the flow-thru BMP is upstream of the project's retention and biofiltration BMPs then the flow-thru BMP shall be sized using an adjustment factor of 1.

2) Volume based (e.g., dry extended detention basin) flow-thru treatment control BMPs shall be sized to the volume in Line 4 and dlow based)e.g., vegetated swales) shall be sized to flow rate in Line 9. Sand filter and media filter can be designed by either volume in :ie 4 or flow rate in Line 9

3) Propietary BMPs, if used, shall provide certified treatment capacity equal to or greater than the

4) Flow-thru treatment control BMPs shall be sized to filter or treat the maximum flow rate of runoff produced from a rainfaill intensity of 0.2 inch of rainfall per hour or each hour of every storm event

*1.5 Times Flow Rate Safety Factor

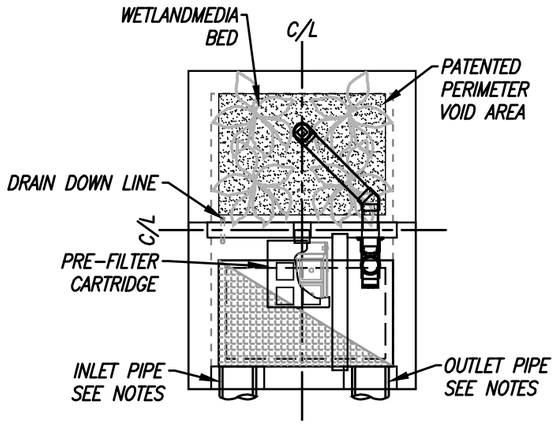
SITE SPECIFIC DATA			
PROJECT NUMBER		14942	
PROJECT NAME		GRAN VISTA	
PROJECT LOCATION		SAN MARCOS, CA	
STRUCTURE ID		BF-3-4	
TREATMENT REQUIRED			
VOLUME BASED (CF)		FLOW BASED (CFS)	
N/A		0.026	
TREATMENT HGL AVAILABLE (FT)			N/K
PEAK BYPASS REQUIRED (CFS) - IF APPLICABLE			DVERT
PIPE DATA	I.E.	MATERIAL	DIAMETER
INLET PIPE 1	559.33	PVC	8"
INLET PIPE 2	N/A	N/A	N/A
OUTLET PIPE	558.00	PVC	8"
	PRETREATMENT	BIOFILTRATION	DISCHARGE
RIM ELEVATION	562.00	562.00	562.00
SURFACE LOAD	PEDESTRIAN	N/A	PEDESTRIAN
FRAME & COVER	24" X 42"	OPEN PLANTER	N/A
WETLANDMEDIA VOLUME (CY)			1.45
ORIFICE SIZE (DIA. INCHES)			ø0.94"
NOTES: PRELIMINARY NOT FOR CONSTRUCTION. DVERT LENGTH APPROXIMATELY 10'			

INSTALLATION NOTES

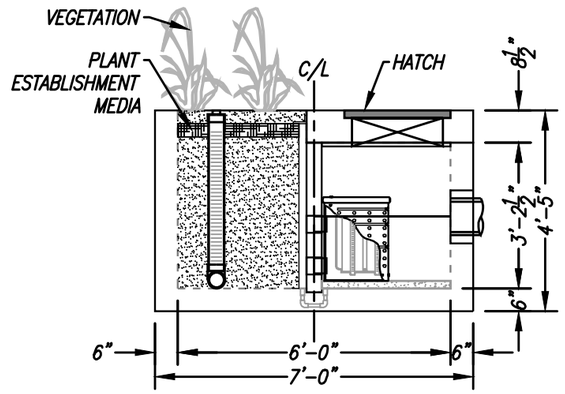
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5. CONTRACTOR RESPONSIBLE FOR INSTALLATION OF ALL PIPES, RISERS, MANHOLES, AND HATCHES. CONTRACTOR TO USE GROUT AND/OR BRICKS TO MATCH COVERS WITH FINISHED SURFACE UNLESS SPECIFIED OTHERWISE.
6. VEGETATION SUPPLIED AND INSTALLED BY OTHERS. ALL UNITS WITH VEGETATION MUST HAVE DRIP OR SPRAY IRRIGATION SUPPLIED AND INSTALLED BY OTHERS.
7. CONTRACTOR RESPONSIBLE FOR CONTACTING BIO CLEAN FOR ACTIVATION OF UNIT. MANUFACTURER'S WARRANTY IS VOID WITHOUT PROPER ACTIVATION BY A BIO CLEAN REPRESENTATIVE.

GENERAL NOTES

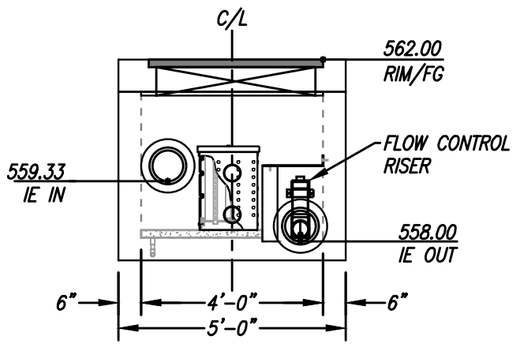
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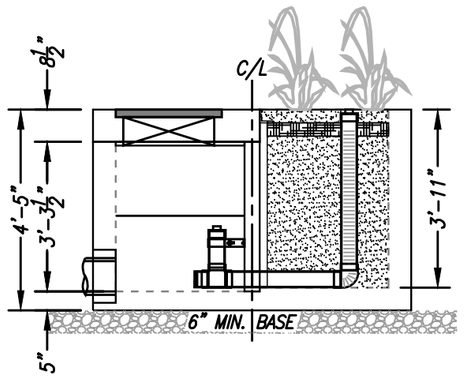
PLAN VIEW



LEFT END VIEW



ELEVATION VIEW



RIGHT END VIEW

TREATMENT FLOW (CFS)	0.026
OPERATING HEAD (FT)	1.2
PRETREATMENT LOADING RATE (GPM/SF)	0.9
WETLAND MEDIA LOADING RATE (GPM/SF)	1.0

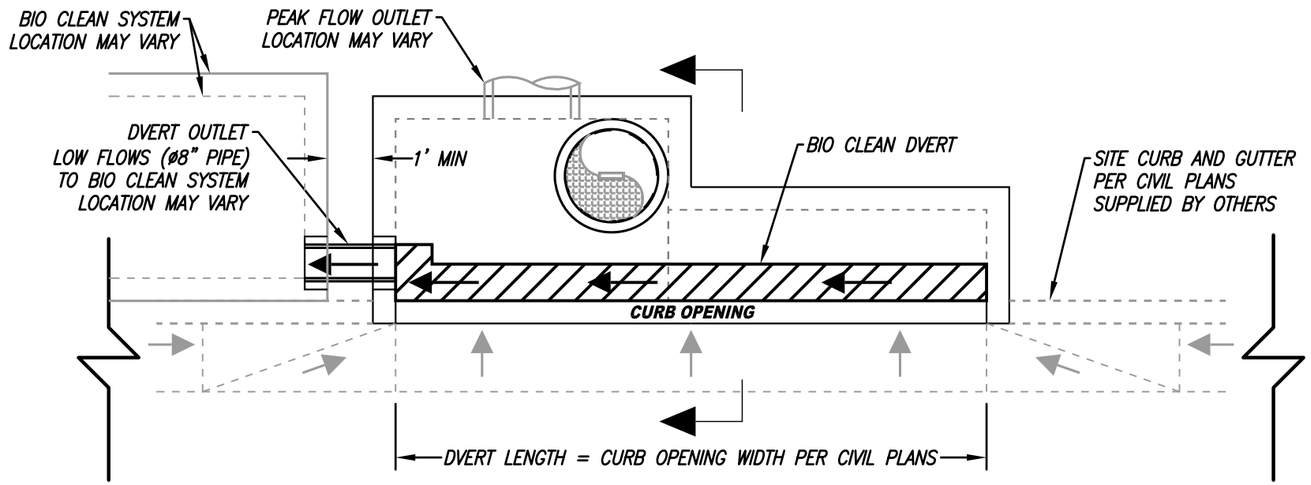
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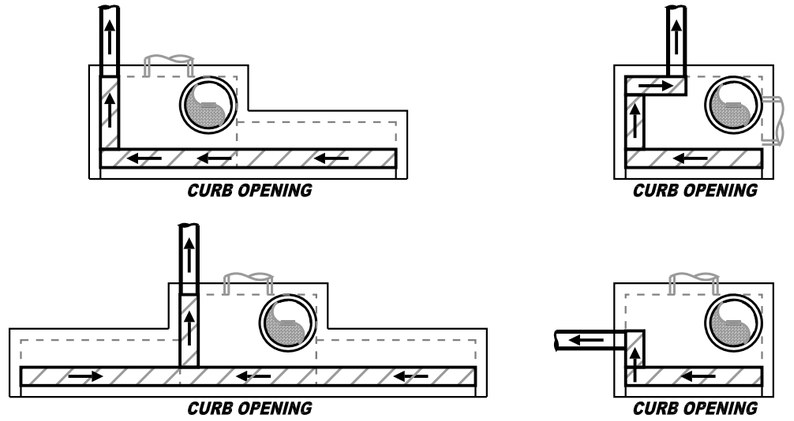
Bio Clean
A Forterra Company

MWS-L-4-6-3'-11"-V
STORMWATER BIOFILTRATION SYSTEM
STANDARD DETAIL

4/28/22MBILLINGS

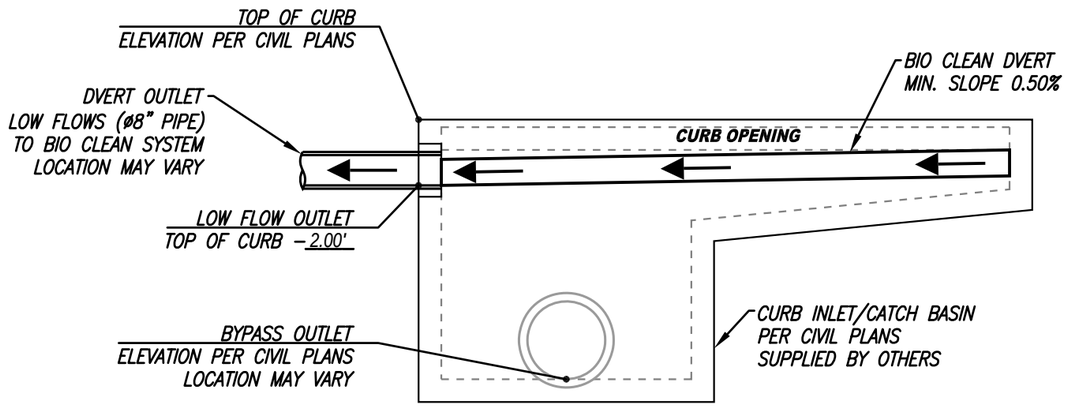


PLAN VIEW

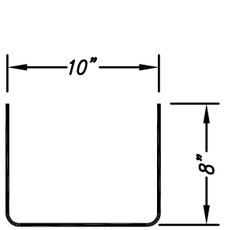


ALTERNATE CONFIGURATIONS

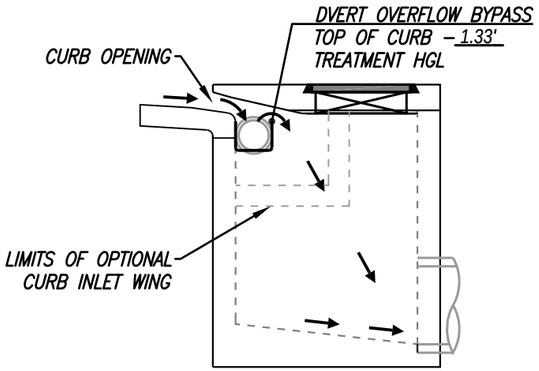
CONTACT BIO CLEAN FOR ADDITIONAL CUSTOM CONFIGURATIONS



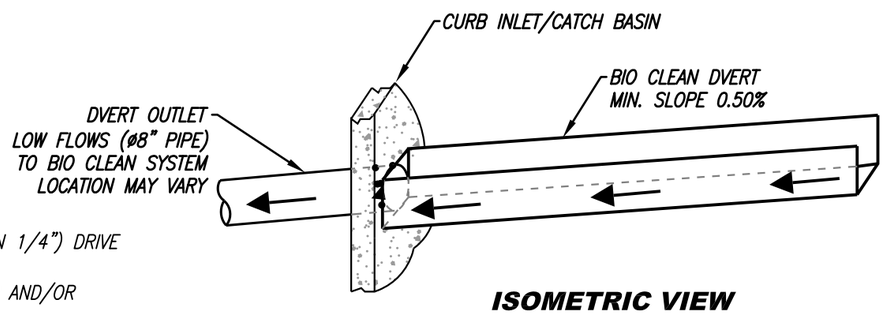
ELEVATION VIEW



DVERT END VIEW



SECTION VIEW



ISOMETRIC VIEW

INSTALLATION NOTES

1. DVERT TO BE CONNECTED TO CONCRETE BELOW CURB OPENING USING 316 STAINLESS STEEL (MIN 1/4") DRIVE PIN ANCHORS SPACED 12" ON CENTER AND 316 STAINLESS STEEL RIVETS (MIN 3/16").
2. ALL SEAMS BETWEEN DVERT AND CONCRETE SHALL BE FILLED WITH WATERTIGHT CONCRETE FILLER AND/OR SILICONE SEALANT.
3. CONTRACTOR TO SUPPLY AND INSTALL ALL EXTERNAL CONNECTING PIPES. ALL PIPES MUST BE FLUSH WITH INSIDE SURFACE OF CONCRETE. PIPES CANNOT INTRUDE BEYOND FLUSH. INVERT OF OUTFLOW PIPE MUST BE FLUSH WITH THE FLOWLINE OF THE DVERT. ALL PIPES SHALL BE SEALED WATERTIGHT PER MANUFACTURER'S STANDARD CONNECTION DETAIL.
4. CONTRACTOR RESPONSIBLE FOR CONTACTING BIO CLEAN FOR ACTIVATION OF MODULAR WETLANDS (MWS) UNIT. MANUFACTURER'S WARRANTY IS VOID WITHOUT PROPER ACTIVATION BY A BIO CLEAN REPRESENTATIVE.

MAXIMUM LOW FLOW DIVERSION (CFS)	0.74
LOW FLOW OUTLET PIPE SIZE (INCHES)	ø8"
STATIC HEAD (INCHES)	8"
SAFETY FACTOR	2

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Bio Clean
A Forterra Company

DVERT DVT-10-8
MODULAR TROUGH DIVERSION SYSTEM
STANDARD DETAIL

2/5/21SSERRICH

DMA 5
FLOW BASED BMP SIZING CALCULATION

DMA 5: Flow Based BMP Design Flows (BF-3-5)		Worksheet B.6-1		
1	DCV	DCV	837	cubic-feet
2	DCV Retained (Treewell Reduction)	DCV Retained	0	cubic-feet
3	DCV Biofiltered	DCV Biofiltered	0.00	cubic-feet
4	DCV requiring flow-thru (Line 1 - Line 2 - 0.67*Line 3)	DCV flow-thru	837	cubic-feet
5	Adjustment Factor (Line 4 / Line1)	AF=	1.00	unitless
6	Design rainfall intensity	i=	0.20	in/hr
7	Area tributary to BMP(s)	A=	0.44	acres
8	Area-weighted runoff factor (estimate using Appendix B.2)	C=	0.74	unitless
9	Calculate Flow Rate = AF x (C x i x A)x1.5*	Q=	0.099	cfs

1) Adjustment factor shall be estimated considering only retention and biofiltration BMPs located upstream of flow-thru BMPs. That is, if the flow-thru BMP is upstream of the project's retention and biofiltration BMPs then the flow-thru BMP shall be sized using an adjustment factor of 1.

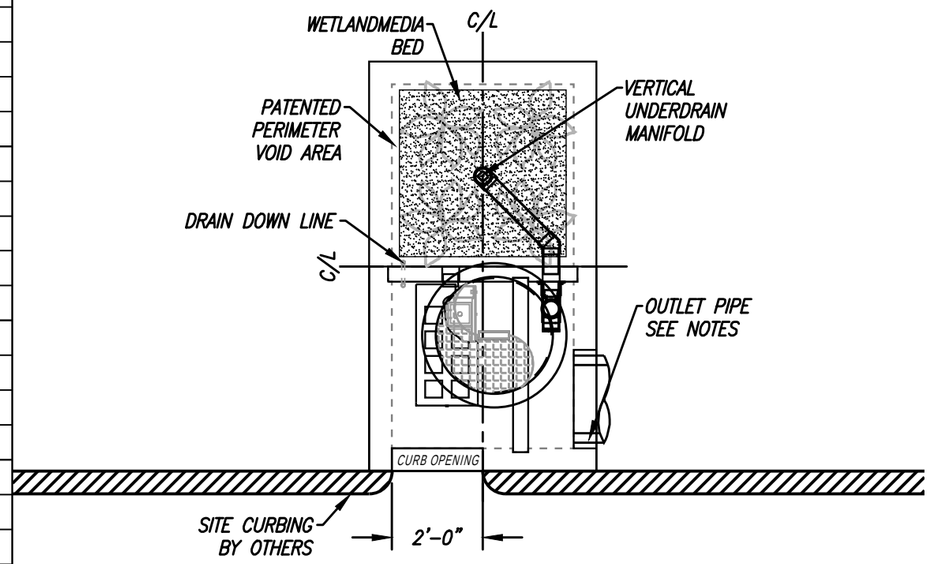
2) Volume based (e.g., dry extended detention basin) flow-thru treatment control BMPs shall be sized to the volume in Line 4 and dlow based)e.g., vegetated swales) shall be sized to flow rate in Line 9. Sand filter and media filter can be designed by either volume in :ie 4 or flow rate in Line 9

3) Propietary BMPs, if used, shall provide certified treatment capacity equal to or greater than the

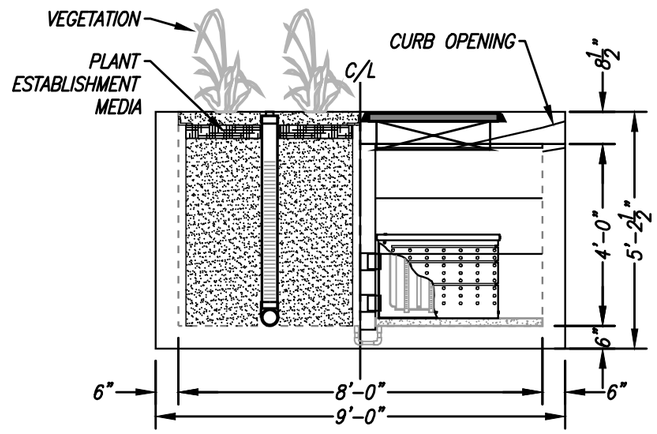
4) Flow-thru treatment control BMPs shall be sized to filter or treat the maximum flow rate of runoff produced from a rainfaill intensity of 0.2 inch of rainfall per hour or each hour of every storm event

*1.5 Times Flow Rate Safety Factor

SITE SPECIFIC DATA			
PROJECT NUMBER		14942	
PROJECT NAME		GRAN VISTA	
PROJECT LOCATION		SAN MARCOS, CA	
STRUCTURE ID		BF-3-5	
TREATMENT REQUIRED			
VOLUME BASED (CF)		FLOW BASED (CFS)	
N/A		0.10	
TREATMENT HGL AVAILABLE (FT)			N/K
PEAK BYPASS REQUIRED (CFS) - IF APPLICABLE			2.11
PIPE DATA	I.E.	MATERIAL	DIAMETER
INLET PIPE 1	N/A	N/A	N/A
INLET PIPE 2	N/A	N/A	N/A
OUTLET PIPE	567.91	RCP	18"
	PRETREATMENT	BIOFILTRATION	DISCHARGE
RIM ELEVATION	572.70	572.70	572.70
SURFACE LOAD	PEDESTRIAN	N/A	PEDESTRIAN
FRAME & COVER	36" X 36"	OPEN PLANTER	N/A
WETLANDMEDIA VOLUME (CY)			2.39
ORIFICE SIZE (DIA. INCHES)			ø1.48"
NOTES: PRELIMINARY NOT FOR CONSTRUCTION.			



PLAN VIEW



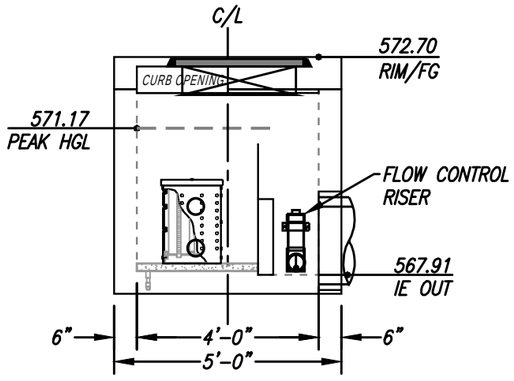
LEFT END VIEW

INSTALLATION NOTES

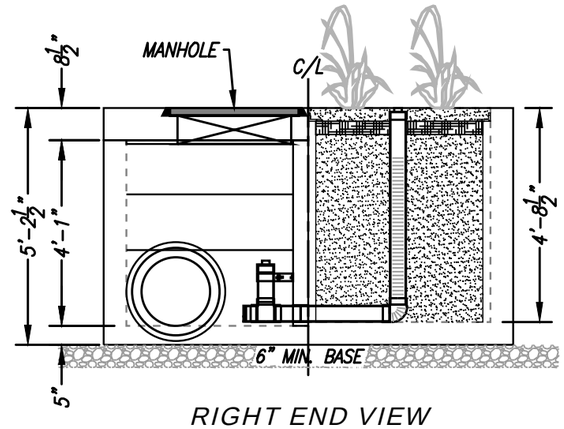
1. CONTRACTOR TO PROVIDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS REQUIRED TO OFFLOAD AND INSTALL THE SYSTEM AND APPURTENANCES IN ACCORDANCE WITH THIS DRAWING AND THE MANUFACTURERS' SPECIFICATIONS, UNLESS OTHERWISE STATED IN MANUFACTURER'S CONTRACT.
2. UNIT MUST BE INSTALLED ON LEVEL BASE. MANUFACTURER RECOMMENDS A MINIMUM 6" LEVEL ROCK BASE UNLESS SPECIFIED BY THE PROJECT ENGINEER. CONTRACTOR IS RESPONSIBLE FOR VERIFYING PROJECT ENGINEER'S RECOMMENDED BASE SPECIFICATIONS.
4. CONTRACTOR TO SUPPLY AND INSTALL ALL EXTERNAL CONNECTING PIPES. ALL PIPES MUST BE FLUSH WITH INSIDE SURFACE OF CONCRETE (PIPES CANNOT INTRUDE BEYOND FLUSH). INVERT OF OUTFLOW PIPE MUST BE FLUSH WITH DISCHARGE CHAMBER FLOOR. ALL PIPES SHALL BE SEALED WATERTIGHT PER MANUFACTURER'S STANDARD CONNECTION DETAIL.
5. CONTRACTOR RESPONSIBLE FOR INSTALLATION OF ALL PIPES, RISERS, MANHOLES, AND HATCHES. CONTRACTOR TO USE GROUT AND/OR BRICKS TO MATCH COVERS WITH FINISHED SURFACE UNLESS SPECIFIED OTHERWISE.
6. VEGETATION SUPPLIED AND INSTALLED BY OTHERS. ALL UNITS WITH VEGETATION MUST HAVE DRIP OR SPRAY IRRIGATION SUPPLIED AND INSTALLED BY OTHERS.
7. CONTRACTOR RESPONSIBLE FOR CONTACTING BIO CLEAN FOR ACTIVATION OF UNIT. MANUFACTURER'S WARRANTY IS VOID WITHOUT PROPER ACTIVATION BY A BIO CLEAN REPRESENTATIVE.

GENERAL NOTES

1. MANUFACTURER TO PROVIDE ALL MATERIALS UNLESS OTHERWISE NOTED.
2. ALL DIMENSIONS, ELEVATIONS, SPECIFICATIONS AND CAPACITIES ARE SUBJECT TO CHANGE. FOR PROJECT SPECIFIC DRAWINGS DETAILING EXACT DIMENSIONS, WEIGHTS AND ACCESSORIES PLEASE CONTACT BIO CLEAN.



ELEVATION VIEW



RIGHT END VIEW

INTERNAL BYPASS DISCLOSURE:

THE DESIGN AND CAPACITY OF THE PEAK CONVEYANCE METHOD TO BE REVIEWED AND APPROVED BY THE ENGINEER OF RECORD. HGL(S) AT PEAK FLOW SHALL BE ASSESSED TO ENSURE NO UPSTREAM FLOODING. PEAK HGL AND BYPASS CAPACITY SHOWN ON DRAWING ARE USED FOR GUIDANCE ONLY.

TREATMENT FLOW (CFS)	0.10
OPERATING HEAD (FT)	2.9
PRETREATMENT LOADING RATE (GPM/SF)	1.8
WETLAND MEDIA LOADING RATE (GPM/SF)	1.0

MODULAR WETLANDS
THIS PRODUCT MAY BE PROTECTED BY ONE OR MORE OF THE FOLLOWING US PATENTS: 7,425,262; 7,470,362; 7,674,378; 8,303,816; RELATED FOREIGN PATENTS OR OTHER PATENTS PENDING

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A Forterra Company

MWS-L-4-8-4'-8"-C
STORMWATER BIOFILTRATION SYSTEM
STANDARD DETAIL

4/28/22MBILLINGS

ATTACHMENT 2
BACKUP FOR PDP HYDROMODIFICATION CONTROL MEASURES

This is the cover sheet for Attachment 2.

☒ Mark this box if this attachment is empty because the project is exempt from PDP hydromodification management requirements.

Indicate which Items are Included behind this cover sheet:

Attachment Sequence	Contents	Checklist
Attachment 2a	Hydromodification Management Exhibit (Required)	☒ Included See Hydromodification Management Exhibit Checklist on the back of this Attachment cover sheet.
Attachment 2b	Management of Critical Coarse Sediment Yield Areas (WMAA Exhibit is required, additional analyses are optional) See Section 6.2 of the BMP Design Manual.	☒ Exhibit showing project drainage boundaries marked on WMAA Critical Coarse Sediment Yield Area Map (Required) Optional analyses for Critical Coarse Sediment Yield Area Determination ☐ 6.2.1 Verification of Geomorphic Landscape Units Onsite ☐ 6.2.2 Downstream Systems Sensitivity to Coarse Sediment ☐ 6.2.3 Optional Additional Analysis of Potential Critical Coarse Sediment Yield Areas Onsite
Attachment 2c	Geomorphic Assessment of Receiving Channels (Optional) See Section 6.3.4 of the BMP Design Manual.	☐ Not performed ☐ Included ☐ Submitted as separate stand-alone document
Attachment 2d	Flow Control Facility Design, including Structural BMP Drawdown Calculations and Overflow Design Summary (Required) See Chapter 6 and Appendix G of the BMP Design Manual	☒ Included ☐ Submitted as separate stand-alone document
Attachment 2e	Vector Control Plan (Required when structural BMPs will not drain in 96 hours)	☐ Included ☒ Not required because BMPs will drain in less than 96 hours

Use this checklist to ensure the required information has been included on the Hydromodification Management Exhibit:

The Hydromodification Management Exhibit must identify:

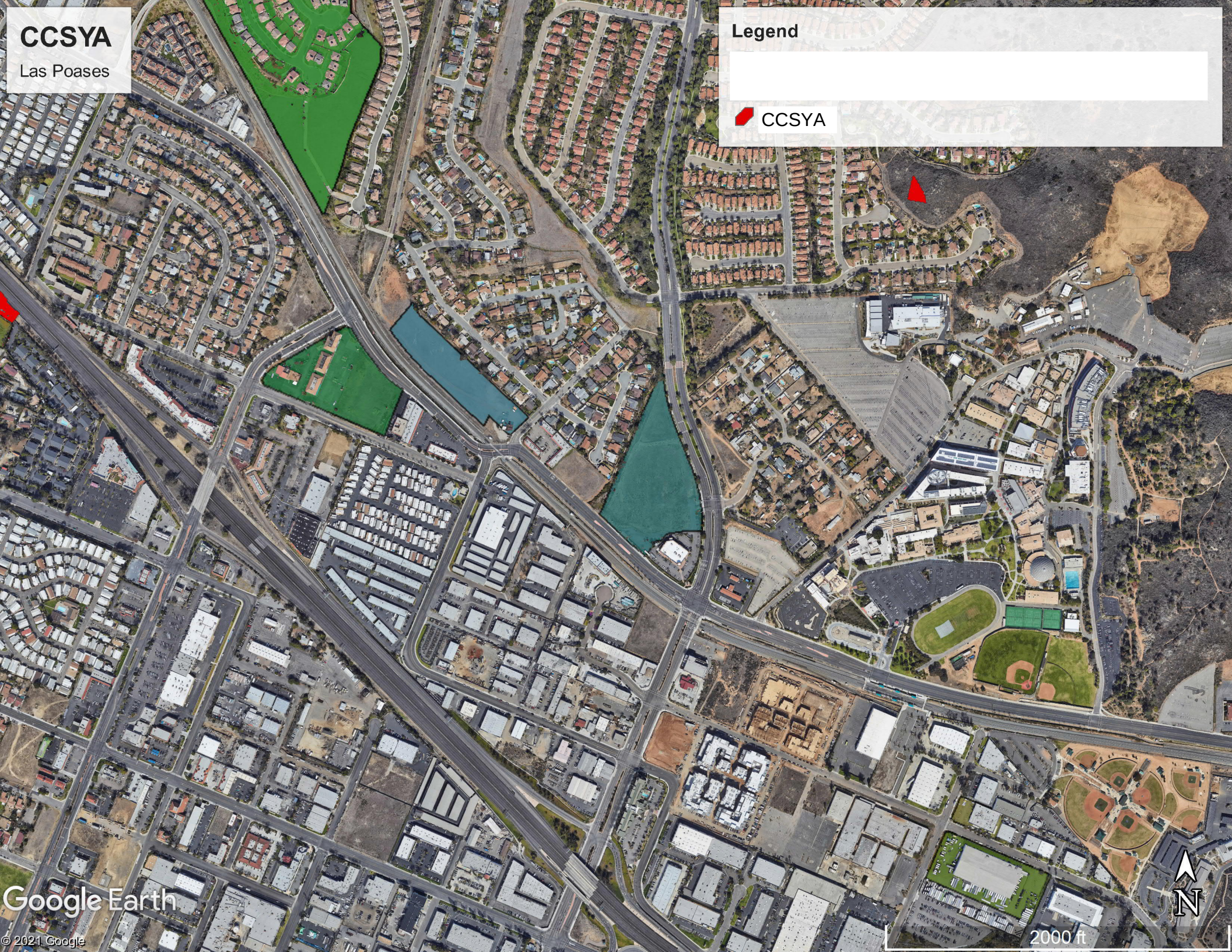
- ☐ Underlying hydrologic soil group
- ☐ Approximate depth to groundwater
- ☐ Existing natural hydrologic features (watercourses, seeps, springs, wetlands)
- ☐ Critical coarse sediment yield areas to be protected
- ☐ Existing topography
- ☐ Existing and proposed site drainage network and connections to drainage offsite
- ☐ Proposed grading
- ☐ Proposed impervious features
- ☐ Proposed design features and surface treatments used to minimize imperviousness
- ☐ Point(s) of Compliance (POC) for Hydromodification Management
- ☐ Existing and proposed drainage boundary and drainage area to each POC (when necessary, create separate exhibits for pre-development and post-project conditions)
- ☐ Structural BMPs for hydromodification management (identify location, type of BMP, and size/detail)

ATTACHMENT 2a

HYDROMODIFICATION MANAGEMENT EXHIBITS

ATTACHMENT 2b

MANAGEMENT OF CRITICAL COARSE SEDIMENT YIELD AREAS

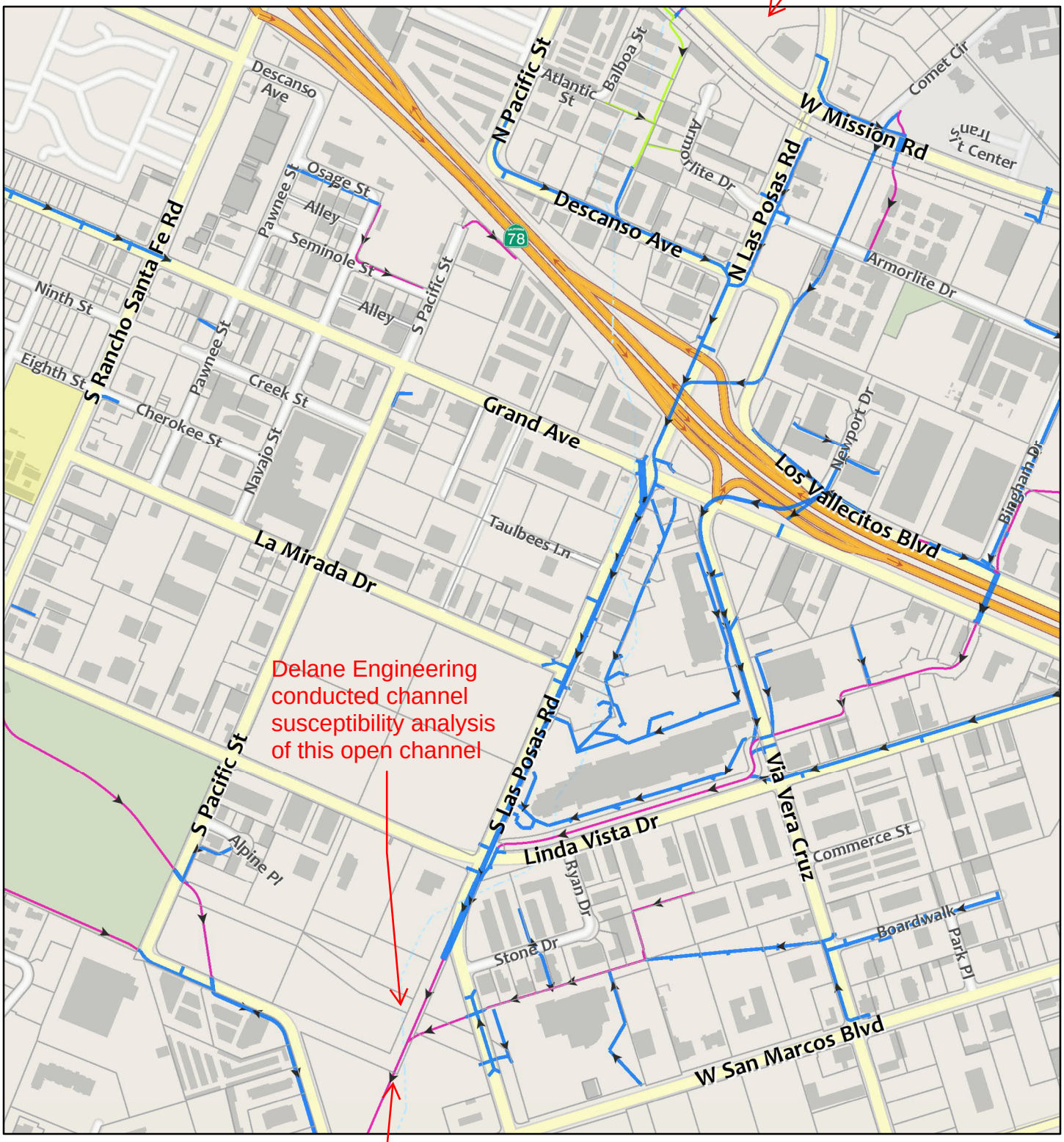

CCSYA
Las Poases
Legend
CCSYA
Google Earth
© 2021 Google
2000 ft
N

ATTACHMENT 2c

GEOMORPHIC ASSESSMENT OF RECEIVING CHANNELS

Prepared by Delane Engineering

City of San Marcos, CA



June 21, 2021

1:9,028

0 412.5 825 1,650 ft

0 125 250 500 m

City of San Marcos GIS

Disclaimer: Map and parcel data are believed to be accurate, but accuracy is not guaranteed. This is not a legal document and should not be substituted for a title search,appraisal, survey, or for zoning verification.

CHANNEL SCREENING ANALYSIS

KARL STRAUSS SAN MARCOS TASTING ROOM AND GARDEN

ARMORLITE DR.
SAN MARCOS, CA 92069

ASSESSOR'S PARCEL NUMBER(S):
219-163-60

ENGINEER OF WORK:



BRIAN P. WIESE, P.E., LICENSE # C80674
EXPIRATION DATE: 03/31/2021

PREPARED FOR:

Karl Strauss Brewing Co.
5965 Santa Fe Street, Suite E
San Diego, CA 92109

PREPARED BY:

Delane Engineering, Inc.
4909 Murphy Canyon Road, Suite 330
San Diego, CA 92123
619-535-0602

DATE:
November 18, 2019

DELANE ENGINEERING

TABLE OF CONTENTS:

1.0 Introduction

2.0 Office Assessment

3.0 Analysis Domain

4.0 Field Screening

- **Vertical Susceptibility**
- **Lateral Susceptibility**

5.0 Conclusion

ATTACHMENTS:

***ATTACHMENT A*: Vicinity Map**

***ATTACHMENT B*: Field Assessment Photographs**

***ATTACHMENT C*: Form 1: Initial Desktop Analysis**

***ATTACHMENT D*: Form 3: Vertical Susceptibility Field Sheet**

***ATTACHMENT E*: Form 4: Lateral Susceptibility Field Sheet**

***ATTACHMENT F*: Form 6: Probability of Mass Wasting Bank Failure**

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1.0 Introduction

A new brewery with tasting room, garden, food truck staging areas, and an associated parking lot is being proposed by Karl Strauss Brewing Company on a 1.51 acre site at Los Posas Road and Los Vallecitos Blvd in the City of San Marcos. Runoff from the site is discharged via lateral into an existing 72" pipe recently constructed as part of the adjacent Palomar Station development. The 72" pipe is part of the public storm drain system that flows in a generally southerly direction before discharging into a vegetated channel, referred to herein as Los Posas Creek. See **Attachment A** for vicinity map showing project site in relation to Los Posas Creek.

The project is subject to hydromodification requirements as described in Chapter 6 of the City of San Marcos BMP Design Manual, the purpose of which is to minimize the potential of storm water discharges from the MS4 from causing altered flow regimes and excessive downstream erosion in receiving waters. To meet this requirement the project must provide flow control for post-project runoff to meet the flow control performance standard. The flow control performance standard covers flow rates ranging from a lower flow threshold of 10 percent, 30 percent or 50 percent of the pre-development 2-year runoff event ($0.1Q_2$, $0.3Q_2$, or $0.5Q_2$) up to the pre-development 10-year runoff event (Q10). The determination of the low flow threshold depends on the erosion susceptibility of the receiving stream with $0.1Q_2$ for projects discharging to streams with high susceptibility to erosion (also the default when a channel susceptibility study has not been prepared), $0.3Q_2$ for projects discharging to streams with medium susceptibility to erosion, and $0.5Q_2$ for projects discharging to streams with low susceptibility to erosion

As described in section 6.3.4 of the San Marcos BMP Manual, the use of a higher low flow threshold of $0.3Q_2$ or $0.5Q_2$ must be supported by a channel screening report based on a tool developed by the Southern California Coastal Water Research Project (SCCWRP), documented in SCCWRP's Technical Report 606 (TR 606), dated March 2010, "Hydromodification Screening Tools: Field Manual for Assessing Channel Susceptibility." This study follows the methodology of the SCCWRP in order to determine the susceptibility of Los Posas Creek, the results of which can be used to establish the required flow control sizing for the project.

2.0 Office Assessment

Although the screening tool presented in TR 606 is predominantly designed for field-based assessment, it requires some preparatory office work to provide context and familiarity with the site prior to conducting the field evaluation. A satellite image is provided in **Attachment A** which shows features of the overall setting such as vegetation coverage, grade-control locations, human influences, and existing infrastructure.

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The office assessment also requires an initial desktop analysis, the results of which are provided on Form 1 in **Attachment C**. Inputs for the drainage area and mean annual precipitation where determined from StreamStats, a Web-based GIS application that provides users access to USGS Data (StreamStats report provided in **Attachment C**). The valley width and valley slope were determined from City of San Marcos bare earth elevation contour information (2-ft) from 2009.

3.0 Analysis Domain

As defined in the San Marcos BMP Manual, the receiving stream is the location where runoff from the project is discharged to natural or un-lined channels. This occurs at the outfall of Los Posas Creek from a triple box culvert on the west side of Los Posas Road, approximately 500ft south of the intersection of Linda Vista Drive. This is the upstream limit of analysis as it is where the open, unlined channel begins (*Photos 1, 2*).

Per criteria in TR 606, the downstream extent of analysis is determined to be the closest of the following:

- At least one reach downstream of the first grade-control point
- Tidal backwater/lentic waterbody
- Equal order tributary
- A 2-fold increase in drainage area

The nearest lentic waterbody is Lake San Marcos, approximately 5,000 ft downstream and an equal order tributary/2-fold increase in drainage area does not occur until the confluence with San Marcos Creek approximately 2,000 ft downstream. The first grade control point is approximately 400 ft downstream where a small channel discharges from the east and the main channel shows distinct changes, in particular to bank slope. Although analysis is only required for one reach downstream of this location, the downstream extent selected was the crossing beneath San Marcos Boulevard (*Photo 14*) as this is a logical divide which may offer grade control, cause discontinuities in the conveyance of water or sediment, etc.

Although the 1,200 ft analysis domain is longer than the 656 feet (200m) maximum reach length for assigning a susceptibility rating per TR 606, this section of Los Posas Creek is an engineered channel which aerial photos and field reconnaissance show to be relatively uniform. Dividing the analysis domain into additional subreaches will not produce significantly different results.

4.0 Field Screening

A field assessment of the analysis domain was done on November 8, 2019. Much of the study area contained dense vegetation (*Photos 2, 11*) which limited access to some areas of the channel. The areas of the channel that were accessible for assessment were typically moderately vegetated (*Photo 12*). Evaluating just these

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areas errs conservative as additional vegetation helps hold soil together and reduces flow velocity, further reducing susceptibility to erosion. Aerial photographs of the area dating back over 20 years show that vegetation coverage along the channel has increased with time.

The field screening tool uses a combination of relatively simple, but quantitative field indicators as input parameters to a set of decision trees. These decision trees, along with checklists, tables and calculations, follow a logical progression for assigning a susceptibility rating of Low, Medium, High, or Very High to the channel reach being assessed. susceptibility ratings are assigned independently to the vertical and lateral conditions, the more conservative of which is used to determine the erosion susceptibility of the channel. Vertical stability is a prerequisite for lateral stability because a stream that incises can increase bank heights to the point of collapse and channel widening. Accordingly, vertical susceptibility is assessed first because it affects the lateral rating in most instances.

Vertical Susceptibility

The decision tree and associated checklists and calculations for determining a vertical susceptibility rating (Form 3 from TR 606) are in **Attachment D**. The purpose of the vertical susceptibility decision tree is to assess the state of the channel bed with a particular focus on the risk of incision. There are three potential states of bed material based on broad classes of armoring potential, described in TR 606 as follows:

- *Labile Bed* – sand-dominated bed, little resistant substrate
- *Transitional/Intermediate Bed* – bed typically characterized by gravel/small cobble, intermediate level of resistance of the substrate and uncertain potential for armoring
- *Threshold Bed (Course/Armored Bed)* – armored with large cobbles or larger bed material or highly-resistant bed substrate

The decision tree includes a photographic supplement to help make the determination of bed material. Through field observation it was determined that the bed was not sand-dominated nor sufficiently armored. Although the channel is not consistently armored, some larger cobble was observed along the banks adjacent to the initial discharge location into the channel (*Photos 3, 4*). Concrete armoring of the bed was observed upstream of the culvert crossing beneath San Marcos Blvd, at the downstream end of the analysis domain (*Photos 13, 14*). For the majority of the analysis domain, a surface veneer and dense vegetation cause uncertainty in the potential for armoring. Penetration of the soil was difficult and the limited substrate bed material that was able to be observed contained gravel (*Photo 5*), both of which are consistent with a Transitional/Intermediate Bed.

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Intermediate beds require the following additional risk factors to be examined before a vertical rating can be assigned.

- *Armoring Potential* – The channel was determined to have intermediate armoring potential based on Form 3 Checklist 1. This is a result of the unknown condition of the substrate due to surface veneer and vegetation.

- *Grade Control* – The channel was determined to have intermediate grade control based on Form 3 Checklist 2. Man-made grade control is present at each end of the analysis domain in the form of culverts. Both appear in good condition with no apparent undermining, flanking, etc. The dense vegetation between functions as a continuous natural grade control and the flat valley slope determined as part of the desktop analysis mean that grade control will have an affect across a longer distance. The determination of intermediate instead of effective grade control was made to err conservative due to potential evidence of erosion observed on a few short stretches of bank along the channel (*Photo 6*)

- *Proximity to incision/braiding threshold* – The channel was determined to have a screening index score of B per Form 3 Table 1 as the surface veneer and vegetation result in hardpan/d_{50} that is indeterminate.

The results of the additional risk factors were translated to numeric values and used as inputs into a formula for coming up with an overall vertical rating as shown at the end of Form 3. The vertical rating was determined to be 6, which falls into the range of MEDIUM VERTICAL SUSCEPTIBILITY.

Lateral Susceptibility

The decision tree for determining a lateral susceptibility rating (Form 4 from TR 606) is in **Attachment E**. The purpose of the lateral decision tree is to assess the state of the channel banks with a particular focus on the risk of widening. Although the channel is straight and linear, it is laterally adjustable due to lack of armoring. However, the field assessment found no evidence of lateral adjustments occurring.

The banks were found to be moderately to highly consolidated based on the criteria in TR 606. They are hard when dry with little evidence of crumbling and bank material stratification is not prevalent or contributing to failure. Although there was no evidence of extensive mass wasting occurring along the channel, TR 606 methodology requires that the probability of mass wasting bank failure be analyzed to determine whether the risk of bank failure is less than or greater than 10%.

This risk threshold determination was made using the Probability Mass Wasting diagram in **Attachment F** (Form 6 Figure 1 from TR 606). The inputs for bank angle and height were determined based on measurements taken in the field (*Photos 7-10*). Assessment was done in several locations along the analysis

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domain with generally consistent results, with the more conservative of the measurements being used as inputs. Even erring conservation, it was determined that the probability of mass wasting bank failure is less than 10%.

The vertical rating is medium and the VWI (Valley Width Index) was calculated to be greater than 2 during the initial desktop analysis. As a result, the channel was determined to have MEDIUM LATERAL SUSCEPTIBILITY.

5.0 Conclusion

The methodology in the SCCWRP's Technical Report 606 was used to analyze the section of Los Posas Creek from the initial discharge into an unlined channel west of Los Posas Road to the culvert crossing beneath San Marcos Blvd. Results of the analysis indicate that the channel has medium vertical and lateral susceptibility. As such, the Karl Straus San Marcos project should design flow control facilities based on a maximum low flow threshold of 0.3Q2 which is indicative of a receiving channel with MEDIUM SUSCEPTIBILITY to erosion.

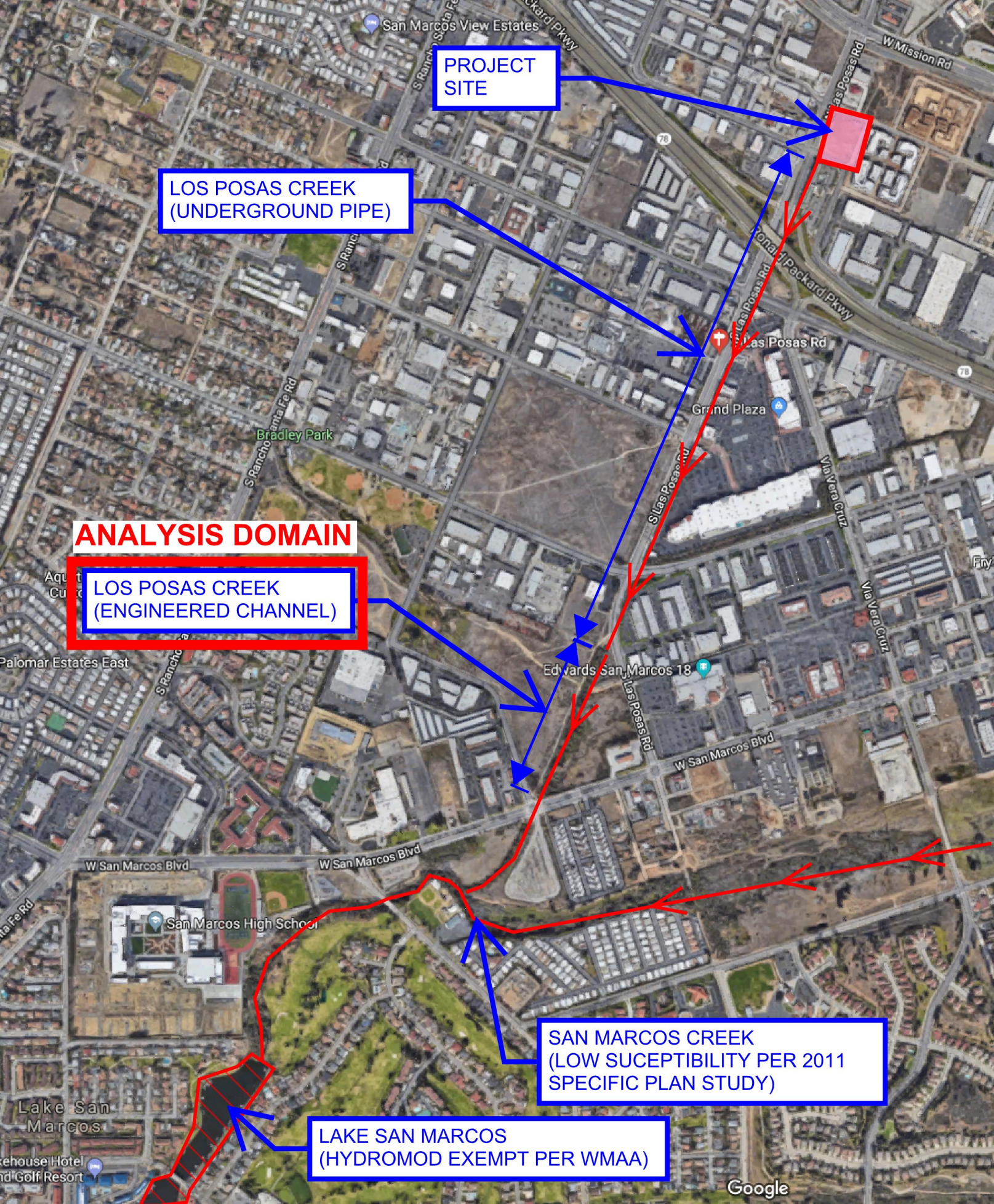
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ATTACHMENT A

VICINITY MAP

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PROJECT SITE
LOS POSAS CREEK (UNDERGROUND PIPE)
ANALYSIS DOMAIN
LOS POSAS CREEK (ENGINEERED CHANNEL)
SAN MARCOS CREEK (LOW SUCEPTIBILITY PER 2011 SPECIFIC PLAN STUDY)
LAKE SAN MARCOS (HYDROMOD EXEMPT PER WMAA)
San Marcos View Estates
W Mission Rd
Las Posas Rd
Ronald Reagan Packard Pkwy
Grand Plaza
Bradley Park
S Rancho Santa Fe Rd
Via Vera Cruz
Palomar Estates East
Edwards San Marcos 18
W San Marcos Blvd
San Marcos High School
Lake San Marcos
Google

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ATTACHMENT B
FIELD ASSESSMENT PHOTOGRAPHS

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Photo 1: Looking upstream at beginning of analysis domain



Photo 2: Looking downstream from beginning of analysis domain

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Photo 3: Evidence of bank armoring at beginning of analysis domain



Photo 4: Evidence of bank armoring at beginning of analysis domain

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Photo 5: Channel bed material



Photo 6: Evidence of possible erosion

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Photo 7: Typical left bank slope



Photo 8: Typical left bank height

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Photo 9: Typical right bank slope



Photo 10: Typical right bank height

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Photo 11: Typical heavily vegetated section of channel



Photo 12: Typical moderately vegetated section of channel

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Photo 13: Armoring at downstream end of domain of analysis



Photo 14: Armoring at downstream end of domain of analysis

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ATTACHMENT C

FORM 1: INITIAL DESKTOP ANALYSIS

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S.CA Hydromodification Screening Tool version 1.0

user: Brian Wiese, PE

stream: **Karl Strauss San Marcos discharge location at Los Posas Creek**

latitude (decimal degrees): **33.1360**

longitude (decimal degrees): **-117.1951**

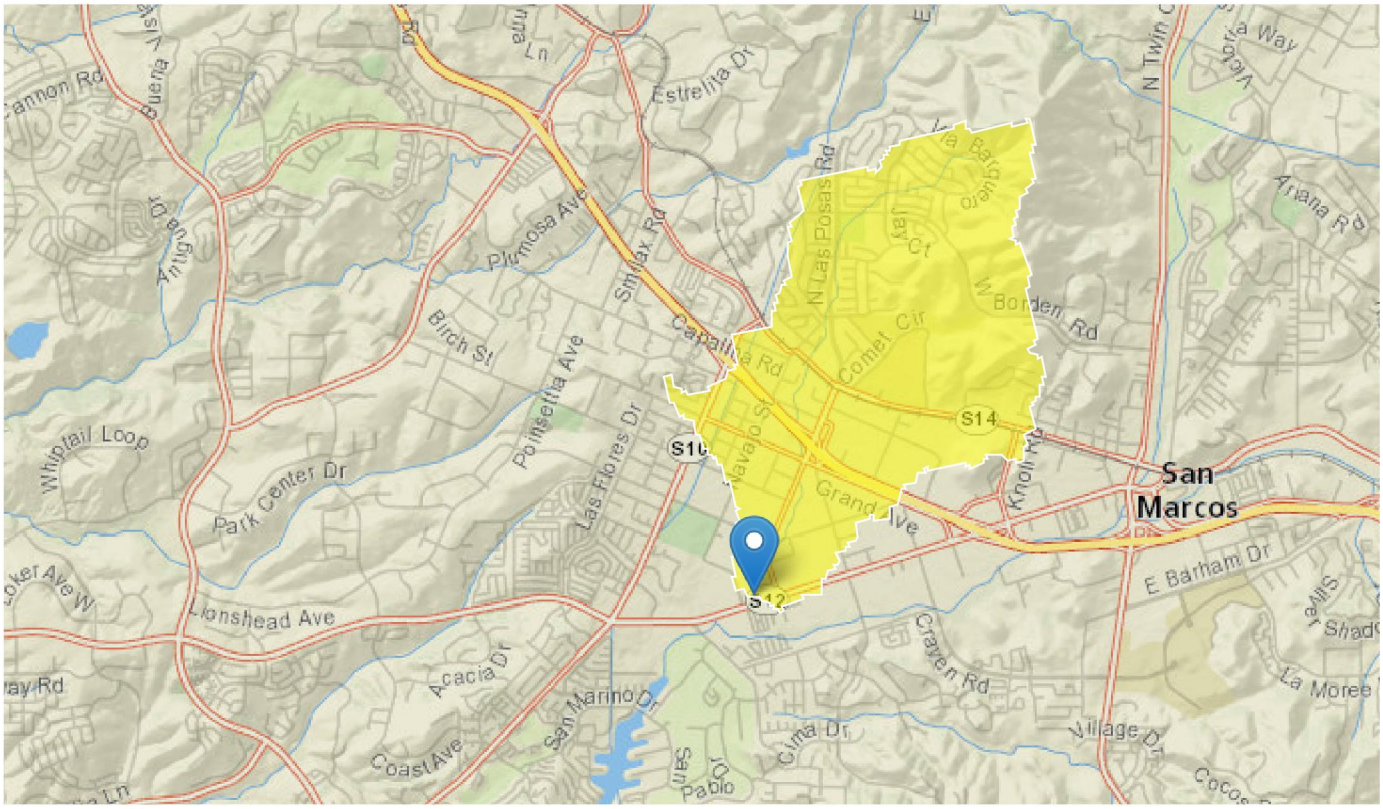
FORM 1: INITIAL DESKTOP ANALYSIS

GIS metrics and screening indices (for detailed instructions/examples see 'Field Screening Companion Document')

Symbol	Variable	units	Value	Description & Source
A	Drainage Area	mi^2	**2.6**	contributing drainage area to screening location via *published HUCs and/or 30-m (or better) National Elevation Data (NED), USGS seamless server*
P	Mean annual precipitation	inches	**15.8**	area-weighted annual precipitation via *USGS delineated polygons using records from 1900 to 1960 (which was more significant in hydrologic models than polygons delineated from shorter record lengths)*
S_v	Valley slope	m/m	**0.005**	valley slope at site *via NED, measured over a relatively homogeneous valley segment as indicated by slope, hillslope coupling/confinement, valley alignment, confluences, etc., over a distance of up to ~500 meters or 10% of the main-channel length (whatever is smaller)*
W_v	Valley width	meters	**127**	valley bottom width at site *between natural valley walls as dictated by clear breaks in hillslope on NED raster, irrespective of potential armoring from floodplain encroachement, levees, etc. (imprecise measurements have negligible effect on rating in wide valleys where VWI >>2, as defined in lateral decision tree)*
Q_{10cfs}	10-year peak flow, US units	ft^3/s	**350**	$Q_{10cfs} = 18.2 * A^{0.87} * P^{0.77}$ *(Hawley and Bledsoe, In review)*
Q_{10}	10-year peak flow	m^3/s	**9.90**	$Q_{10} = 0.0283 * Q_{10cfs}$
INDEX	10-year mobility index	$m^{1.5}/s^{0.5}$	**0.016**	$INDEX = S_v * Q_{10}^{0.5}$
W_{ref}	Reference width	meters	**19.08**	$W_{ref} = 6.99 * Q_{10}^{0.438}$
VWI	Valley width index	m/m	**6.65**	$VWI = W_v / W_{ref}$

039 Los Posas Creek StreamStats Report

Region ID: CA
Workspace ID: CA20191113182948989000
Clicked Point (Latitude, Longitude): 33.13324, -117.19614
Time: 2019-11-13 10:30:07 -0800



Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
BSLDEM30M	Mean basin slope computed from 30 m DEM	8.79	percent
DRNAREA	Area that drains to a point on a stream	2.6	square miles
PRECIP	Mean Annual Precipitation	15.8	inches

USGS Data Disclaimer: Unless otherwise stated, all data, metadata and related materials are considered to satisfy the quality standards relative to the purpose for which the data were collected. Although these data and associated metadata have been reviewed for accuracy and completeness and approved for release by the U.S. Geological Survey (USGS), no warranty expressed or implied is made regarding the display or utility of the data for other purposes, nor on all computer systems, nor shall the act of distribution constitute any such warranty.

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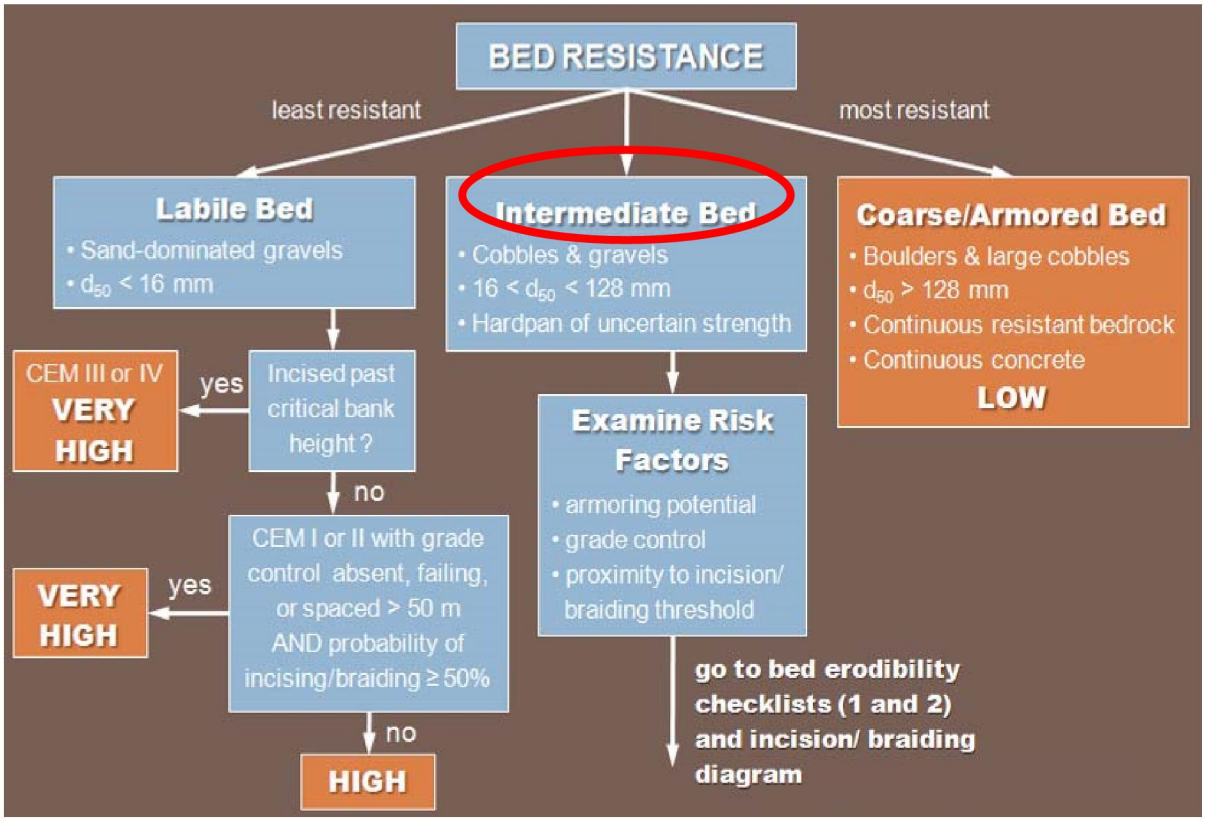
ATTACHMENT D

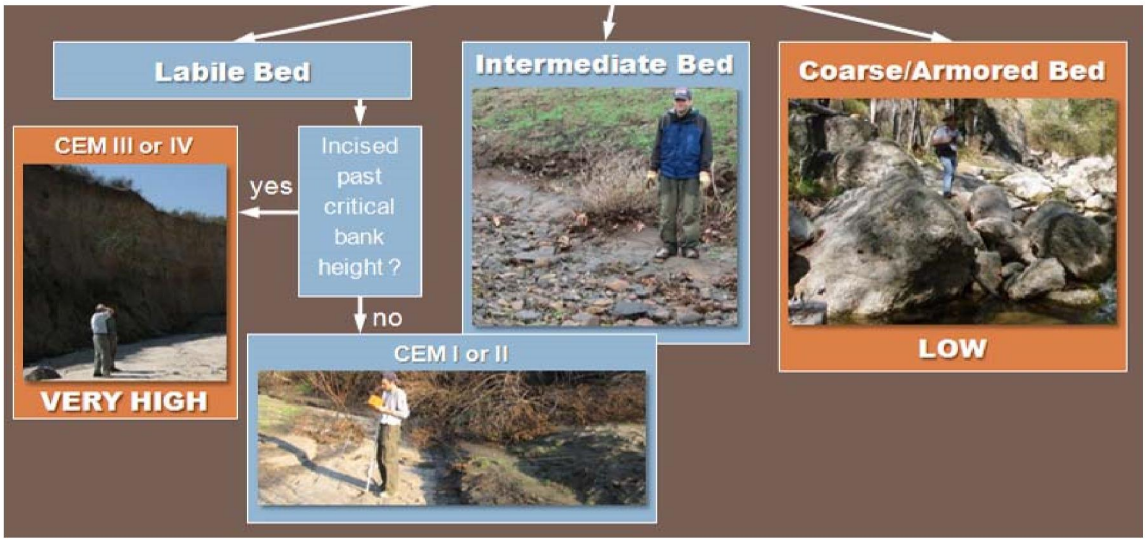
FORM 3: VERTICAL SUSCEPTIBILITY FIELD SHEET

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4909 Murphy Canyon Road, STE 330, San Diego, CA 92123 | P. 619.787.5566 | F. 866.579.6415

FORM 3: VERTICAL SUSCEPTIBILITY FIELD SHEET

Circle appropriate nodes/pathway for proposed site.





Form 3 Figure 1. Vertical Susceptibility photographic supplement to be used in conjunction with Form 3 Bed Resistance above.

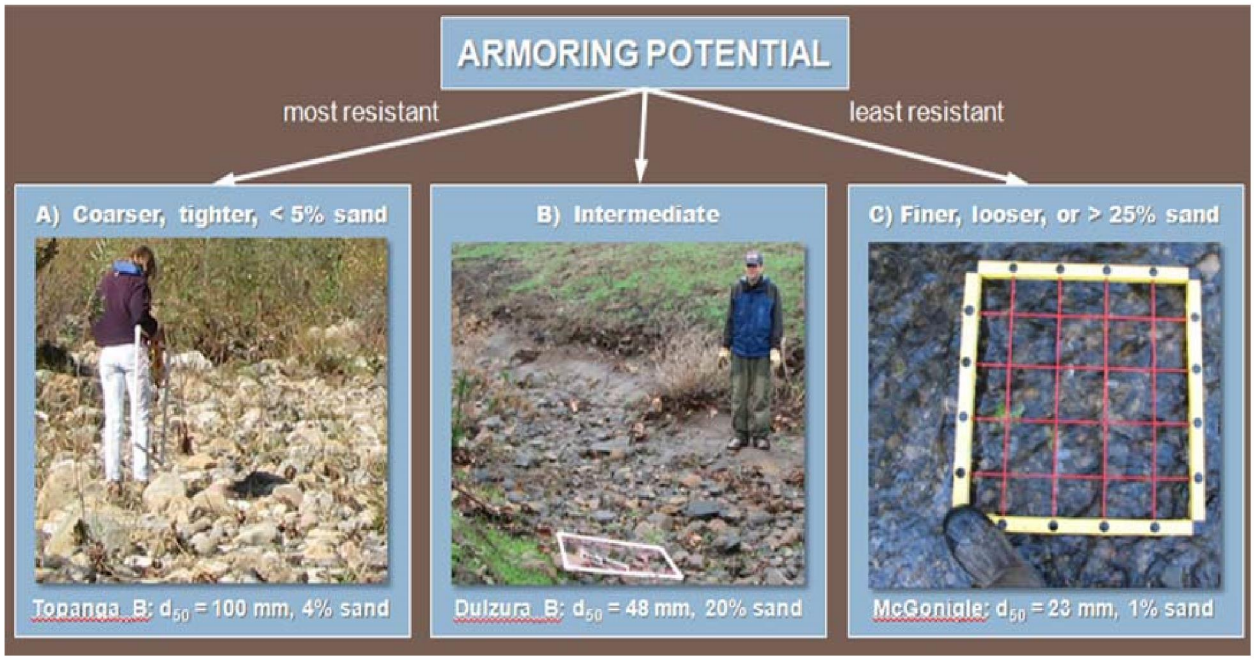
(Sheet 1 of 4)

Form 3 Support Materials

Form 3 Checklists 1 and 2, along with information recording in Form 3 Table 1, are intended to support the decisions pathways illustrated in Form 3 Overall Vertical Rating for Intermediate/Transitional Bed.

Form 3 Checklist 1: Armoring Potential

□	A	A mix of coarse gravels and cobbles that are tightly packed with <5% surface material of diameter <2 mm
X	B	Intermediate to A and C or hardpan of unknown resistance, spatial extent (longitudinal and depth), or unknown armoring potential due to surface veneer covering gravel or coarser layer encountered with probe
□	C	Gravels/cobbles that are loosely packed or >25% surface material of diameter <2 mm



Form 3 Figure 2. Armoring potential photographic supplement for assessing intermediate beds (16 < d_{50} < 128 mm) to be used i**n conjunction with Form 3 Checklist 1.**

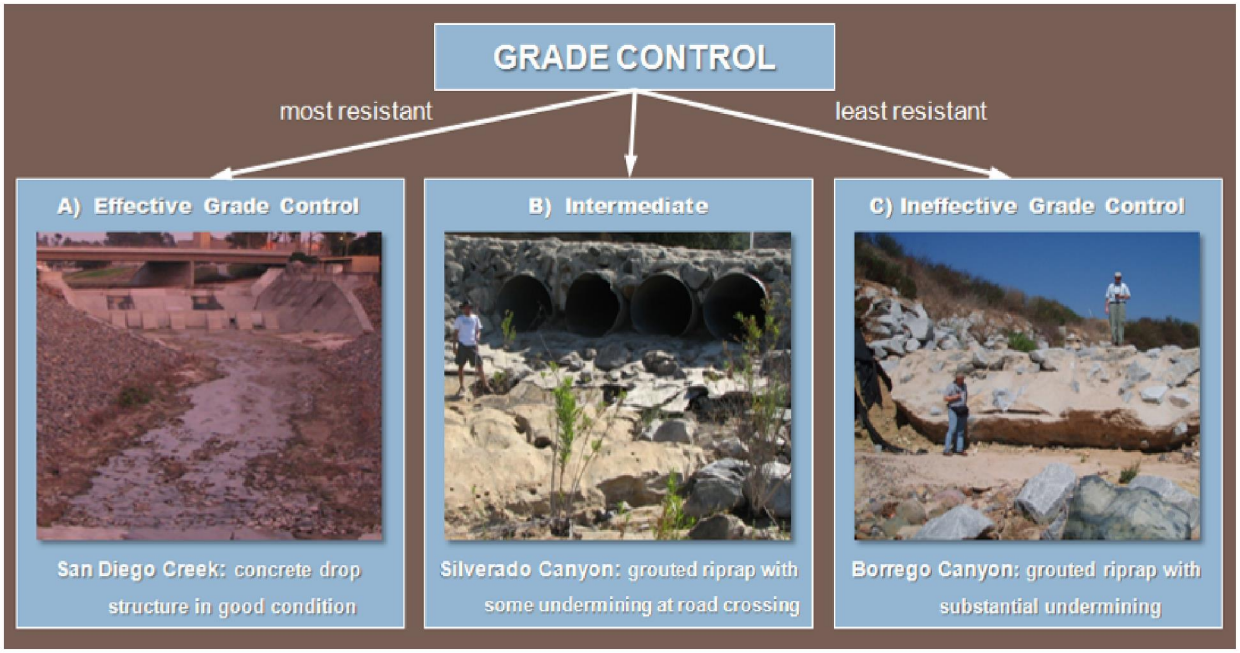
Form 3 Checklist 2: Grade Control

□ A Grade control is present with spacing <50 m or $2/S_v$ m

- No evidence of failure/ineffectiveness, e.g., no headcutting (>30 cm), no active mass wasting (analyst cannot say grade control sufficient if mass-wasting checklist indicates presence of bank failure), no exposed bridge pilings, no culverts/structures undermined
- Hard points in serviceable condition at decadal time scale, e.g., no apparent undermining, flanking, failing grout
- If geologic grade control, rock should be resistant igneous and/or metamorphic; For sedimentary/hardpan to be classified as 'grade control', it should be of demonstrable strength as indicated by field testing such as hammer test/borings and/or inspected by appropriate stakeholder

☒ B Intermediate to A and C – artificial or geologic grade control present but spaced 2/Sv m to 4/Sv m or potential evidence of failure or hardpan of uncertain resistance

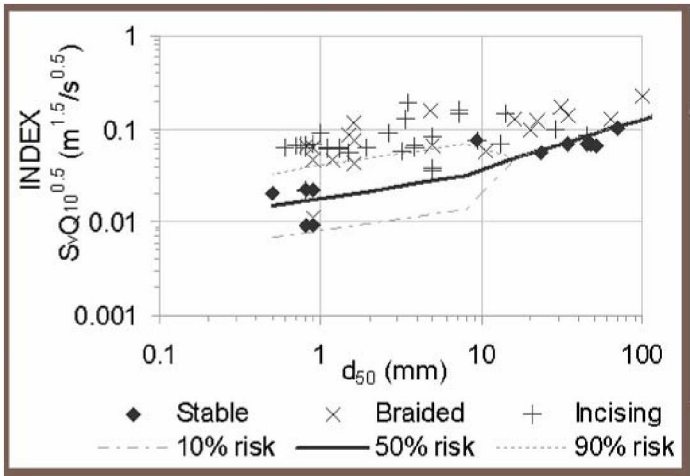
□ C Grade control absent, spaced >100 m or $>4/S_v$ m, or clear evidence of ineffectiveness



Form 3 Figure 3. Grade-control (condition) photographic supplement for assessing intermediate beds ($16 < d_{50} < 128$ mm) to be used in conjunction with Form 3 Checklist 2.

Regionally-Calibrated Screening Index Threshold for Incising/Braiding

For transitional bed channels (d_{50} between 16 and 128 mm) or labile beds (channel not incised past critical bank height), use Form 3 Figure 3 to determine Screening Index Score and complete Form 3 Table 1.



Model Type	d_{50} (mm)	50% Risk $S_vQ_{10}^{0.5}$ ($m^{1.5}/s^{0.5}$)
Logistic Regression $d_{50} \geq 16$ mm	128	0.145
	96	0.125
	80	0.114
	64	0.101
	48	0.087
	32	0.070
	16	0.049
Logistic Reg. $d_{50} < 16$ mm	8	0.031
	4	0.026
	2	0.022
	1	0.018
	0.5	0.015

Form 3 Figure 4. Probability of incising/braiding based on logistic regression of Screening Index and d_{50} to be used in conjunction with Form 3 Table 1.

Form 3 Table 1. Values for Screening Index Threshold (probability of incising/braiding) to be used in conjunction with Form 3 Figure 4 (above) to complete Form 3 Overall Vertical Rating for Intermediate/Transitional Bed (below).. Screening Index Score: A = <50% probability of incision for current Q_{10}, valley slope, and d_{50}; B = Hardpan/d_{50} indeterminate; and C = ≥50% probability of incising/braiding for current Q_{10}, valley slope, and d_{50}.

d_{50} (mm) *From Form 2*	**$S_v*Q_{10}^{0.5}$ ($m^{1.5}/s^{0.5}$)** *From Form 1*	**$S_v*Q_{10}^{0.5}$ ($m^{1.5}/s^{0.5}$)** *50% risk of incising/braiding from table in Form 3 Figure 3 above*	**Screening Index Score (A, B, C)**
	0.016	n/a (d50 indeterminate)	B

Overall Vertical Rating for Intermediate/Transitional Bed

Calculate the overall Vertical Rating for Transitional Bed channels using the formula below. Numeric values for responses to Form 3 Checklists and Table 1 as follows: A = 3, B = 6, C = 9.

B=6 B=6 B=6

$$Vertical\ Rating = \sqrt{\{(\sqrt{armoring} * grade\ control) * screening\ index\ score\}}$$

Vertical Susceptibility based on Vertical Rating: <4.5 = LOW; 4.5 to 7 = MEDIUM; and >7 = HIGH.

(Sheet 4 of 4)

Vertical Rating = $\sqrt{\sqrt{6 \times 6} \times 6} = 6$

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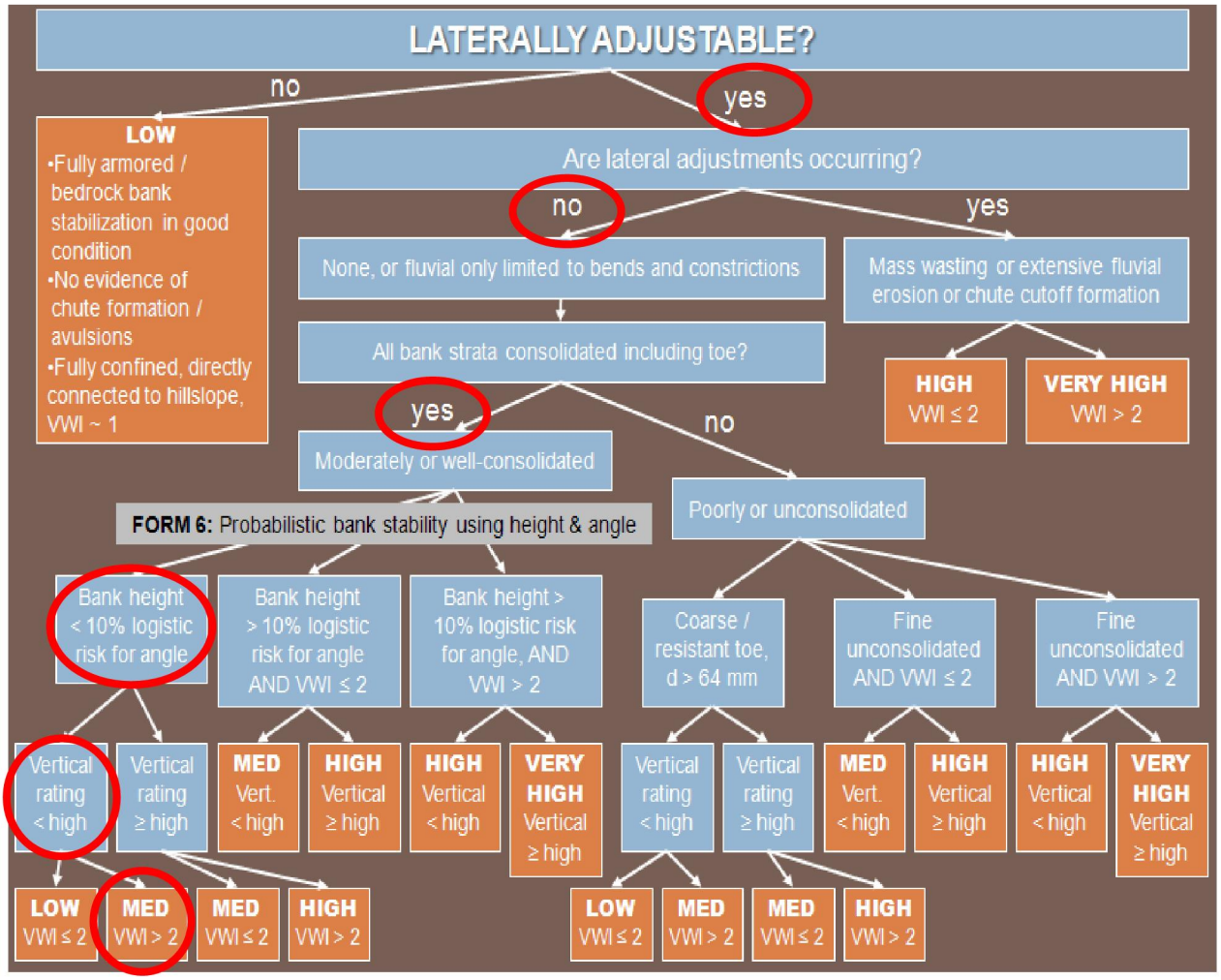
ATTACHMENT E

FORM 4: LATERAL SUSCEPTIBILITY FIELD SHEET

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4909 Murphy Canyon Road, STE 330, San Diego, CA 92123 | P. 619.787.5566 | F. 866.579.6415

FORM 4: LATERAL SUSCEPTIBILTY FIELD SHEET

Circle appropriate nodes/pathway for proposed site
OR use sequence of questions provided in Form 5.



(Sheet 1 of 1)

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ATTACHMENT F

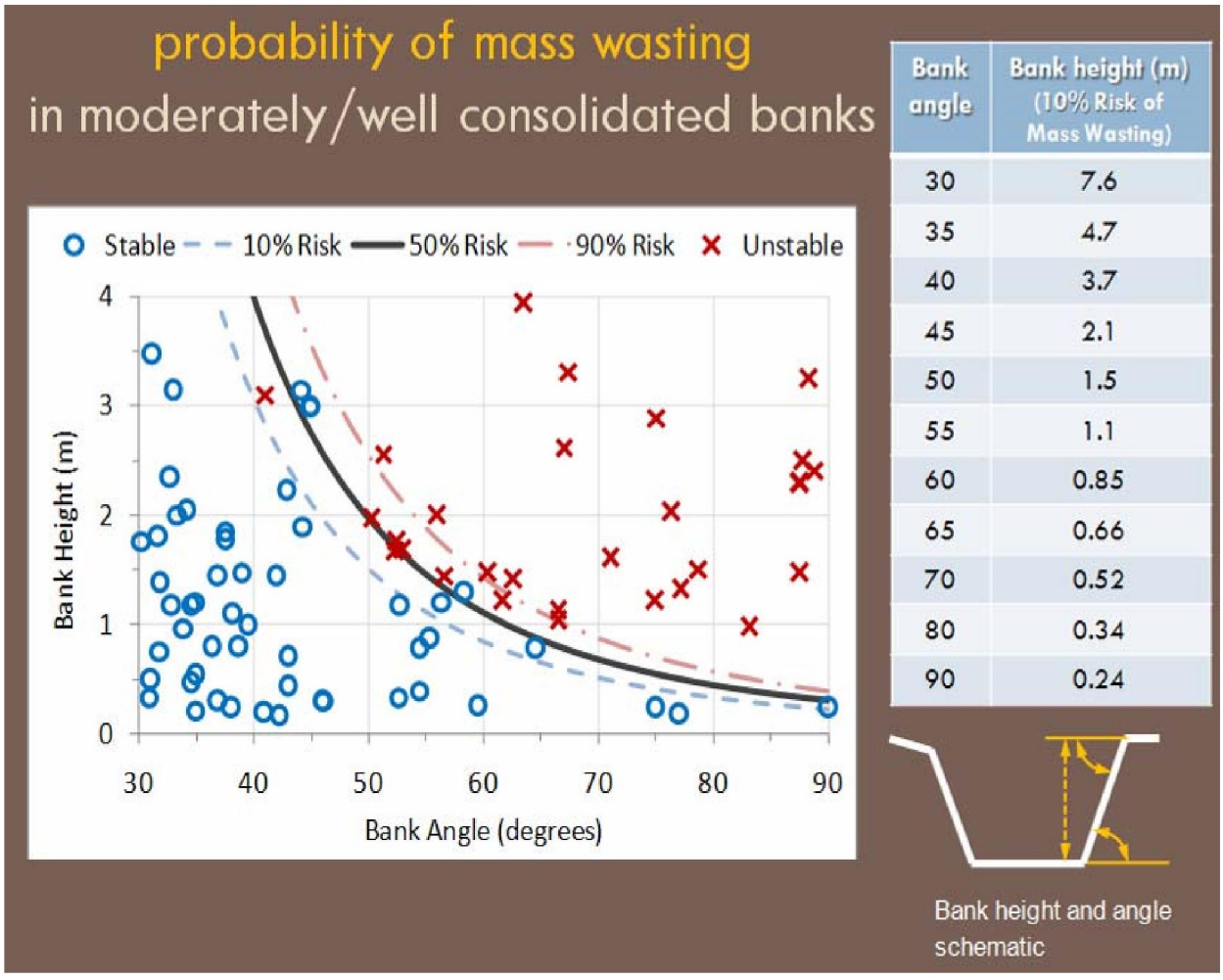
FORM 6: PROBABILITY OF MASS WASTING BANK FAILURE

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4909 Murphy Canyon Road, STE 330, San Diego, CA 92123 | P. 619.787.5566 | F. 866.579.6415

FORM 6: PROBABILITY OF MASS WASTING BANK FAILURE

If mass wasting is not currently extensive and the banks are moderately- to well-consolidated, measure bank height and angle at several locations (i.e., at least three locations that capture the range of conditions present in the study reach) to estimate representative values for the reach. Use Form 6 Figure 1 below to determine if risk of bank failure is >10% and complete Form 6 Table 1. Support your results with photographs that include a protractor/rod/tape/person for scale.

	Bank Angle (degrees) *(from Field)*	**Bank Height (m)** *(from Field)*	**Corresponding Bank Height for 10% Risk of Mass Wasting (m)** *(from Form 6 Figure 1 below)*	**Bank Failure Risk** *(<10% Risk)* *(>10% Risk)*
Left Bank	35 deg	< 1.5 m	4.7 m	< 10% Risk
Right Bank	25 deg	< 1.5 m	7.6 m	< 10% Risk



Form 6 Figure 1. Probability Mass Wasting diagram, Bank Angle:Height/% Risk table, and Band Height:Angle schematic.

(Sheet 1 of 1)

Attachment 2d
Flow Control Facility Design

INTRODUCTION

This HMP analysis for flow control summarizes the approach used to model the proposed Gran Vista project in San Marcos, CA using the Environmental Protection Agency (EPA) Storm Water Management Model 5.1 (SWMM). SWMM models were prepared for the pre and post developed conditions at the site in order to determine if the proposed hydromodification/detention vault facilities have sufficient footprint and volume potential to meet the current Hydromodification Management Plan (HMP) requirements from the Regional Water Quality Control Board (RWQCB).

This HMP analysis addresses areas shown on the Existing and Proposed Condition exhibits located in Attachment 2a.

POC1 is located at the Southwest corner of the project boundary (Discharge location into the 3X8 Box Culvert) as shown on the hydromodification exhibits.

The discharge from the site will enter the enclosed storm drain system via 3X8 culvert per IP-1219 crossing W Mission Rd. The discharge will be routed southerly via concrete lined channels and enclosed storm drain, except for a small portion of an unlined open channel that was analyzed to have a medium erosion susceptibility per an approved susceptibility analysis prepared by Delane Engineering and saved in the City files. The flow from the site will ultimately discharge into the HMP exempted Lake San Marcos.

The discharge location is not exempt from flow-control hydromodification since the site does not directly discharge to Lake San Marcos. However, the open unlined channel in the flow-path from the site to the exempt body was determined to have a medium erosion susceptibility. Therefore, 0.3 Q2 was used as the lower flow threshold for the receiving stream for the project site. POC1 is discussed in the following sections of this Attachment.

SWMM MODEL DEVELOPMENT

Two (2) SWMM models were prepared for this study for POC1, one for pre-developed conditions and the second for the proposed condition. SWMM was used since we have found it to be more comparable to San Diego area watersheds than the more widely used San Diego Hydrology Model (SDHM). For both SWMM models, flow duration curves were prepared to determine if the proposed hydromodification/detention vault facilities were sufficient to meet the current HMP requirements.

The inputs required to develop SWMM models include rainfall, watershed characteristics, and BMP configurations. The Oceanside Rain Gage from the Project Clean Water website was used for this study since it is the most representative of the project site precipitation among the available gages based on the site location and topograpy.

Evaporation for the site is modeled using average monthly values from the San Diego County hourly dataset (Zone 4). The site was modeled with hydrologic soil groups C and D soils as determined from USGS Survey web-based Soil Survey Map. Other SWMM inputs for the subareas are discussed in the subsections to this document where the selection of the parameters is explained in detail.

HYDROMODIFICATION MODELING

Developed storm water runoff is routed through the proposed treatment facilities consisting of Two (2) hydromodification and detention vaults, located southeast and southwest of the project site. Flows from the proposed project drain to these vaults, location of vaults can be found on the Proposed Hydromodification Map. Onsite flow will exit this site to 3x8 Box Culvert at the southwest corner of the site, which is the chosen point of compliance (POC-1).

DMA Discussion:

Runoff from approximately

1. 1.92 acres at the western portion of the project (DMA-1) is directed towards the proposed Vault HMP-1, and BF-3-1 Volume based MWS unit to address water quality

2. 3.46 acres (including 0.023 acres of the existing driveway) at the eastern portion of the project (DMA-2) is directed towards the proposed Vault HMP-2, and BF-3-2 Volume based MWS unit to address water quality

3. 0.11 acres of the developed area is routed to the flow-based MWS unit to address water quality and directly to the POC-1 (DMA-4).

4. 0.44 acres of the developed area is routed to the flow-based MWS unit to address water quality and directly to poc-1

5. 0.11 ac of the self mitigating pervious slopes (per section 5.2.2 from the BMP manual), 0.005 (208 sf) of de minimis area is routed directly to the POC-1

6. 0.453 ac of the undisturbed existing parking and driveway south of the project (DMA3-EX) with additional 0.09 ac of the proposed driveways and sidewalks (DMA-3) will be routed to the flow-based MWS unit to address water quality and directly connected to the POC-1.

Vaults HMP-1 and HM-2 are sized to detain for the direct flows from DMA-1 and DMA-2 and to over-detain for DMA-3,4,5, self mitigation and de minimis areas to meet HMP requirements when measured at POC1

Vault Discussion:

Vaults' detaining characteristics have been included in the proposed condition hydromodifcation SWMM model per this report. The vaults will consist of storage (for water quality and HMP volume). Flow control in the vaults is achieved using multiple orifices on a concrete riser box. The size, number and location of the orifices are presented in the vault Table below. Flow will exit the vaults via a 3' x 2' and 4'X3' risers

with a rim elevation of 5.4' for Vault1 and 5.9' for Vault 2 above the vault base. The emergency overflow riser is utilized in storm events equal to or larger than the 100 year storm. Once flows exceed the rim elevation of the riser, runoff will drain over the riser rim and enter discharge pipe. Sizing and further peak flow discussion is in the Drainage Study.

.

Basin Table

	HMP-1 (POC-1)	HMP-2 (POC-1)
Weir Height (ft.)*	5.4	5.9
Weir Length (ft.)	10.0	10
Approx. Dimensions (LxW)	2'x3'	4'x3'
Top Orifice		
No. of Orifices	2	10
Diameter (in)	3	3
Invert Height (ft.)*	4.50	5.0
Middle Orifice		
No. of Orifices	2	10
Diameter (in)	4	3
Invert Height (ft.)*	3.5	3.4
Bottom Orifice		
No. of Orifices	2	1
Diameter (in)	4	2
Invert Height (ft.)*	2.5	2.6
Water Quaity Orifice		
No. of Orifices	1	1
Diameter (in)	1.6	2.3

*to the volume based MWS unit

Once flows have been routed through the respective vaults, flows discharges southwest to the existing 3x8 box culvert which is chosen as POC-1.

FLOW DURATION CURVE COMPARISON

The Flow Duration Curve (FDC) for the site was compared at the Point of Compliance (POC1) by exporting the hourly runoff time series results from SWMM to a spreadsheet. FDC was

compared between 30% of the existing condition Q_2 (based on accepting an assumption of medium susceptibility for downstream channel erosion as approved by the susceptibility analysis that was prepared by Delane Engineering for the unlined portion of the channel and saved in the City files) up to the existing condition Q_{10}. The Q_2 and Q_{10} were determined using a partial duration statistical analysis of the runoff time series in an Excel spreadsheet using the Cunnane plotting position method (which is the preferred plotting methodology in the HMP Permit). The range between 30% of Q_2 and Q_{10} was divided into 100 equal time intervals; the number of hours that each flow rate was exceeded was counted from the hourly series. Additionally, the intermediate peaks with a return period "i" were obtained (Q_i with i=3 to 9). For the purpose of the plot, the values were presented as percentage of time exceeded for each flow rate.

FDC comparison at POC1 is illustrated in Figure 1 in logarithmic scale. POC1 corresponds with the point located downstream of the discharge of the discharge pipe. Attachment 10 provides detailed drainage exhibit for the post-developed condition.

As can be seen in Figure 1, the FDC for the proposed condition is within 110% of the curve for the existing condition. The additional runoff volume generated from developing the site will be released to the downstream storm drain at a flow rate below the 30% Q_2 lower threshold. Additionally, the project will also not increase peak flow rates between the Q_2 and the Q_{10}, as shown in the graphic and also in the attached table.

SUMMARY

The total project area to POC-1 is identical in pre and post project condition. The proposed biofiltration and hydromodification/detention facilities mitigate increased flow frequencies as a result of development.

Area Summary

	Existing (AC)	Proposed (AC)
POC 1	6.598	6.598

KEY ASSUMPTIONS

1. C and D Soils are representative of the existing condition site.

ATTACHMENTS

1. Flow Duration Curve Analysis
2. Elevation vs. Area Curves vs. Discharge Curves to be used in SWMM
3. Vault Details
4. SWMM Input Data (Existing and Proposed Models)
5. SWMM Screens and Explanation of Significant Variables
6. Drying Time of the HMP volume
7. Hydromodification Watershed Maps

Flow Duration Curve Analysis, Plot & Table

Flow duration curve shall not exceed the existing conditions by more than 10% neither in peak flow nor duration.

The figure on the following page illustrates that the flow duration curve in post-development conditions after the proposed BMPs is below the existing flow duration curve. The flow duration curve table following the curve shows that if the interval 0.30Q 2 – Q 10 is divided in 100 sub-intervals, then a) the post development divided by pre-development durations are never larger than 110% (the permit allows up to 110%); and b) there are no more than 10 intervals in the range 101%-110% which would imply an excess over 10% of the length of the curve (the permit allows less than 10% of excesses measured as 101-110%).

Consequently, the design passes the hydromodification test.

It is important to note that the flow duration curve can be expressed in the "x" axis as percentage of time, hours per year, total number of hours, or any other similar time variable. As those variables only differ by a multiplying constant, their plot in logarithmic scale is going to look exactly the same and compliance can be observed regardless of the variable selected. The selection of a logarithmic scale in lieu of the normal scale is preferred, as differences between the pre-development and post-development curves can be seen more clearly in the entire range of analysis. Both graphics are presented for reference.

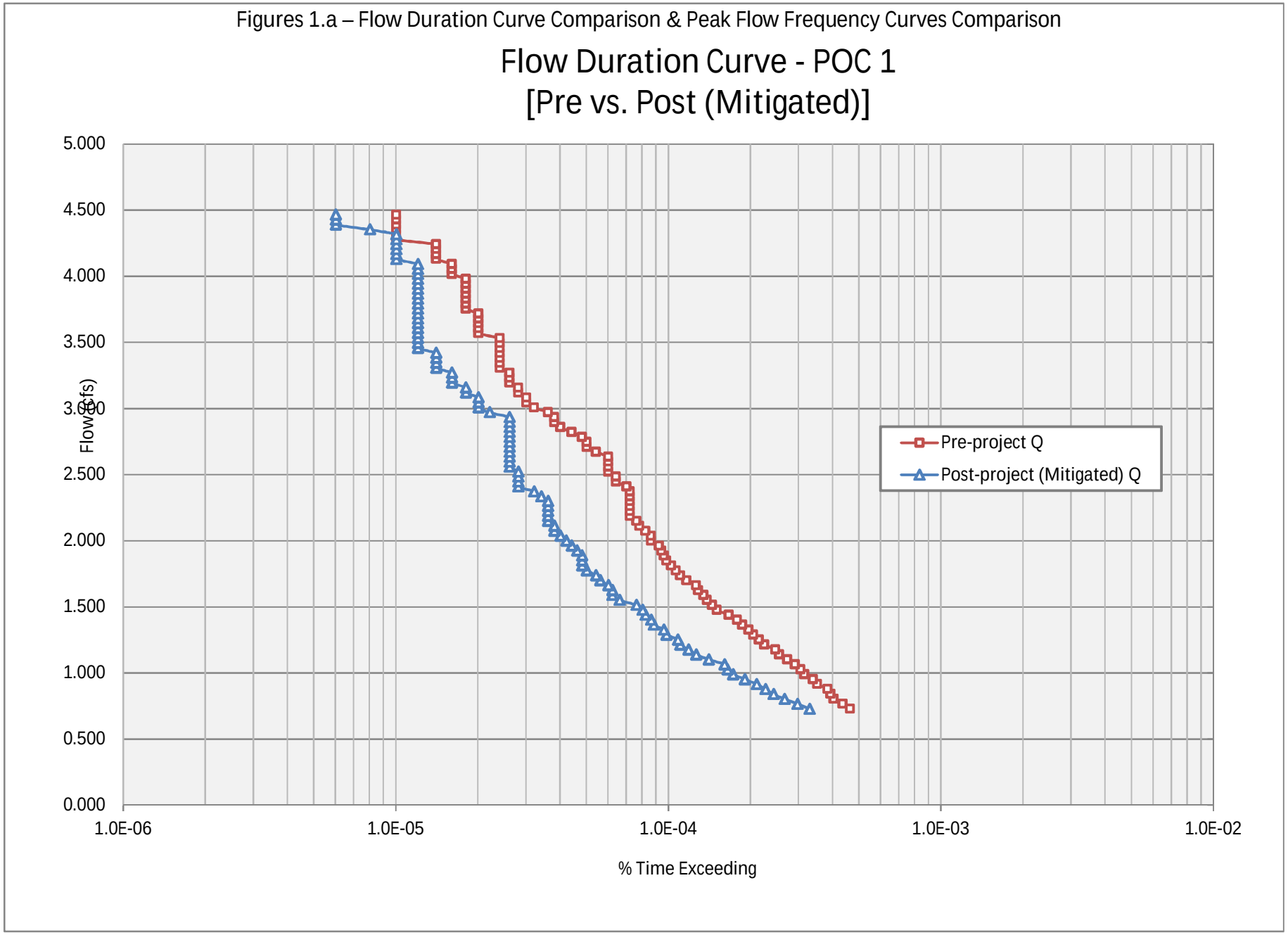
In terms of the "y" axis, the peak flow value is the variable of choice. As an additional analysis performed by H&A, not only the range of analysis is clearly depicted (30% of Q 2 to Q 10) but also all intermediate flows are shown (30% of Q 2, 50% of Q 2, Q 2, Q 3, Q 4, Q 5, Q 6, Q 7, Q 8 and Q 9) in order to demonstrate compliance at any range Q x – Q x+1. It must be pointed out that one of the limitations of both the SWMM and SDHM models is that the intermediate analysis is not performed (to obtain Qi from i = 2 to 10). H&A performed the analysis using the Cunnane Plotting Position Method (the preferred method in the HMP permit) from the "n" largest independent peak flows obtained from the continuous time series.

The largest "n" peak flows are attached in this appendix, as well as the values of Q_i with a return period "i", from i=2 to 10. The Q i values are also added into the flow-duration plot.

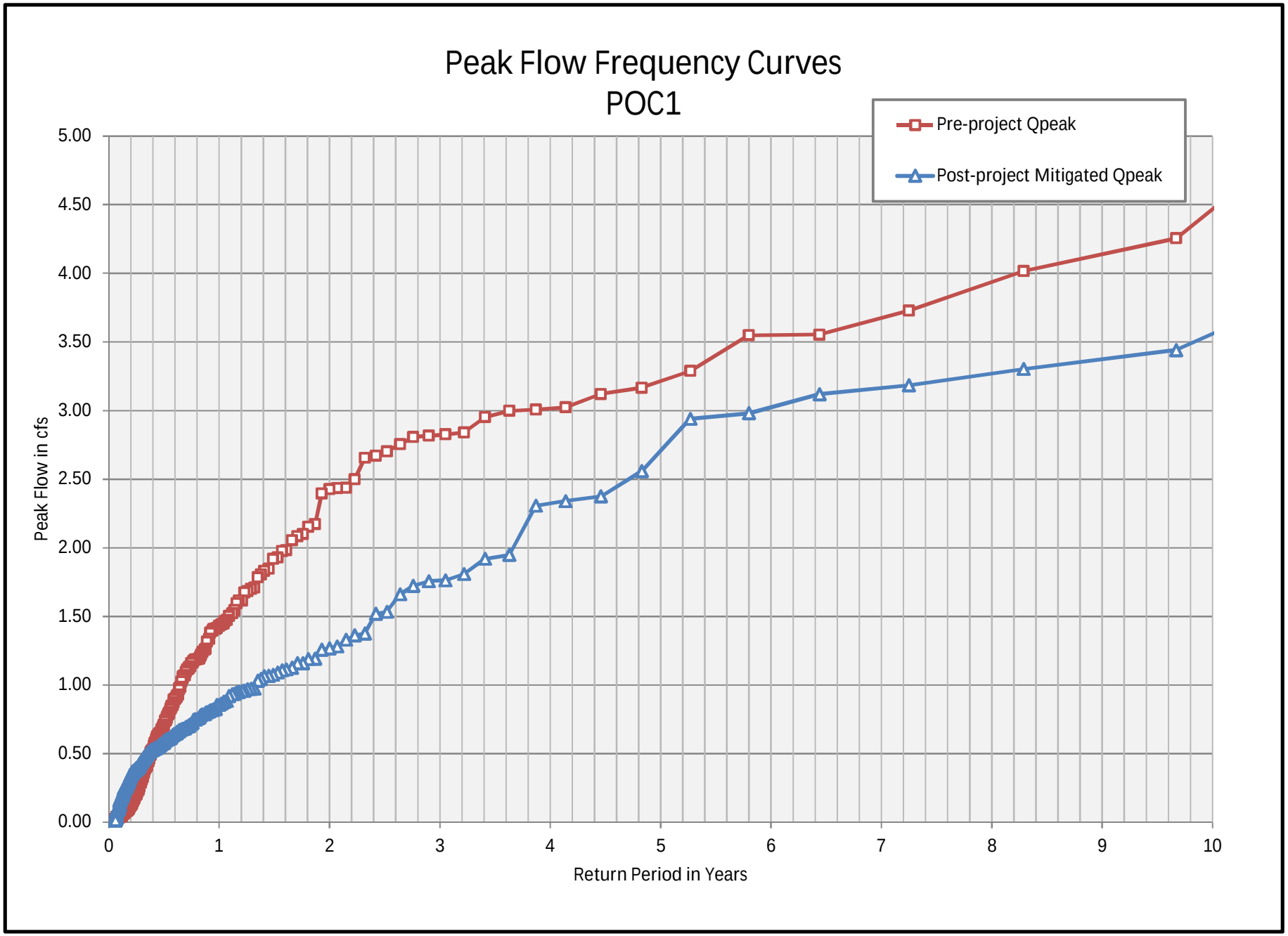
ATTACHMENT 1 - Flow Duration Curve Analysis, Plot & Table

(Logarithmic “x” scale)

Figures 1.a – Flow Duration Curve Comparison & Peak Flow Frequency Curves Comparison



Figures 1.b – Flow Duration Curve Comparison & Peak Flow Frequency Curves Comparison



LAS POSAS

Low-flow Threshold:	30%	
0.3xQ2 (Pre):	0.728	cfs
Q10 (Pre):	4.466	cfs
Ordinate #:	100	3
Incremental Q (Pre):	0.03738	cfs
Total Hourly Data:	497370	hours

POC 1

The proposed BMP: PASSED

Interval	Pre-project Flow (cfs)	Pre-project Hours	Pre-project % Time Exceeding	Post-project Hours	Post-project % Time Exceeding	Percentage	Pass/Fail
0	0.728	231	4.64E-04	164	3.30E-04	71%	Pass
1	0.765	217	4.36E-04	148	2.98E-04	68%	Pass
2	0.803	201	4.04E-04	133	2.67E-04	66%	Pass
3	0.840	196	3.94E-04	121	2.43E-04	62%	Pass
4	0.878	191	3.84E-04	113	2.27E-04	59%	Pass
5	0.915	175	3.52E-04	105	2.11E-04	60%	Pass
6	0.952	169	3.40E-04	95	1.91E-04	56%	Pass
7	0.990	157	3.16E-04	86	1.73E-04	55%	Pass
8	1.027	152	3.06E-04	82	1.65E-04	54%	Pass
9	1.065	145	2.92E-04	80	1.61E-04	55%	Pass
10	1.102	136	2.73E-04	70	1.41E-04	51%	Pass
11	1.139	127	2.55E-04	63	1.27E-04	50%	Pass
12	1.177	123	2.47E-04	59	1.19E-04	48%	Pass
13	1.214	112	2.25E-04	55	1.11E-04	49%	Pass
14	1.251	107	2.15E-04	54	1.09E-04	50%	Pass
15	1.289	102	2.05E-04	49	9.85E-05	48%	Pass
16	1.326	98	1.97E-04	48	9.65E-05	49%	Pass
17	1.364	93	1.87E-04	44	8.85E-05	47%	Pass
18	1.401	89	1.79E-04	43	8.65E-05	48%	Pass
19	1.438	83	1.67E-04	41	8.24E-05	49%	Pass
20	1.476	75	1.51E-04	40	8.04E-05	53%	Pass
21	1.513	72	1.45E-04	38	7.64E-05	53%	Pass
22	1.550	69	1.39E-04	33	6.63E-05	48%	Pass
23	1.588	67	1.35E-04	31	6.23E-05	46%	Pass
24	1.625	64	1.29E-04	31	6.23E-05	48%	Pass
25	1.663	63	1.27E-04	30	6.03E-05	48%	Pass
26	1.700	58	1.17E-04	28	5.63E-05	48%	Pass
27	1.737	55	1.11E-04	27	5.43E-05	49%	Pass
28	1.775	53	1.07E-04	25	5.03E-05	47%	Pass
29	1.812	51	1.03E-04	24	4.83E-05	47%	Pass
30	1.850	49	9.85E-05	24	4.83E-05	49%	Pass
31	1.887	48	9.65E-05	24	4.83E-05	50%	Pass
32	1.924	47	9.45E-05	23	4.62E-05	49%	Pass
33	1.962	46	9.25E-05	22	4.42E-05	48%	Pass
34	1.999	43	8.65E-05	21	4.22E-05	49%	Pass
35	2.036	43	8.65E-05	20	4.02E-05	47%	Pass
36	2.074	41	8.24E-05	19	3.82E-05	46%	Pass
37	2.111	39	7.84E-05	19	3.82E-05	49%	Pass
38	2.149	38	7.64E-05	18	3.62E-05	47%	Pass
39	2.186	36	7.24E-05	18	3.62E-05	50%	Pass
40	2.223	36	7.24E-05	18	3.62E-05	50%	Pass
41	2.261	36	7.24E-05	18	3.62E-05	50%	Pass
42	2.298	36	7.24E-05	18	3.62E-05	50%	Pass
43	2.335	36	7.24E-05	17	3.42E-05	47%	Pass
44	2.373	36	7.24E-05	16	3.22E-05	44%	Pass
45	2.410	35	7.04E-05	14	2.81E-05	40%	Pass
46	2.448	32	6.43E-05	14	2.81E-05	44%	Pass
47	2.485	32	6.43E-05	14	2.81E-05	44%	Pass
48	2.522	30	6.03E-05	14	2.81E-05	47%	Pass
49	2.560	30	6.03E-05	13	2.61E-05	43%	Pass

Interval	Pre-project Flow (cfs)	Pre-project Hours	Pre-project % Time Exceeding	Post-project Hours	Post-project % Time Exceeding	Percentage	Pass/Fail
50	2.597	30	6.03E-05	13	2.61E-05	43%	Pass
51	2.635	30	6.03E-05	13	2.61E-05	43%	Pass
52	2.672	27	5.43E-05	13	2.61E-05	48%	Pass
53	2.709	25	5.03E-05	13	2.61E-05	52%	Pass
54	2.747	25	5.03E-05	13	2.61E-05	52%	Pass
55	2.784	24	4.83E-05	13	2.61E-05	54%	Pass
56	2.821	22	4.42E-05	13	2.61E-05	59%	Pass
57	2.859	20	4.02E-05	13	2.61E-05	65%	Pass
58	2.896	19	3.82E-05	13	2.61E-05	68%	Pass
59	2.934	19	3.82E-05	13	2.61E-05	68%	Pass
60	2.971	18	3.62E-05	11	2.21E-05	61%	Pass
61	3.008	16	3.22E-05	10	2.01E-05	63%	Pass
62	3.046	15	3.02E-05	10	2.01E-05	67%	Pass
63	3.083	15	3.02E-05	10	2.01E-05	67%	Pass
64	3.120	14	2.81E-05	9	1.81E-05	64%	Pass
65	3.158	14	2.81E-05	9	1.81E-05	64%	Pass
66	3.195	13	2.61E-05	8	1.61E-05	62%	Pass
67	3.233	13	2.61E-05	8	1.61E-05	62%	Pass
68	3.270	13	2.61E-05	8	1.61E-05	62%	Pass
69	3.307	12	2.41E-05	7	1.41E-05	58%	Pass
70	3.345	12	2.41E-05	7	1.41E-05	58%	Pass
71	3.382	12	2.41E-05	7	1.41E-05	58%	Pass
72	3.420	12	2.41E-05	7	1.41E-05	58%	Pass
73	3.457	12	2.41E-05	6	1.21E-05	50%	Pass
74	3.494	12	2.41E-05	6	1.21E-05	50%	Pass
75	3.532	12	2.41E-05	6	1.21E-05	50%	Pass
76	3.569	10	2.01E-05	6	1.21E-05	60%	Pass
77	3.606	10	2.01E-05	6	1.21E-05	60%	Pass
78	3.644	10	2.01E-05	6	1.21E-05	60%	Pass
79	3.681	10	2.01E-05	6	1.21E-05	60%	Pass
80	3.719	10	2.01E-05	6	1.21E-05	60%	Pass
81	3.756	9	1.81E-05	6	1.21E-05	67%	Pass
82	3.793	9	1.81E-05	6	1.21E-05	67%	Pass
83	3.831	9	1.81E-05	6	1.21E-05	67%	Pass
84	3.868	9	1.81E-05	6	1.21E-05	67%	Pass
85	3.905	9	1.81E-05	6	1.21E-05	67%	Pass
86	3.943	9	1.81E-05	6	1.21E-05	67%	Pass
87	3.980	9	1.81E-05	6	1.21E-05	67%	Pass
88	4.018	8	1.61E-05	6	1.21E-05	75%	Pass
89	4.055	8	1.61E-05	6	1.21E-05	75%	Pass
90	4.092	8	1.61E-05	6	1.21E-05	75%	Pass
91	4.130	7	1.41E-05	5	1.01E-05	71%	Pass
92	4.167	7	1.41E-05	5	1.01E-05	71%	Pass
93	4.205	7	1.41E-05	5	1.01E-05	71%	Pass
94	4.242	7	1.41E-05	5	1.01E-05	71%	Pass
95	4.279	5	1.01E-05	5	1.01E-05	100%	Pass
96	4.317	5	1.01E-05	5	1.01E-05	100%	Pass
97	4.354	5	1.01E-05	4	8.04E-06	80%	Pass
98	4.391	5	1.01E-05	3	6.03E-06	60%	Pass
99	4.429	5	1.01E-05	3	6.03E-06	60%	Pass
100	4.466	5	1.01E-05	3	6.03E-06	60%	Pass

ATTACHMENT 2 - Elevation vs. Area Curves vs. Discharge Curves to be used in SWMM

Elevation vs Area

For the receiving detention vault, a storage node is used to route the hydrographs. The elevation vs area curve in the model is calculated in Excel and imported into the model at a 0.1 ft. interval range.

Elevation vs Discharge

The total discharge peak flow is imported from an Excel spreadsheet that calculated the elevation vs discharge of the multiple outlet system.

The orifices have been selected to maximize their size while still restricting flows to conform to the required 30% of the Q2 event flow as mandated in the Final Hydromodification Management Plan by Brown & Caldwell, dated March 2011. While we acknowledge that these orifices are small, to increase the size of these outlets would impact the vaults' ability to restrict flows beneath the HMP thresholds, thus preventing the BMP from conformance with HMP requirements.

In order to prevent blockage of the orifice, a debris screen will be fitted to the base invert of the lower orifices located within the detention basin. Regular maintenance of the riser and orifices will be performed to ensure potential blockages are minimized. A detail of the orifice and riser structures is provided in Section 5 of this Attachment. The stage-storage and stage-discharge calculations have been provided on the following pages.

Vault #1 WQ Discharge to the MWS BF-3-1 (was not included in detention calcs)

Discharge vs Elevation Table

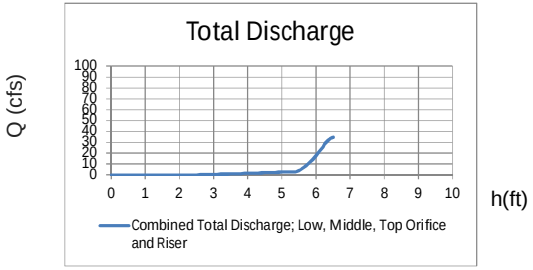
Low orifice:	1.6 "
Number:	1
Cg-low:	0.61
invert elev:	0.00 ft

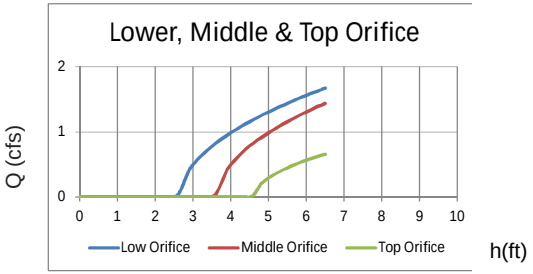
h (ft)	H/D-low -	H/D-mid -	H/D-top -	Qlow-orif (cfs)	Qlow-weir (cfs)	Qtot-low (cfs)	Qmid-orif (cfs)	Qmid-weir (cfs)	Qtot-med (cfs)	Qtop-orif (cfs)	Qtop-weir (cfs)	Qtot-top (cfs)	Qemerg (cfs)	Qtot (cfs)
0.0	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.1	0.75	0.00	0.15	0.012	0.010	0.010	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.010
0.2	1.50	0.00	0.30	0.025	0.030	0.025	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.025
0.3	2.25	0.00	0.45	0.033	0.044	0.033	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.033
0.4	3.00	0.00	0.60	0.039	0.046	0.039	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.039
0.5	3.75	0.00	0.75	0.045	0.060	0.045	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.045
0.6	4.50	0.80	0.90	0.050	0.150	0.050	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.050
0.7	5.25	1.60	1.05	0.054	0.437	0.054	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.054
0.8	6.00	2.40	1.20	0.059	1.113	0.059	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.059
0.9	6.75	3.20	1.35	0.062	2.457	0.062	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.062
1.0	7.50	4.00	1.50	0.066	4.848	0.066	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.066
1.1	8.25	4.80	1.65	0.069	8.781	0.069	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.069
1.2	9.00	5.60	1.80	0.073	14.881	0.073	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.073
1.3	9.75	6.40	1.95	0.076	23.920	0.076	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.076
1.4	10.50	7.20	2.10	0.079	36.828	0.079	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.079
1.5	11.25	8.00	2.25	0.082	54.712	0.082	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.082
1.6	12.00	8.80	2.40	0.085	78.866	0.085	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.085
1.7	12.75	9.60	2.55	0.087	110.792	0.087	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.087
1.8	13.50	10.40	2.70	0.090	152.208	0.090	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.090
1.9	14.25	11.20	2.85	0.093	205.069	0.093	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.093
2.0	15.00	12.00	3.00	0.095	271.576	0.095	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.095
2.1	15.75	12.80	3.15	0.097	354.197	0.097	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.097
2.2	16.50	13.60	3.30	0.100	455.676	0.100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.100
2.3	17.25	14.40	3.45	0.102	579.052	0.102	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.102
2.4	18.00	15.20	3.60	0.104	727.670	0.104	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.104
2.5	18.75	16.00	3.75	0.107	905.200	0.107	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.107

Vault #1 HMP Discharge

Discharge vs Elevation Table

Low orifice:	4	"	Top orifice:	3.000	"
Number:	2		Number:	2.000	
Cg-low:	0.61		Cg-low:	0.610	
invert elev:	2.50	ft	invert elev:	4.500	ft
Middle orifice:	4	"	Emergency inlet:		
number of orif:	2		Rim height:	5.40	ft
Cg-middle:	0.61		Area	6.00	sq ft <---2' x 3'
invert elev:	3.50	ft	Circumference	10.00	ft





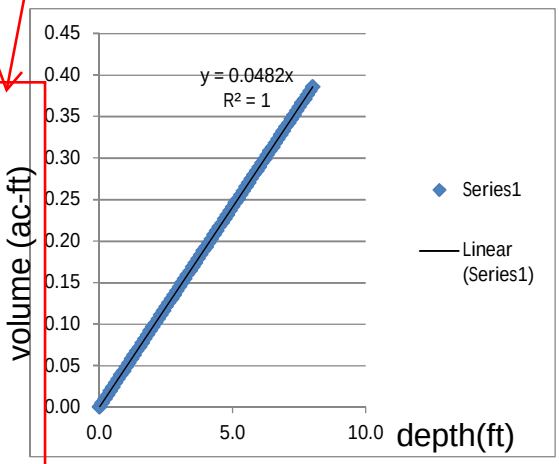
h (ft)	H/D-low -	H/D-mid -	H/D-top -	Qlow-orif (cfs)	Qlow-weir (cfs)	Qtot-low (cfs)	Qmid-orif (cfs)	Qmid-weir (cfs)	Qtot-med (cfs)	Qtop-orif (cfs)	Qtop-weir (cfs)	Qtot-top (cfs)	Qemerg (cfs)	Qtot (cfs)
0.0	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.1	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.2	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.3	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.4	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.5	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.6	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.7	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.8	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.9	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1.0	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1.1	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1.2	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1.3	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1.4	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1.5	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1.6	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1.7	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1.8	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1.9	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.0	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.1	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.2	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.3	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.4	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.5	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.6	0.30	0.00	0.00	0.000	0.037	0.037	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.037
2.7	0.60	0.00	0.00	0.156	0.138	0.138	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.138
2.8	0.90	0.00	0.00	0.312	0.280	0.280	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.280
2.9	1.20	0.00	0.00	0.413	0.442	0.413	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.413
3.0	1.50	0.00	0.00	0.493	0.600	0.493	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.493
3.10	1.80	0.00	0.00	0.562	0.734	0.562	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.562
3.2	2.10	0.00	0.00	0.624	0.830	0.624	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.624
3.3	2.40	0.00	0.00	0.680	0.883	0.680	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.680
3.4	2.70	0.00	0.00	0.732	0.901	0.732	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.732
3.5	3.00	0.00	0.00	0.780	0.906	0.780	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.780
3.6	3.30	0.30	0.00	0.825	0.938	0.825	0.000	0.037	0.037	0.000	0.000	0.000	0.000	0.863
3.7	3.60	0.60	0.00	0.869	1.061	0.869	0.156	0.138	0.138	0.000	0.000	0.000	0.000	1.006
3.8	3.90	0.90	0.00	0.910	1.358	0.910	0.312	0.280	0.280	0.000	0.000	0.000	0.000	1.18981
3.9	4.20	1.20	0.00	0.949	1.944	0.949	0.413	0.442	0.413	0.000	0.000	0.000	0.000	1.36154
4.0	4.50	1.50	0.00	0.987	2.960	0.987	0.493	0.600	0.493	0.000	0.000	0.000	0.000	1.47983
4.1	4.80	1.80	0.00	1.023	4.584	1.023	0.562	0.734	0.562	0.000	0.000	0.000	0.000	1.585
4.2	5.10	2.10	0.00	1.058	7.028	1.058	0.624	0.830	0.624	0.000	0.000	0.000	0.000	1.682
4.3	5.40	2.40	0.00	1.092	10.542	1.092	0.680	0.883	0.680	0.000	0.000	0.000	0.000	1.772
4.4	5.70	2.70	0.00	1.125	15.420	1.125	0.732	0.901	0.732	0.000	0.000	0.000	0.000	1.8565
4.5	6.00	3.00	0.00	1.157	22.001	1.157	0.780	0.906	0.780	0.000	0.000	0.000	0.000	1.937
4.6	6.30	3.30	0.40	1.188	30.670	1.188	0.825	0.938	0.825	0.000	0.032	0.032	0.000	2.045

4.7	6.60	3.60	0.80	1.218	41.866	1.218	0.869	1.061	0.869	0.132	0.112	0.112	0.000	2.199
4.8	6.90	3.90	1.20	1.248	56.080	1.248	0.910	1.358	0.910	0.201	0.215	0.201	0.000	2.358
4.9	7.20	4.20	1.60	1.277	73.861	1.277	0.949	1.944	0.949	0.252	0.316	0.252	0.000	2.478
5.0	7.50	4.50	2.00	1.305	95.817	1.305	0.987	2.960	0.987	0.294	0.391	0.294	0.000	2.586
5.1	7.80	4.80	2.40	1.333	122.620	1.333	1.023	4.584	1.023	0.331	0.430	0.331	0.000	2.687
5.2	8.10	5.10	2.80	1.360	155.009	1.360	1.058	7.028	1.058	0.364	0.439	0.364	0.000	2.782
5.3	8.40	5.40	3.20	1.386	193.789	1.386	1.092	10.542	1.092	0.395	0.449	0.395	0.000	2.873
5.4	8.70	5.70	3.60	1.413	239.840	1.413	1.125	15.420	1.125	0.423	0.517	0.423	0.000	2.960
5.5	9.00	6.00	4.00	1.438	294.116	1.438	1.157	22.001	1.157	0.450	0.738	0.450	0.980	4.025
5.6	9.30	6.30	4.40	1.463	357.648	1.463	1.188	30.670	1.188	0.475	1.249	0.475	2.773	5.899
5.7	9.60	6.60	4.80	1.488	431.549	1.488	1.218	41.866	1.218	0.498	2.233	0.498	5.094	8.298
5.8	9.90	6.90	5.20	1.512	517.017	1.512	1.248	56.080	1.248	0.521	3.930	0.521	7.842	11.124
5.9	10.20	7.20	5.60	1.536	615.336	1.536	1.277	73.861	1.277	0.543	6.636	0.543	10.960	14.316
6.0	10.50	7.50	6.00	1.560	727.878	1.560	1.305	95.817	1.305	0.564	10.717	0.564	14.407	17.836

WQ Volume

Vault#1 Stage Storage

depth	area sft	area (ac)	elevation	volume (cf)	volume (acft)
0.0	2100	0.05	0.0	0	0.00
0.1	2100	0.05	0.1	210	0.00
0.2	2100	0.05	0.2	420	0.01
0.3	2100	0.05	0.3	630	0.01
0.4	2100	0.05	0.4	840	0.02
0.5	2100	0.05	0.5	1050	0.02
0.6	2100	0.05	0.6	1260	0.03
0.7	2100	0.05	0.7	1470	0.03
0.8	2100	0.05	0.8	1680	0.04
0.9	2100	0.05	0.9	1890	0.04
1.0	2100	0.05	1.0	2100	0.05
1.1	2100	0.05	1.1	2310	0.05
1.2	2100	0.05	1.2	2520	0.06
1.3	2100	0.05	1.3	2730	0.06
1.4	2100	0.05	1.4	2940	0.07
1.5	2100	0.05	1.5	3150	0.07
1.6	2100	0.05	1.6	3360	0.08
1.7	2100	0.05	1.7	3570	0.08
1.8	2100	0.05	1.8	3780	0.09
1.9	2100	0.05	1.9	3990	0.09
2.0	2100	0.05	2.0	4200	0.10
2.1	2100	0.05	2.1	4410	0.10
2.2	2100	0.05	2.2	4620	0.11
2.3	2100	0.05	2.3	4830	0.11
2.4	2100	0.05	2.4	5040	0.12
2.5	2100	0.05	2.5	5250	0.12
2.6	2100	0.05	2.6	5460	0.13
2.7	2100	0.05	2.7	5670	0.13
2.8	2100	0.05	2.8	5880	0.13
2.9	2100	0.05	2.9	6090	0.14
3.0	2100	0.05	3.0	6300	0.14
3.1	2100	0.05	3.1	6510	0.15
3.2	2100	0.05	3.2	6720	0.15
3.3	2100	0.05	3.3	6930	0.16
3.4	2100	0.05	3.4	7140	0.16
3.5	2100	0.05	3.5	7350	0.17
3.6	2100	0.05	3.6	7560	0.17
3.7	2100	0.05	3.7	7770	0.18
3.8	2100	0.05	3.8	7980	0.18
3.9	2100	0.05	3.9	8190	0.19
4.0	2100	0.05	4.0	8400	0.19
4.1	2100	0.05	4.1	8610	0.20
4.2	2100	0.05	4.2	8820	0.20
4.3	2100	0.05	4.3	9030	0.21
4.4	2100	0.05	4.4	9240	0.21
4.5	2100	0.05	4.5	9450	0.22
4.6	2100	0.05	4.6	9660	0.22
4.7	2100	0.05	4.7	9870	0.23
4.8	2100	0.05	4.8	10080	0.23
4.9	2100	0.05	4.9	10290	0.24
5.0	2100	0.05	5.0	10500	0.24
5.1	2100	0.05	5.1	10710	0.25
5.2	2100	0.05	5.2	10920	0.25
5.3	2100	0.05	5.3	11130	0.26
5.4	2100	0.05	5.4	11340	0.26
5.5	2100	0.05	5.5	11550	0.27
5.6	2100	0.05	5.6	11760	0.27
5.7	2100	0.05	5.7	11970	0.27



5.8	2100	0.05	5.8	12180	0.28
5.9	2100	0.05	5.9	12390	0.28
6.0	2100	0.05	6.0	12600	0.29
6.1	2100	0.05	6.1	12810	0.29
6.2	2100	0.05	6.2	13020	0.30
6.3	2100	0.05	6.3	13230	0.30
6.4	2100	0.05	6.4	13440	0.31
6.5	2100	0.05	6.5	13650	0.31

WQ Volume

Total Vault Draw Down

Elevation	Q_{AVG} (CFS)	DV (CF)	DT (HR)	Total T
0.1	0.01	210	11.25	37.12
0.2	0.02	210	3.30	25.87
0.3	0.03	210	2.01	22.57
0.4	0.04	210	1.61	20.56
0.5	0.04	210	1.38	18.95
0.6	0.05	210	1.23	17.57
0.7	0.05	210	1.12	16.34
0.8	0.06	210	1.03	15.22
0.9	0.06	210	0.96	14.19
1.0	0.06	210	0.91	13.22
1.1	0.07	210	0.86	12.31
1.2	0.07	210	0.82	11.45
1.3	0.07	210	0.78	10.63
1.4	0.08	210	0.75	9.85
1.5	0.08	210	0.73	9.09
1.6	0.08	210	0.70	8.37
1.7	0.09	210	0.68	7.67
1.8	0.09	210	0.66	6.99
1.9	0.09	210	0.64	6.33
2.0	0.09	210	0.62	5.69
2.1	0.10	210	0.61	5.07
2.2	0.10	210	0.59	4.46
2.3	0.10	210	0.58	3.87
2.4	0.10	210	0.56	3.30
2.5	0.11	210	0.55	2.73
2.6	0.13	210	0.46	2.18
2.7	0.20	210	0.30	1.72
2.8	0.32	210	0.18	1.42
2.9	0.46	210	0.13	1.24
3.0	0.57	210	0.10	1.11
3.1	0.65	210	0.09	1.01
3.2	0.71	210	0.08	0.92
3.3	0.77	210	0.08	0.84
3.4	0.83	210	0.07	0.76
3.5	0.88	210	0.07	0.69
3.6	0.95	210	0.06	0.63
3.7	1.06	210	0.05	0.56
3.8	1.23	210	0.05	0.51
3.9	1.41	210	0.04	0.46
4.0	1.56	210	0.04	0.42
4.1	1.67	210	0.03	0.38
4.2	1.77	210	0.03	0.35
4.3	1.87	210	0.03	0.32
4.4	1.96	210	0.03	0.28

Vault #2 WQ Discharge to the MWS BF-3-2 (was not included in detention calcs)

Vault #2 WQ Discharge

Discharge vs Elevation Table

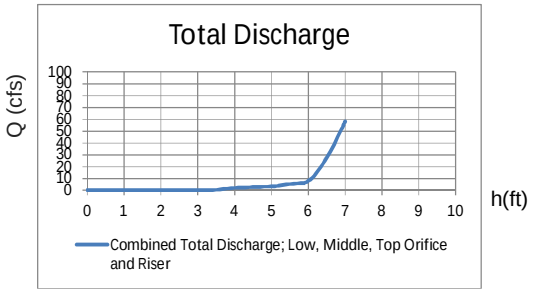
Low orifice:	2.3 "
Number:	1
Cg-low:	0.61
invert elev:	0.00 ft

h (ft)	H/D-low -	H/D-mid -	H/D-top -	Qlow-orif (cfs)	Qlow-weir (cfs)	Qtot-low (cfs)	Qmid-orif (cfs)	Qmid-weir (cfs)	Qtot-med (cfs)	Qtop-orif (cfs)	Qtop-weir (cfs)	Qtot-top (cfs)	Qemerg (cfs)	Qtot (cfs)
0.0	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.1	0.52	0.00	0.15	0.009	0.013	0.013	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.013
0.2	1.04	0.00	0.30	0.046	0.045	0.045	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.045
0.3	1.57	0.00	0.45	0.064	0.079	0.064	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.064
0.4	2.09	0.00	0.60	0.078	0.104	0.078	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.078
0.5	2.61	0.00	0.75	0.090	0.113	0.090	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.090
0.6	3.13	0.00	0.90	0.100	0.114	0.100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.100
0.7	3.65	0.00	1.05	0.110	0.138	0.110	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.110
0.8	4.17	0.00	1.20	0.119	0.235	0.119	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.119
0.9	4.70	0.00	1.35	0.127	0.494	0.127	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.127
1.0	5.22	0.00	1.50	0.134	1.035	0.134	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.134
1.1	5.74	0.00	1.65	0.142	2.027	0.142	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.142
1.2	6.26	0.00	1.80	0.148	3.686	0.148	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.148
1.3	6.78	0.00	1.95	0.155	6.283	0.155	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.155
1.4	7.30	0.00	2.10	0.161	10.153	0.161	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.161
1.5	7.83	0.00	2.25	0.167	15.695	0.167	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.167
1.6	8.35	0.00	2.40	0.173	23.385	0.173	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.173
1.7	8.87	0.00	2.55	0.179	33.776	0.179	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.179
1.8	9.39	0.00	2.70	0.184	47.508	0.184	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.184
1.9	9.91	0.00	2.85	0.190	65.312	0.190	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.190
2.0	10.43	0.00	3.00	0.195	88.015	0.195	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.195
2.1	10.96	0.00	3.15	0.200	116.550	0.200	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.200
2.2	11.48	0.00	3.30	0.205	151.957	0.205	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.205
2.3	12.00	0.00	3.45	0.210	195.393	0.210	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.210
2.4	12.52	0.00	3.60	0.214	248.135	0.214	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.214
2.5	13.04	0.00	3.75	0.219	311.587	0.219	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.219

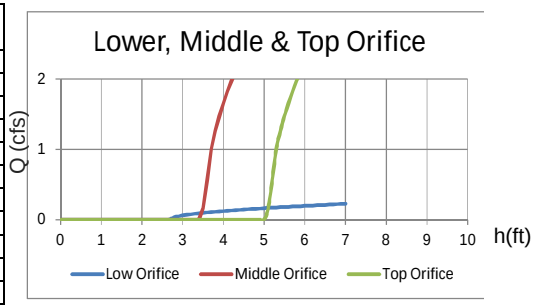
Vault #2 HMP Discharge

Discharge vs Elevation Table

Low orifice:	2 "	Top orifice:	3 "	
Number:	1	Number:	10	
Cg-low:	0.61	Cg-low:	0.61	
invert elev:	2.60 ft	invert elev:	5.00 ft	
Middle orifice:	3 "	Emergency inlet:		
number of orif:	10	Rim height:	5.90 ft	
Cg-middle:	0.61	Area	12.00 sq ft	<---4' x 3'
invert elev:	3.40 ft	Circumference	14.00 ft	



h (ft)	H/D-low -	H/D-mid -	H/D-top -	Qlow-orif (cfs)	Qlow-weir (cfs)	Qtot-low (cfs)	Qmid-orif (cfs)	Qmid-weir (cfs)	Qtot-med (cfs)	Qtop-orif (cfs)	Qtop-weir (cfs)	Qtot-top (cfs)	Qemerg (cfs)	Qtot (cfs)
0.0	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.1	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.2	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.3	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.4	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.5	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.6	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.7	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.8	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.9	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1.0	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1.1	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1.2	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1.3	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1.4	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1.5	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1.6	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1.7	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1.8	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1.9	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.0	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.1	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.2	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.3	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.4	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.5	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.6	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.7	0.60	0.00	0.00	0.014	0.012	0.012	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.012
2.8	1.20	0.00	0.00	0.036	0.039	0.036	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.036
2.9	1.80	0.00	0.00	0.050	0.065	0.050	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.050
3.0	2.40	0.00	0.00	0.060	0.078	0.060	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.060
3.1	3.00	0.00	0.00	0.069	0.080	0.069	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.069
3.2	3.60	0.00	0.00	0.077	0.094	0.077	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.077
3.3	4.20	0.00	0.00	0.084	0.172	0.084	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.084
3.4	4.80	0.00	0.00	0.090	0.405	0.090	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.090
3.5	5.40	0.40	0.00	0.097	0.932	0.097	0.000	0.158	0.158	0.000	0.000	0.000	0.000	0.254
3.6	6.00	0.80	0.00	0.102	1.945	0.102	0.658	0.559	0.559	0.000	0.000	0.000	0.000	0.661
3.7	6.60	1.20	0.00	0.108	3.700	0.108	1.005	1.077	1.005	0.000	0.000	0.000	0.000	1.113
3.8	7.20	1.60	0.00	0.113	6.528	0.113	1.260	1.578	1.260	0.000	0.000	0.000	0.000	1.373
3.9	7.80	2.00	0.00	0.118	10.838	0.118	1.471	1.954	1.471	0.000	0.000	0.000	0.000	1.589
4.0	8.40	2.40	0.00	0.123	17.129	0.123	1.656	2.150	1.656	0.000	0.000	0.000	0.000	1.779
4.1	9.00	2.80	0.00	0.127	25.996	0.127	1.822	2.197	1.822	0.000	0.000	0.000	0.000	1.949

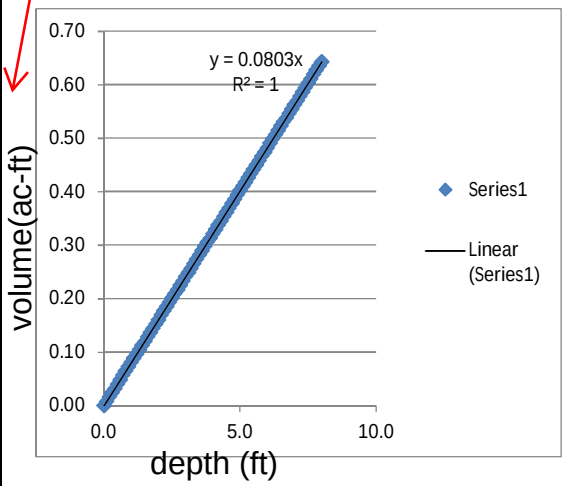


4.2	9.60	3.20	0.00	0.132	38.144	0.132	1.974	2.243	1.974	0.000	0.000	0.000	0.000	2.106
4.3	10.20	3.60	0.00	0.136	54.389	0.136	2.115	2.583	2.115	0.000	0.000	0.000	0.000	2.251
4.4	10.80	4.00	0.00	0.140	75.670	0.140	2.248	3.690	2.248	0.000	0.000	0.000	0.000	2.388
4.5	11.40	4.40	0.00	0.144	103.061	0.144	2.373	6.244	2.373	0.000	0.000	0.000	0.000	2.517
4.6	12.00	4.80	0.00	0.148	137.773	0.148	2.491	11.166	2.491	0.000	0.000	0.000	0.000	2.639
4.7	12.60	5.20	0.00	0.152	181.166	0.152	2.605	19.648	2.605	0.000	0.000	0.000	0.000	2.756
4.8	13.20	5.60	0.00	0.155	234.757	0.155	2.713	33.180	2.713	0.000	0.000	0.000	0.000	2.869
4.9	13.80	6.00	0.00	0.159	300.229	0.159	2.818	53.587	2.818	0.000	0.000	0.000	0.000	2.977
5.0	14.40	6.40	0.00	0.163	379.439	0.163	2.918	83.053	2.918	0.000	0.000	0.000	0.000	3.081
5.1	15.00	6.80	0.40	0.166	474.424	0.166	3.016	124.157	3.016	0.000	0.158	0.158	0.000	3.339
5.2	15.60	7.20	0.80	0.169	587.416	0.169	3.110	179.902	3.110	0.658	0.559	0.559	0.000	3.838
5.3	16.20	7.60	1.20	0.173	720.842	0.173	3.201	253.745	3.201	1.005	1.077	1.005	0.000	4.379
5.4	16.80	8.00	1.60	0.176	877.340	0.176	3.290	349.629	3.290	1.260	1.578	1.260	0.000	4.726
5.5	17.40	8.40	2.00	0.179	1059.762	0.179	3.377	472.011	3.377	1.471	1.954	1.471	0.000	5.028
5.6	18.00	8.80	2.40	0.182	1271.187	0.182	3.461	625.898	3.461	1.656	2.150	1.656	0.000	5.300
5.7	18.60	9.20	2.80	0.185	1514.925	0.185	3.544	816.871	3.544	1.822	2.197	1.822	0.000	5.551
5.8	19.20	9.60	3.20	0.189	1794.529	0.189	3.624	1051.123	3.624	1.974	2.243	1.974	0.000	5.787
5.9	19.80	10.00	3.60	0.192	2113.801	0.192	3.703	1335.483	3.703	2.115	2.583	2.115	0.000	6.010
6.0	20.40	10.40	4.00	0.194	2476.804	0.194	3.780	1677.452	3.780	2.248	3.690	2.248	1.372	7.595

Vault#2 Stage Storage

depth	area sft	area (ac)	elevation	volume (cf)	volume (acft)
0.0	3500	0.08	0.0	0	0.00
0.1	3500	0.08	0.1	350	0.01
0.2	3500	0.08	0.2	700	0.02
0.3	3500	0.08	0.3	1050	0.02
0.4	3500	0.08	0.4	1400	0.03
0.5	3500	0.08	0.5	1750	0.04
0.6	3500	0.08	0.6	2100	0.05
0.7	3500	0.08	0.7	2450	0.06
0.8	3500	0.08	0.8	2800	0.06
0.9	3500	0.08	0.9	3150	0.07
1.0	3500	0.08	1.0	3500	0.08
1.1	3500	0.08	1.1	3850	0.09
1.2	3500	0.08	1.2	4200	0.10
1.3	3500	0.08	1.3	4550	0.10
1.4	3500	0.08	1.4	4900	0.11
1.5	3500	0.08	1.5	5250	0.12
1.6	3500	0.08	1.6	5600	0.13
1.7	3500	0.08	1.7	5950	0.14
1.8	3500	0.08	1.8	6300	0.14
1.9	3500	0.08	1.9	6650	0.15
2.0	3500	0.08	2.0	7000	0.16
2.1	3500	0.08	2.1	7350	0.17
2.2	3500	0.08	2.2	7700	0.18
2.3	3500	0.08	2.3	8050	0.18
2.4	3500	0.08	2.4	8400	0.19
2.5	3500	0.08	2.5	8750	0.20
2.6	3500	0.08	2.6	9100	0.21
2.7	3500	0.08	2.7	9450	0.22
2.8	3500	0.08	2.8	9800	0.22
2.9	3500	0.08	2.9	10150	0.23
3.0	3500	0.08	3.0	10500	0.24
3.1	3500	0.08	3.1	10850	0.25
3.2	3500	0.08	3.2	11200	0.26
3.3	3500	0.08	3.3	11550	0.27
3.4	3500	0.08	3.4	11900	0.27
3.5	3500	0.08	3.5	12250	0.28
3.6	3500	0.08	3.6	12600	0.29
3.7	3500	0.08	3.7	12950	0.30
3.8	3500	0.08	3.8	13300	0.31
3.9	3500	0.08	3.9	13650	0.31
4.0	3500	0.08	4.0	14000	0.32
4.1	3500	0.08	4.1	14350	0.33
4.2	3500	0.08	4.2	14700	0.34
4.3	3500	0.08	4.3	15050	0.35
4.4	3500	0.08	4.4	15400	0.35
4.5	3500	0.08	4.5	15750	0.36
4.6	3500	0.08	4.6	16100	0.37
4.7	3500	0.08	4.7	16450	0.38
4.8	3500	0.08	4.8	16800	0.39
4.9	3500	0.08	4.9	17150	0.39
5.0	3500	0.08	5.0	17500	0.40
5.1	3500	0.08	5.1	17850	0.41
5.2	3500	0.08	5.2	18200	0.42
5.3	3500	0.08	5.3	18550	0.43
5.4	3500	0.08	5.4	18900	0.43
5.5	3500	0.08	5.5	19250	0.44
5.6	3500	0.08	5.6	19600	0.45
5.7	3500	0.08	5.7	19950	0.46

WQ Volume



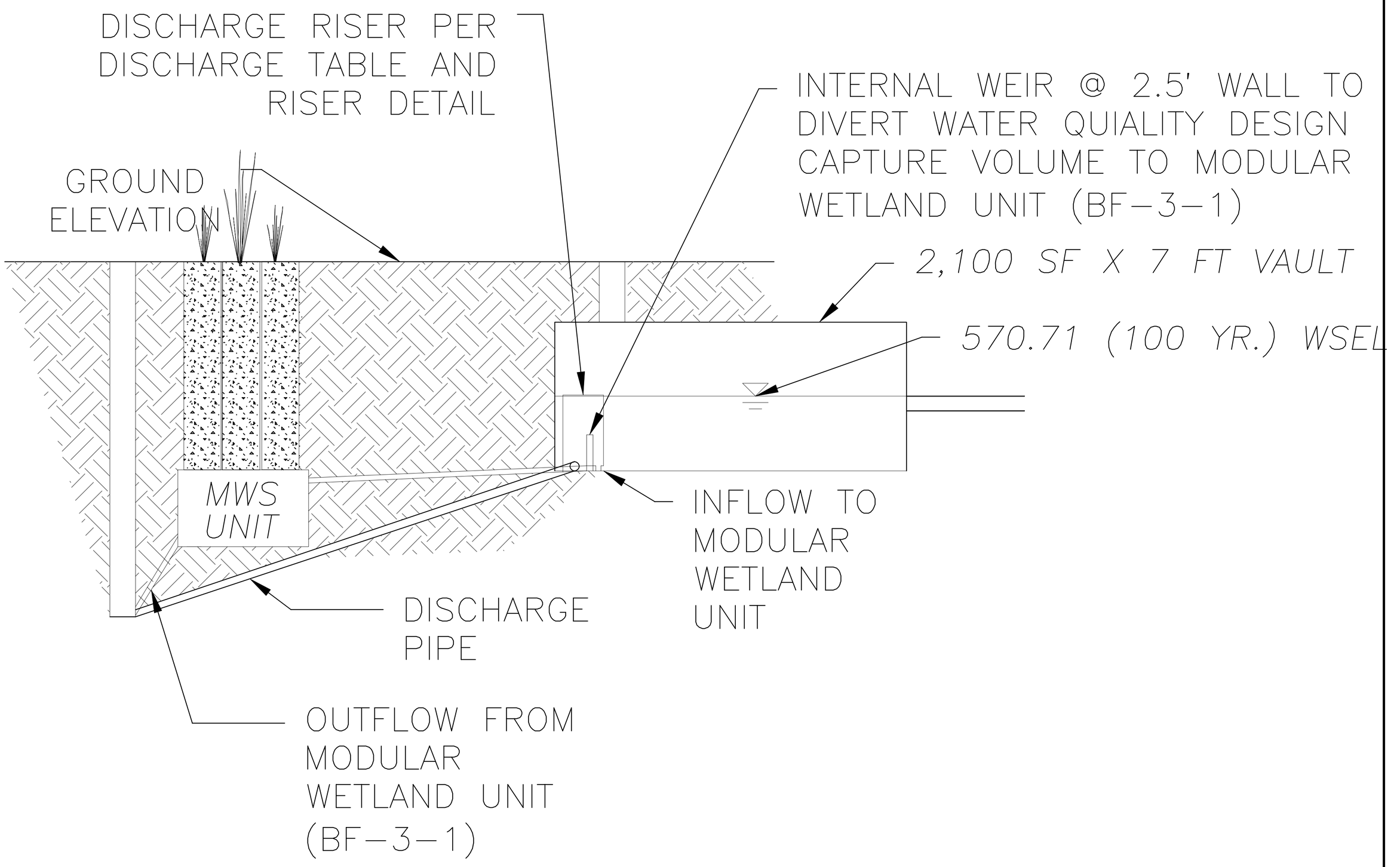
5.8	3500	0.08	5.8	20300	0.47
5.9	3500	0.08	5.9	20650	0.47
6.0	3500	0.08	6.0	21000	0.48
6.1	3500	0.08	6.1	21350	0.49
6.2	3500	0.08	6.2	21700	0.50
6.3	3500	0.08	6.3	22050	0.51
6.4	3500	0.08	6.4	22400	0.51
6.5	3500	0.08	6.5	22750	0.52

WQ Volume

Total Vault Draw Down

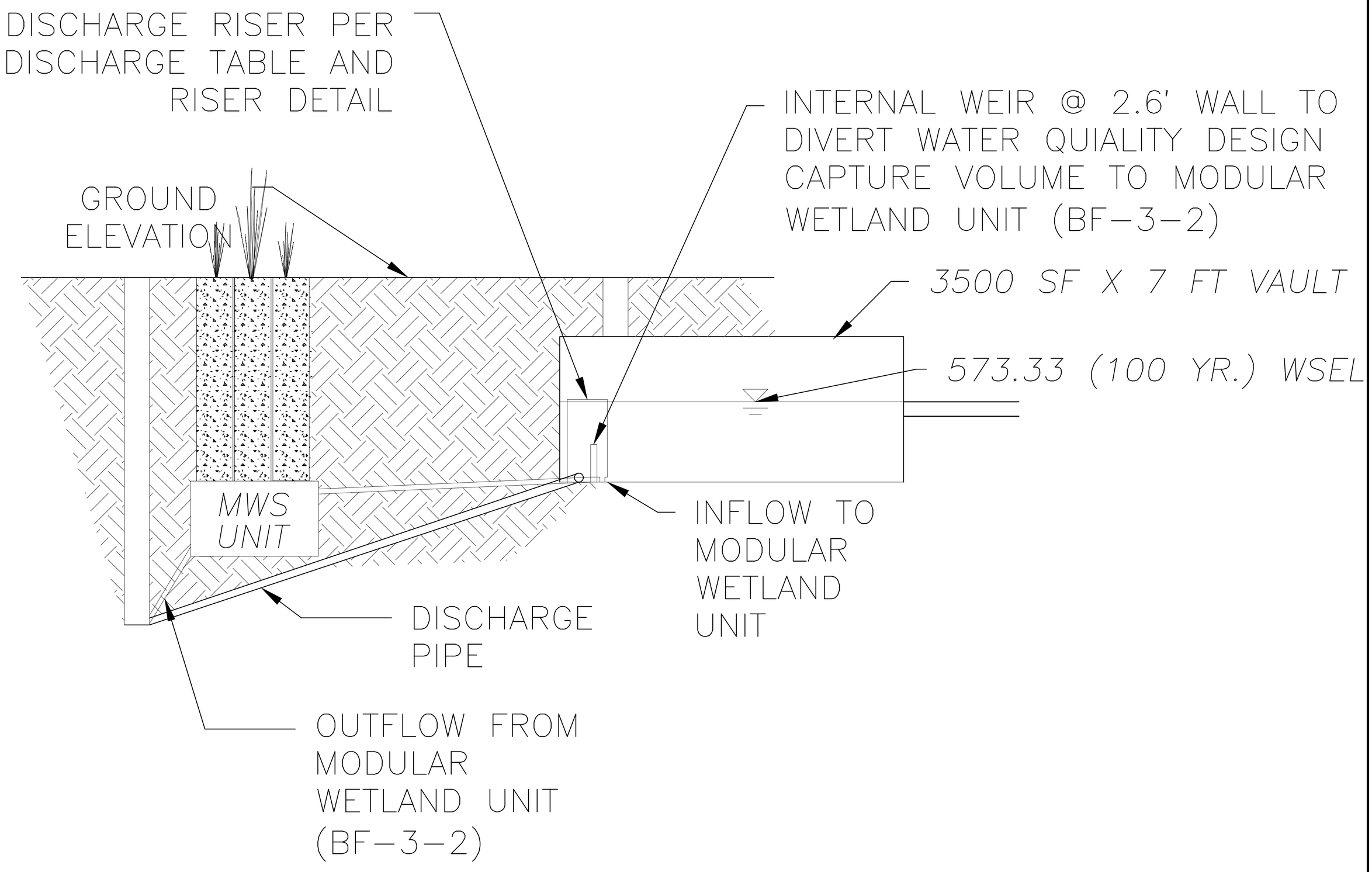
Elevation	Q_{AVG} (CFS)	DV (CF)	DT (HR)	Total T
0.1	0.01	350	14.58	39.00
0.2	0.03	350	3.35	24.43
0.3	0.05	350	1.79	21.08
0.4	0.07	350	1.37	19.29
0.5	0.08	350	1.16	17.92
0.6	0.10	350	1.02	16.76
0.7	0.11	350	0.93	15.73
0.8	0.11	350	0.85	14.81
0.9	0.12	350	0.79	13.96
1.0	0.13	350	0.75	13.16
1.1	0.14	350	0.70	12.42
1.2	0.14	350	0.67	11.71
1.3	0.15	350	0.64	11.04
1.4	0.16	350	0.61	10.40
1.5	0.16	350	0.59	9.79
1.6	0.17	350	0.57	9.19
1.7	0.18	350	0.55	8.62
1.8	0.18	350	0.54	8.07
1.9	0.19	350	0.52	7.54
2.0	0.19	350	0.51	7.02
2.1	0.20	350	0.49	6.51
2.2	0.20	350	0.48	6.02
2.3	0.21	350	0.47	5.54
2.4	0.21	350	0.46	5.07
2.5	0.22	350	0.45	4.61
2.6	0.22	350	0.44	4.16
2.7	0.23	350	0.42	3.72
2.8	0.25	350	0.38	3.30
2.9	0.28	350	0.35	2.92
3.0	0.29	350	0.33	2.57
3.1	0.31	350	0.32	2.24
3.2	0.32	350	0.30	1.92
3.3	0.33	350	0.29	1.62
3.4	0.34	350	0.28	1.33
3.5	0.43	350	0.23	1.04
3.6	0.72	350	0.14	0.82
3.7	1.15	350	0.08	0.68
3.8	1.51	350	0.06	0.60
3.9	1.75	350	0.06	0.53
4.0	1.96	350	0.05	0.48
4.1	2.14	350	0.05	0.43
4.2	2.31	350	0.04	0.38
4.3	2.47	350	0.04	0.34
4.4	2.61	350	0.04	0.30

ATTACHMENT 3 – Vault Details



DETENTION VAULT (BF-3-1) DETAIL

NOT TO SCALE



DETENTION VAULT (BF-3-2) DETAIL

NOT TO SCALE

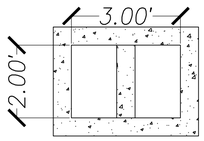
VAULT OUTLET STRUCTURE DETAILS

LAS POSAS ALTA

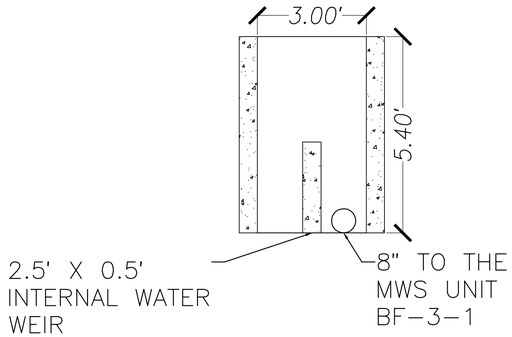
CITY OF SAN MARCOS, CALIFORNIA

VAULT 1

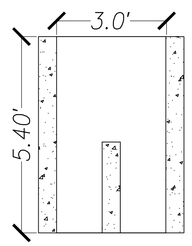
PLAN VIEW



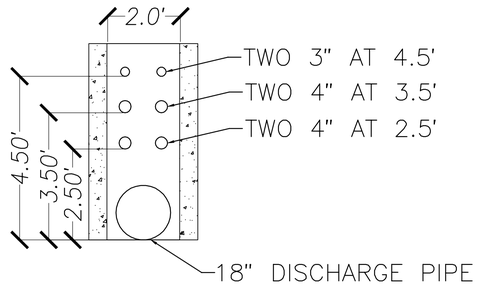
RIGHT SIDE



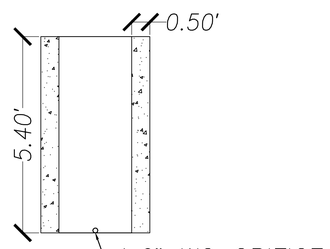
LEFT SIDE



FRONT SIDE

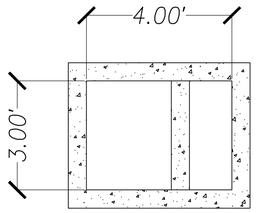


BACK SIDE

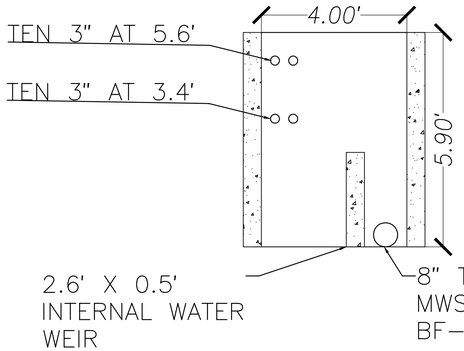


VAULT 2

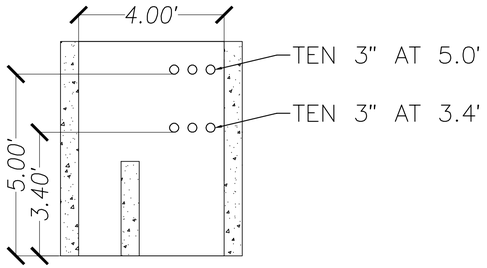
PLAN VIEW



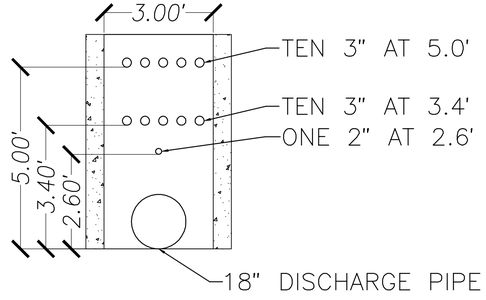
RIGHT SIDE



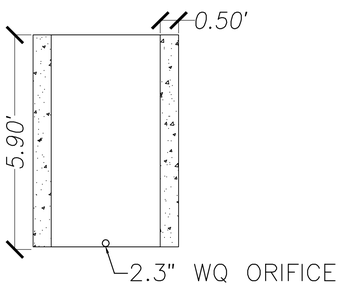
LEFT SIDE



FRONT SIDE



BACK SIDE



VAULT OUTLET STRUCTURE DETAILS

LAS POSAS ALTA

CITY OF SAN MARCOS, CALIFORNIA

ATTACHMENT 4 - SWMM Input Data (Existing and Proposed Models)

POST PROJECT CONDITIONS		
DMA1-C		
L=	330	ft
A=	1.650	ac
% Impervious	77.1%	
W=	218	ft
US Elev=	577.0	ft
DS Elev=	573.6	ft
S=	1.0%	
DMA1-D		
L=	170	ft
A=	0.270	ac
% Impervious	66.9%	
W=	69	ft
US Elev=	580.8	ft
DS Elev=	578.0	ft
S=	1.65%	
DMA2-C		
L=	90	ft
A=	0.430	ac
% Impervious	66.2%	
W=	208	ft
US Elev=	577.2	ft
DS Elev=	576.4	ft
S=	0.89%	
DMA2-D		
L=	565	ft
A=	3.030	ac
% Impervious	71.4%	
W=	234	ft
US Elev=	585.0	ft
DS Elev=	579.0	ft
S=	1.06%	
DMA4-C		
L=	47	ft
A=	0.110	ac
% Impervious	73.4%	
W=	102	ft
US Elev=	573.6	ft
DS Elev=	571.0	ft
S=	5.53%	
DMA3-EX-D		
L=	212	ft
A=	0.303	ac
% Impervious	77.3%	
W=	62	ft
US Elev=	584.0	ft
DS Elev=	575.0	ft
S=	4.25%	
DMA3-EX-C		
L=	217	ft
A=	0.240	ac
% Impervious	72.4%	
W=	48	ft
US Elev=	575	ft
DS Elev=	572	ft
S=	1.38%	
SM		
L=	33	ft
A=	0.120	ac
% Impervious	0.0%	
W=	158	ft
US Elev=	576	ft
DS Elev=	567	ft
S=	27.27%	
DMA5-C		
L=	137	ft
A=	0.440	ac
% Impervious	80.1%	
W=	140	ft
US Elev=	574.0	ft
DS Elev=	572.7	ft
S=	0.95%	

Deminimis		
L=	25	ft
A=	0.005	ac
% Impervious	100.0%	
W=	8	ft
US Elev=	569.0	ft
DS Elev=	566.0	ft
S=	12.00%	

Area (ac) 6.598

PRE PROJECT CONDITIONS		
DMA1-C		
L=	299	ft
A=	2.797	ac
% Impervious	0.0%	
W=	407	ft
US Elev=	577	ft
DS Elev=	570	ft
S=	2.3%	
DMA1-D		
L=	500	ft
A=	3.302	ac
% Impervious	0.0%	
W=	288	ft
US Elev=	584	ft
DS Elev=	575	ft
S=	1.80%	
DMA2-EX-D		
L=	212	ft
A=	0.263	ac
% Impervious	80.0%	
W=	54	ft
US Elev=	584	ft
DS Elev=	575	ft
S=	4.25%	
DMA2-EX-C		
L=	217	ft
A=	0.190	ac
% Impervious	80.0%	
W=	38	ft
US Elev=	575	ft
DS Elev=	572	ft
S=	1.38%	
DMA3-EX-D		
L=	80	ft
A=	0.046	ac
% Impervious	91.0%	
W=	25	ft
US Elev=	584	ft
DS Elev=	579	ft
S=	6.88%	
Total Area (ac) =	6.598	

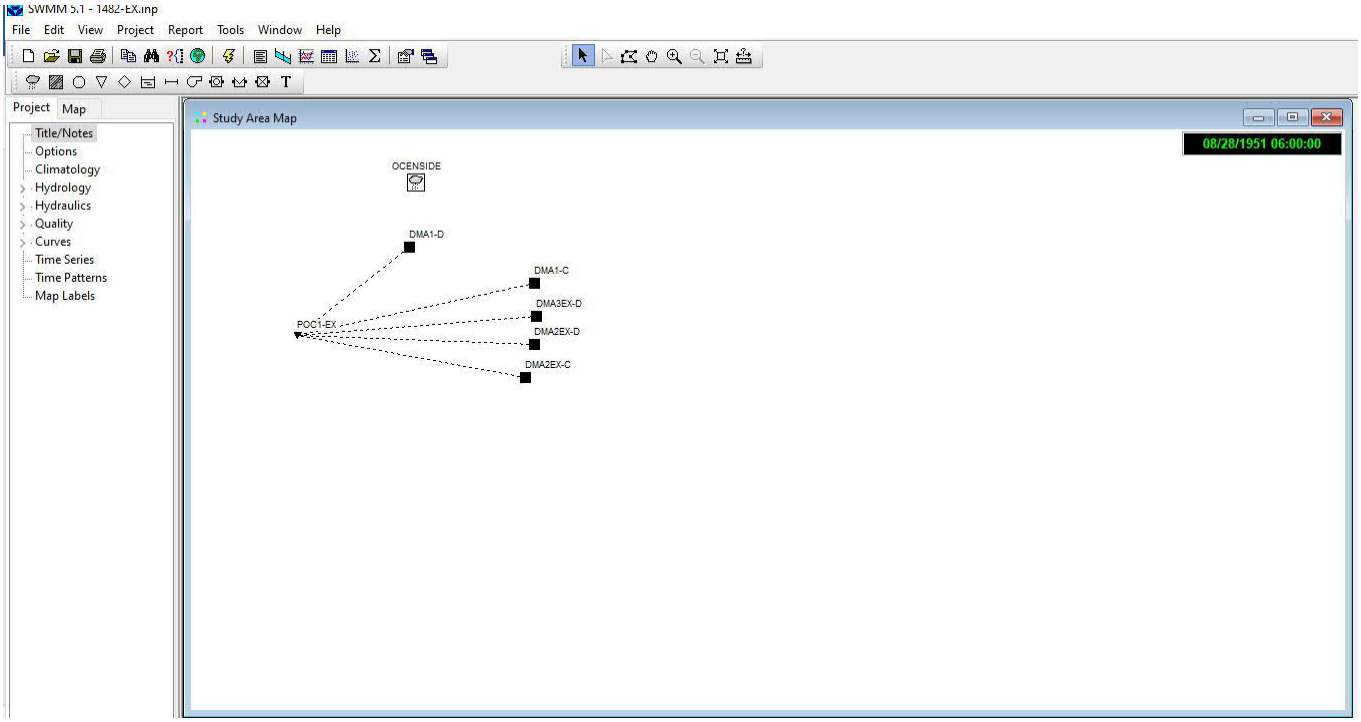
0.263+0.04

80X0.263+59.57x0.04

0.19+0.05

43.44x0.05+80x0.19

Pre-Developed Condition



```
[TITLE]
;;Project Title/Notes
LAS POSAS - Pre-project Condition

[OPTIONS]
;;Option             Value
FLOW_UNITS           CFS
INFILTRATION         GREEN_AMPT
FLOW_ROUTING         KINWAVE
LINK_OFFSETS         DEPTH
MIN_SLOPE            0
ALLOW_PONDING        NO
SKIP_STEADY_STATE    NO

START_DATE           08/28/1951
START_TIME           05:00:00
REPORT_START_DATE    08/28/1951
REPORT_START_TIME    05:00:00
END_DATE             05/23/2008
END_TIME             23:00:00
SWEEP_START          01/01
SWEEP_END            12/31
DRY_DAYS             0
REPORT_STEP          01:00:00
WET_STEP             00:15:00
DRY_STEP             04:00:00
ROUTING_STEP         0:01:00
RULE_STEP            00:00:00

INERTIAL_DAMPING     PARTIAL
NORMAL_FLOW_LIMITED  BOTH
FORCE_MAIN_EQUATION  H-W
VARIABLE_STEP        0.75
LENGTHENING_STEP     0
MIN_SURFAREA         12.557
MAX_TRIALS           8
HEAD_TOLERANCE       0.005
SYS_FLOW_TOL         5
LAT_FLOW_TOL         5
MINIMUM_STEP         0.5
THREADS              1

[EVAPORATION]
;;Data Source    Parameters
;;-------------- ----------------
MONTHLY          0.06   0.08   0.11   0.15   0.17   0.19   0.19   0.18   0.15   0.11   0.08   0.06
DRY_ONLY         NO

[RAINGAGES]
```

```
;;Name           Format    Interval SCF      Source
;;-------------- --------- ------ ------ ----------
OCENSIDE         VOLUME    1:00     1.0      TIMESERIES OCEANSIDE

[SUBCATCHMENTS]
;;Name           Rain Gage        Outlet           Area     %Imperv  Width    %Slope   CurbLen  SnowPack
;;-------------- ---------------- ---------------- -------- -------- -------- -------- -------- ----------------
;Existing Soil Type D
DMA1-D           OCENSIDE         POC1-EX          3.302    0        288      1.80     0
;Existing Soil c
DMA1-C           OCENSIDE         POC1-EX          2.797    0        398      2.3      0
;Exisitng Paved Entrance to don not be disturbed in proposed conditions
;Drains to proposed BMP BF-3-2 in the proposed conditions
DMA3EX-D         OCENSIDE         POC1-EX          0.046    91       25       6.88     0
;Offsite developed area- Soil D
DMA2EX-D         OCENSIDE         POC1-EX          0.263    80       54       4.25     0
;Exisitng offsite developed area- soil C
DMA2EX-C         OCENSIDE         POC1-EX          0.19     80       38       1.38     0

[SUBAREAS]
;;Subcatchment   N-Imperv   N-Perv     S-Imperv   S-Perv     PctZero    RouteTo    PctRouted
;;-------------- ---------- ---------- ---------- ---------- ---------- ---------- ----------
DMA1-D           0.012      0.15       0.05       0.10       25         OUTLET
DMA1-C           0.012      0.15       0.05       0.1        25         OUTLET
DMA3EX-D         0.012      0.15       0.05       0.1        25         OUTLET
DMA2EX-D         0.012      0.15       0.05       0.05       25         OUTLET
DMA2EX-C         0.012      0.15       0.05       0.10       25         OUTLET

[INFILTRATION]
;;Subcatchment   Suction    Ksat       IMD
;;-------------- ---------- ---------- ----------
DMA1-D           9          0.025      0.33
DMA1-C           6          0.1        0.32
DMA3EX-D         9          0.01875    0.33
DMA2EX-D         9          0.01875    0.33
DMA2EX-C         6          0.075      0.32

[OUTFALLS]
;;Name           Elevation  Type       Stage Data       Gated    Route To
;;-------------- ---------- ---------- ---------------- -------- ----------------
POC1-EX          0          FREE                        NO

[TIMESERIES]
;;Name           Date       Time       Value
;;-------------- ---------- ---------- ----------
OCEANSIDE        FILE "R:\1482\&Hyd\HMP\OCEANSIDE.prn"

[REPORT]
;;Reporting Options
```

```
SUBCATCHMENTS ALL
NODES ALL
LINKS ALL

[TAGS]

[MAP]
DIMENSIONS 1196.632 7154.180 2292.457 8209.745
Units      None

[COORDINATES]
;;Node           X-Coord            Y-Coord
;;-------------- ------------------ ------------------
POC1-EX          886.557            7835.483

[VERTICES]
;;Link           X-Coord            Y-Coord
;;-------------- ------------------ ------------------

[Polygons]
;;Subcatchment   X-Coord            Y-Coord
;;-------------- ------------------ ------------------
DMA1-D           1090.040           7997.179
DMA1-C           1318.049           7930.865
DMA3EX-D         1321.683           7870.910
DMA2EX-D         1318.049           7820.040
DMA2EX-C         1301.698           7759.177

[SYMBOLS]
;;Gage           X-Coord            Y-Coord
;;-------------- ------------------ ------------------
OCENSIDE         1105.483           8110.729
```

```
EPA STORM WATER MANAGEMENT MODEL - VERSION 5.1 (Build 5.1.014)
--------------------------------------------------------------

LAS POSAS - Pre-project Condition


**********************************************************
NOTE: The summary statistics displayed in this report are
based on results found at every computational time step,
not just on results from each reporting time step.
**********************************************************

***************
Analysis Options
***************
Flow Units ............... CFS
Process Models:
  Rainfall/Runoff ........ YES
  RDII ................... NO
  Snowmelt ............... NO
  Groundwater ............ NO
  Flow Routing ........... NO
  Water Quality .......... NO
Infiltration Method ...... GREEN_AMPT
Starting Date ............ 08/28/1951 05:00:00
Ending Date .............. 05/23/2008 23:00:00
Antecedent Dry Days ...... 0.0
Report Time Step ......... 01:00:00
Wet Time Step ............ 00:15:00
Dry Time Step ............ 04:00:00


*************************        Volume         Depth
Runoff Quantity Continuity     acre-feet        inches
*************************     ---------       -------
Total Precipitation ......       371.275       675.250
Evaporation Loss .........        10.880        19.788
Infiltration Loss ........       298.874       543.572
Surface Runoff ...........        63.835       116.099
Final Storage ............         0.001         0.003
Continuity Error (%) .....        -0.624


*************************        Volume        Volume
Flow Routing Continuity        acre-feet      10^6 gal
*************************     ---------     ---------
Dry Weather Inflow .......         0.000         0.000
Wet Weather Inflow .......        63.835        20.802
Groundwater Inflow .......         0.000         0.000
RDII Inflow ..............         0.000         0.000
External Inflow ..........         0.000         0.000
External Outflow .........        63.835        20.802
Flooding Loss ............         0.000         0.000
Evaporation Loss .........         0.000         0.000
```

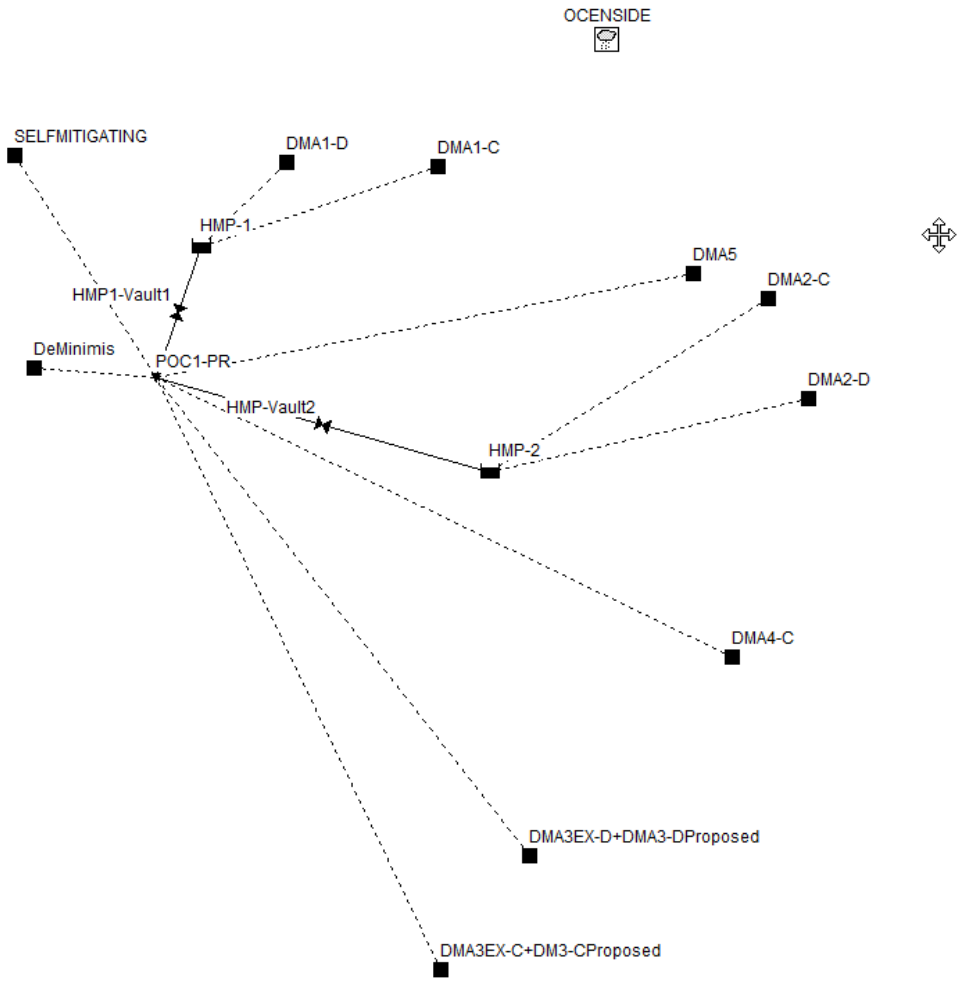
Exfiltration Loss	0.000	0.000
Initial Stored Volume	0.000	0.000
Final Stored Volume	0.000	0.000
Continuity Error (%)	0.000	

****
Subcatchment Runoff Summary
****

Subcatchment	Total Precip in	Total Runon in	Total Evap in	Total Infil in	Imperv Runoff in	Perv Runoff in	Total Runoff in	Total Runoff 10^6 gal	Peak Runoff CFS	Runoff Coeff
DMA1-D	675.25	0.00	22.30	539.12	0.00	119.93	119.93	10.75	3.25	0.178
DMA1-C	675.25	0.00	4.97	628.30	0.00	43.04	43.04	3.27	2.97	0.064
DMA3EX-D	675.25	0.00	93.24	42.97	534.09	17.00	551.09	0.69	0.06	0.816
DMA2EX-D	675.25	0.00	86.06	90.76	466.61	41.89	508.49	3.63	0.31	0.753
DMA2EX-C	675.25	0.00	84.74	121.59	463.79	12.78	476.56	2.46	0.23	0.706

Analysis begun on: Tue Feb 22 14:46:14 2022
Analysis ended on: Tue Feb 22 14:46:35 2022
Total elapsed time: 00:00:21

POC 1 – Developed Condition



```
[TITLE]
;;Project Title/Notes
LAS POSAS - Post-project Condition

[OPTIONS]
;;Option             Value
FLOW_UNITS           CFS
INFILTRATION         GREEN_AMPT
FLOW_ROUTING         KINWAVE
LINK_OFFSETS         DEPTH
MIN_SLOPE            0
ALLOW_PONDING        NO
SKIP_STEADY_STATE    NO

START_DATE           08/28/1951
START_TIME           05:00:00
REPORT_START_DATE    08/28/1951
REPORT_START_TIME    05:00:00
END_DATE             05/23/2008
END_TIME             23:00:00
SWEEP_START          01/01
SWEEP_END            12/31
DRY_DAYS             0
REPORT_STEP          01:00:00
WET_STEP             00:15:00
DRY_STEP             04:00:00
ROUTING_STEP         0:01:00
RULE_STEP            00:00:00

INERTIAL_DAMPING     PARTIAL
NORMAL_FLOW_LIMITED  BOTH
FORCE_MAIN_EQUATION  H-W
VARIABLE_STEP        0.75
LENGTHENING_STEP     0
MIN_SURFAREA         12.557
MAX_TRIALS           8
HEAD_TOLERANCE       0.005
SYS_FLOW_TOL         5
LAT_FLOW_TOL         5
MINIMUM_STEP         0.5
THREADS              1

[EVAPORATION]
;;Data Source    Parameters
;;-------------- ----------------
MONTHLY          0.06   0.08   0.11   0.15   0.17   0.19   0.19   0.18   0.15   0.11   0.08   0.06
DRY_ONLY         NO

[RAINGAGES]
;;Name           Format    Interval SCF      Source
;;-------------- --------- ------ ------ ----------
OCENSIDE         VOLUME    1:00     1.0      TIMESERIES OCEANSIDE

[SUBCATCHMENTS]
;;Name           Rain Gage        Outlet           Area     %Imperv  Width    %Slope   CurbLen  SnowPack
```

```
;;-------------- ---------------- ---------------- -------- -------- -------- -------- -------- ----------------
;Existing Soil Type D
DMA1-D           OCENSIDE         HMP-1            0.27     66.9     69       1.65     0
;Existing Soil c
DMA1-C           OCENSIDE         HMP-1            1.65     77.1     218      1        0
;Offsite developed area- Soil D
;+ Driveway and sidewalk from proposed area drains to the flow based MWS (BF-3-3)
DMA3EX-D+DMA3-DProposed OCENSIDE         POC1-PR          0.303    77.3     62       4.25     0
;Exisitng offsite developed area- soil C
;+ proposed driveways and sidewalks drain to the MWS BF-3-3
DMA3EX-C+DM3-CProposed OCENSIDE         POC1-PR          0.24     72.4     48       1.38     0
DMA2-C           OCENSIDE         HMP-2            0.43     66.2     208      0.89     0
;Including the exisitng entrance that drains to the proposed BMP
DMA2-D           OCENSIDE         HMP-2            3.03     71.4     234      1.06     0
;Drive way that can't be routed to the BMP on site
;Counted for via Stormwater Equivalency for WQ
DMA4-C           OCENSIDE         POC1-PR          0.11     73.4     102      5.53     0
;Disturbed pervious slopes drain away from the Site
SELFMITIGATING   OCENSIDE         POC1-PR          0.12     0        158      27.27    0
;TO BF-3-5
DMA5             OCENSIDE         POC1-PR          0.44     80.1     140      0.95     0
DeMinimis        OCENSIDE         poc1-pr          0.005    100      8        12       0

[SUBAREAS]
;;Subcatchment   N-Imperv   N-Perv     S-Imperv   S-Perv     PctZero    RouteTo    PctRouted
;;-------------- ---------- ---------- ---------- ---------- ---------- ---------- ----------
DMA1-D           0.012      0.15       0.05       0.10       25         OUTLET
DMA1-C           0.012      0.15       0.05       0.1        25         OUTLET
DMA3EX-D+DMA3-DProposed 0.012      0.15       0.05       0.05       25         OUTLET
DMA3EX-C+DM3-CProposed 0.012      0.15       0.05       0.10       25         OUTLET
DMA2-C           0.012      0.15       0.05       0.10       25         OUTLET
DMA2-D           0.012      0.15       0.05       0.10       25         OUTLET
DMA4-C           0.012      0.15       0.05       0.1        25         OUTLET
SELFMITIGATING   0.012      0.15       0.05       0.10       25         OUTLET
DMA5             0.012      0.15       0.05       0.1        25         OUTLET
DeMinimis        0.012      0.15       0.05       0.1        25         OUTLET

[INFILTRATION]
;;Subcatchment   Suction    Ksat       IMD
;;-------------- ---------- ---------- ----------
DMA1-D           9          0.01875    0.33
DMA1-C           6          0.075      0.32
DMA3EX-D+DMA3-DProposed 9          0.01875    0.33
DMA3EX-C+DM3-CProposed 6          0.075      0.32
DMA2-C           6          0.075      0.32
DMA2-D           9          0.01875    0.33
DMA4-C           6          0.075      0.32
SELFMITIGATING   6          0.075      0.32
DMA5             6          0.075      0.32
DeMinimis        6          0.075      0.32

[OUTFALLS]
;;Name           Elevation  Type       Stage Data       Gated    Route To
;;-------------- ---------- ---------- ---------------- -------- ----------------
POC1-PR          0          FREE                        NO
```

```
Attenuated-flow-Vault2 0          FREE                       NO
Attenuated-flow-vault1 0          FREE                       NO

[STORAGE]
;;Name           Elev.    MaxDepth   InitDepth  Shape      Curve Name/Params            N/A      Fevap    Psi      Ksat     IMD
;;-------------- -------- ---------- ---------- ---------- ---------------------------- -------- --------          -------- --------
;Vault HMP-1
HMP-1            0        6.5        0          TABULAR    Vault-1                      0        0
HMP-2            0        6.5        0          TABULAR    Vault-2                      0        0
Node108          0        7          2.6        TABULAR    Vault-2                      0        0
Node204          0        6.5        2.5        TABULAR    Vault-1                      0        0

[OUTLETS]
;;Name           From Node        To Node          Offset     Type            QTable/Qcoeff    Qexpon     Gated
;;-------------- ---------------- ---------------- ---------- --------------- ---------------- ---------- --------
WQ-Vault1        HMP-1            POC1-PR          0          TABULAR/HEAD    WQ-VAULT1                   NO
HMP1-Vault1      HMP-1            POC1-PR          0          TABULAR/HEAD    HMP1-Vault1                 NO
WQ-Vault2        HMP-2            POC1-PR          0          TABULAR/HEAD    Wq-Vault2                   NO
HMP-Vault2       HMP-2            POC1-PR          0          TABULAR/HEAD    HMP2-Vault2                 NO
HMP-DetentionVault2 Node108          Attenuated-flow-Vault2 0          TABULAR/HEAD    HMP2-Vault2                NO
HMP-DETENTION-Vault1 Node204          Attenuated-flow-vault1 0          TABULAR/HEAD    HMP1-Vault1                NO

[INFLOWS]
;;Node           Constituent      Time Series      Type     Mfactor  Sfactor  Baseline Pattern
;;-------------- ---------------- ---------------- -------- -------- -------- -------- --------
Node108          FLOW             100-YearInflow   FLOW     1.0      1.0
Node204          FLOW             100-Year-inflowHydrograph FLOW     1.0      1.0

[CURVES]
;;Name           Type       X-Value    Y-Value
;;-------------- ---------- ---------- ----------
WQ-VAULT1        Rating     0.0        0.000
WQ-VAULT1                   0.1        0.010
WQ-VAULT1                   0.2        0.025
WQ-VAULT1                   0.3        0.033
WQ-VAULT1                   0.4        0.039
WQ-VAULT1                   0.5        0.045
WQ-VAULT1                   0.6        0.050
WQ-VAULT1                   0.7        0.054
WQ-VAULT1                   0.8        0.059
WQ-VAULT1                   0.9        0.062
WQ-VAULT1                   1.0        0.066
WQ-VAULT1                   1.1        0.069
WQ-VAULT1                   1.2        0.073
WQ-VAULT1                   1.3        0.076
WQ-VAULT1                   1.4        0.079
WQ-VAULT1                   1.5        0.082
WQ-VAULT1                   1.6        0.085
WQ-VAULT1                   1.7        0.087
WQ-VAULT1                   1.8        0.090
WQ-VAULT1                   1.9        0.093
WQ-VAULT1                   2.0        0.095
WQ-VAULT1                   2.1        0.097
WQ-VAULT1                   2.2        0.100
WQ-VAULT1                   2.3        0.102
```

```
WQ-VAULT1                 2.4       0.104
WQ-VAULT1                 2.5       0.107
;
HMP1-Vault1      Rating     0.0       0.000
HMP1-Vault1                 0.1       0.000
HMP1-Vault1                 0.2       0.000
HMP1-Vault1                 0.3       0.000
HMP1-Vault1                 0.4       0.000
HMP1-Vault1                 0.5       0.000
HMP1-Vault1                 0.6       0.000
HMP1-Vault1                 0.7       0.000
HMP1-Vault1                 0.8       0.000
HMP1-Vault1                 0.9       0.000
HMP1-Vault1                 1.0       0.000
HMP1-Vault1                 1.1       0.000
HMP1-Vault1                 1.2       0.000
HMP1-Vault1                 1.3       0.000
HMP1-Vault1                 1.4       0.000
HMP1-Vault1                 1.5       0.000
HMP1-Vault1                 1.6       0.000
HMP1-Vault1                 1.7       0.000
HMP1-Vault1                 1.8       0.000
HMP1-Vault1                 1.9       0.000
HMP1-Vault1                 2.0       0.000
HMP1-Vault1                 2.1       0.000
HMP1-Vault1                 2.2       0.000
HMP1-Vault1                 2.3       0.000
HMP1-Vault1                 2.4       0.000
HMP1-Vault1                 2.5       0.000
HMP1-Vault1                 2.6       0.037
HMP1-Vault1                 2.7       0.138
HMP1-Vault1                 2.8       0.280
HMP1-Vault1                 2.9       0.413
HMP1-Vault1                 3.0       0.493
HMP1-Vault1                 3.1       0.562
HMP1-Vault1                 3.2       0.624
HMP1-Vault1                 3.3       0.680
HMP1-Vault1                 3.4       0.732
HMP1-Vault1                 3.5       0.780
HMP1-Vault1                 3.6       0.863
HMP1-Vault1                 3.7       1.006
HMP1-Vault1                 3.8       1.18981
HMP1-Vault1                 3.9       1.36154
HMP1-Vault1                 4.0       1.47983
HMP1-Vault1                 4.1       1.585
HMP1-Vault1                 4.2       1.682
HMP1-Vault1                 4.3       1.772
HMP1-Vault1                 4.4       1.8565
HMP1-Vault1                 4.5       1.937
HMP1-Vault1                 4.6       2.045
HMP1-Vault1                 4.7       2.199
HMP1-Vault1                 4.8       2.358
HMP1-Vault1                 4.9       2.478
HMP1-Vault1                 5.0       2.586
HMP1-Vault1                 5.1       2.687
```

```
HMP1-Vault1                5.2        2.782
HMP1-Vault1                5.3        2.873
HMP1-Vault1                5.4        2.960
HMP1-Vault1                5.5        4.025
HMP1-Vault1                5.6        5.899
HMP1-Vault1                5.7        8.298
HMP1-Vault1                5.8        11.124
HMP1-Vault1                5.9        14.316
HMP1-Vault1                6.0        17.836
HMP1-Vault1                6.1        21.655
HMP1-Vault1                6.2        25.751
HMP1-Vault1                6.3        30.105
HMP1-Vault1                6.4        33.075
HMP1-Vault1                6.5        34.574
;
Wq-Vault2        Rating    0.0        0.000
Wq-Vault2                  0.1        0.013
Wq-Vault2                  0.2        0.045
Wq-Vault2                  0.3        0.064
Wq-Vault2                  0.4        0.078
Wq-Vault2                  0.5        0.090
Wq-Vault2                  0.6        0.100
Wq-Vault2                  0.7        0.110
Wq-Vault2                  0.8        0.119
Wq-Vault2                  0.9        0.127
Wq-Vault2                  1.0        0.134
Wq-Vault2                  1.1        0.142
Wq-Vault2                  1.2        0.148
Wq-Vault2                  1.3        0.155
Wq-Vault2                  1.4        0.161
Wq-Vault2                  1.5        0.167
Wq-Vault2                  1.6        0.173
Wq-Vault2                  1.7        0.179
Wq-Vault2                  1.8        0.184
Wq-Vault2                  1.9        0.190
Wq-Vault2                  2.0        0.195
Wq-Vault2                  2.1        0.200
Wq-Vault2                  2.2        0.205
Wq-Vault2                  2.3        0.210
Wq-Vault2                  2.4        0.214
Wq-Vault2                  2.5        0.219
Wq-Vault2                  2.6        0.224
;
HMP2-Vault2      Rating    0.0        0.000
HMP2-Vault2                0.1        0.000
HMP2-Vault2                0.2        0.000
HMP2-Vault2                0.3        0.000
HMP2-Vault2                0.4        0.000
HMP2-Vault2                0.5        0.000
HMP2-Vault2                0.6        0.000
HMP2-Vault2                0.7        0.000
HMP2-Vault2                0.8        0.000
HMP2-Vault2                0.9        0.000
HMP2-Vault2                1.0        0.000
HMP2-Vault2                1.1        0.000
```

HMP2-Vault2	1.2	0.000
HMP2-Vault2	1.3	0.000
HMP2-Vault2	1.4	0.000
HMP2-Vault2	1.5	0.000
HMP2-Vault2	1.6	0.000
HMP2-Vault2	1.7	0.000
HMP2-Vault2	1.8	0.000
HMP2-Vault2	1.9	0.000
HMP2-Vault2	2.0	0.000
HMP2-Vault2	2.1	0.000
HMP2-Vault2	2.2	0.000
HMP2-Vault2	2.3	0.000
HMP2-Vault2	2.4	0.000
HMP2-Vault2	2.5	0.000
HMP2-Vault2	2.6	0.000
HMP2-Vault2	2.7	0.012
HMP2-Vault2	2.8	0.036
HMP2-Vault2	2.9	0.050
HMP2-Vault2	3.0	0.060
HMP2-Vault2	3.1	0.069
HMP2-Vault2	3.2	0.077
HMP2-Vault2	3.3	0.084
HMP2-Vault2	3.4	0.090
HMP2-Vault2	3.5	0.254
HMP2-Vault2	3.6	0.661
HMP2-Vault2	3.7	1.113
HMP2-Vault2	3.8	1.373
HMP2-Vault2	3.9	1.589
HMP2-Vault2	4.0	1.779
HMP2-Vault2	4.1	1.949
HMP2-Vault2	4.2	2.106
HMP2-Vault2	4.3	2.251
HMP2-Vault2	4.4	2.388
HMP2-Vault2	4.5	2.517
HMP2-Vault2	4.6	2.639
HMP2-Vault2	4.7	2.756
HMP2-Vault2	4.8	2.869
HMP2-Vault2	4.9	2.977
HMP2-Vault2	5.0	3.081
HMP2-Vault2	5.1	3.339
HMP2-Vault2	5.2	3.838
HMP2-Vault2	5.3	4.379
HMP2-Vault2	5.4	4.726
HMP2-Vault2	5.5	5.028
HMP2-Vault2	5.6	5.300
HMP2-Vault2	5.7	5.551
HMP2-Vault2	5.8	5.787
HMP2-Vault2	5.9	6.010
HMP2-Vault2	6.0	7.595
HMP2-Vault2	6.1	10.308
HMP2-Vault2	6.2	13.753
HMP2-Vault2	6.3	17.790
HMP2-Vault2	6.4	22.338
HMP2-Vault2	6.5	27.341
HMP2-Vault2	6.6	32.761

```
HMP2-Vault2                6.7        38.566
HMP2-Vault2                6.8        44.731
HMP2-Vault2                6.9        51.235
HMP2-Vault2                7          58.062
;
Vault-1          Storage   0.0        2100
Vault-1                    0.1        2100
Vault-1                    0.2        2100
Vault-1                    0.3        2100
Vault-1                    0.4        2100
Vault-1                    0.5        2100
Vault-1                    0.6        2100
Vault-1                    0.7        2100
Vault-1                    0.8        2100
Vault-1                    0.9        2100
Vault-1                    1.0        2100
Vault-1                    1.1        2100
Vault-1                    1.2        2100
Vault-1                    1.3        2100
Vault-1                    1.4        2100
Vault-1                    1.5        2100
Vault-1                    1.6        2100
Vault-1                    1.7        2100
Vault-1                    1.8        2100
Vault-1                    1.9        2100
Vault-1                    2.0        2100
Vault-1                    2.1        2100
Vault-1                    2.2        2100
Vault-1                    2.3        2100
Vault-1                    2.4        2100
Vault-1                    2.5        2100
Vault-1                    2.6        2100
Vault-1                    2.7        2100
Vault-1                    2.8        2100
Vault-1                    2.9        2100
Vault-1                    3.0        2100
Vault-1                    3.1        2100
Vault-1                    3.2        2100
Vault-1                    3.3        2100
Vault-1                    3.4        2100
Vault-1                    3.5        2100
Vault-1                    3.6        2100
Vault-1                    3.7        2100
Vault-1                    3.8        2100
Vault-1                    3.9        2100
Vault-1                    4.0        2100
Vault-1                    4.1        2100
Vault-1                    4.2        2100
Vault-1                    4.3        2100
Vault-1                    4.4        2100
Vault-1                    4.5        2100
Vault-1                    4.6        2100
Vault-1                    4.7        2100
Vault-1                    4.8        2100
Vault-1                    4.9        2100
```

```
Vault-1                    5.0        2100
Vault-1                    5.1        2100
Vault-1                    5.2        2100
Vault-1                    5.3        2100
Vault-1                    5.4        2100
Vault-1                    5.5        2100
Vault-1                    5.6        2100
Vault-1                    5.7        2100
Vault-1                    5.8        2100
Vault-1                    5.9        2100
Vault-1                    6.0        2100
Vault-1                    6.1        2100
Vault-1                    6.2        2100
Vault-1                    6.3        2100
Vault-1                    6.4        2100
Vault-1                    6.5        2100
;
Vault-2          Storage   0.0        3500
Vault-2                    0.1        3500
Vault-2                    0.2        3500
Vault-2                    0.3        3500
Vault-2                    0.4        3500
Vault-2                    0.5        3500
Vault-2                    0.6        3500
Vault-2                    0.7        3500
Vault-2                    0.8        3500
Vault-2                    0.9        3500
Vault-2                    1.0        3500
Vault-2                    1.1        3500
Vault-2                    1.2        3500
Vault-2                    1.3        3500
Vault-2                    1.4        3500
Vault-2                    1.5        3500
Vault-2                    1.6        3500
Vault-2                    1.7        3500
Vault-2                    1.8        3500
Vault-2                    1.9        3500
Vault-2                    2.0        3500
Vault-2                    2.1        3500
Vault-2                    2.2        3500
Vault-2                    2.3        3500
Vault-2                    2.4        3500
Vault-2                    2.5        3500
Vault-2                    2.6        3500
Vault-2                    2.7        3500
Vault-2                    2.8        3500
Vault-2                    2.9        3500
Vault-2                    3.0        3500
Vault-2                    3.1        3500
Vault-2                    3.2        3500
Vault-2                    3.3        3500
Vault-2                    3.4        3500
Vault-2                    3.5        3500
Vault-2                    3.6        3500
Vault-2                    3.7        3500
```

```
Vault-2                  3.8        3500
Vault-2                  3.9        3500
Vault-2                  4.0        3500
Vault-2                  4.1        3500
Vault-2                  4.2        3500
Vault-2                  4.3        3500
Vault-2                  4.4        3500
Vault-2                  4.5        3500
Vault-2                  4.6        3500
Vault-2                  4.7        3500
Vault-2                  4.8        3500
Vault-2                  4.9        3500
Vault-2                  5.0        3500
Vault-2                  5.1        3500
Vault-2                  5.2        3500
Vault-2                  5.3        3500
Vault-2                  5.4        3500
Vault-2                  5.5        3500
Vault-2                  5.6        3500
Vault-2                  5.7        3500
Vault-2                  5.8        3500
Vault-2                  5.9        3500
Vault-2                  6.0        3500
Vault-2                  6.1        3500
Vault-2                  6.2        3500
Vault-2                  6.3        3500
Vault-2                  6.4        3500
Vault-2                  6.5        3500
Vault-2                  6.6        3500
Vault-2                  6.7        3500
Vault-2                  6.8        3500
Vault-2                  6.9        3500
Vault-2                  7.0        3500

[TIMESERIES]
;;Name           Date       Time       Value
;;-------------- ---------- ---------- ----------
OCEANSIDE        FILE "R:\1482\&Hyd\HMP\OCEANSIDE.prn"
;
100-YearInflow   8/28/1951  5:00       0
100-YearInflow   8/28/1951  5:11       0.5
100-YearInflow   8/28/1951  5:22       0.5
100-YearInflow   8/28/1951  5:33       0.5
100-YearInflow   8/28/1951  5:44       0.5
100-YearInflow   8/28/1951  5:55       0.6
100-YearInflow   8/28/1951  6:06       0.6
100-YearInflow   8/28/1951  6:17       0.6
100-YearInflow   8/28/1951  6:28       0.6
100-YearInflow   8/28/1951  6:39       0.7
100-YearInflow   8/28/1951  6:50       0.7
100-YearInflow   8/28/1951  7:01       0.7
100-YearInflow   8/28/1951  7:12       0.8
100-YearInflow   8/28/1951  7:23       0.8
100-YearInflow   8/28/1951  7:34       0.9
100-YearInflow   8/28/1951  7:45       1
```

```
100-YearInflow   8/28/1951  7:56       1
100-YearInflow   8/28/1951  8:07       1.2
100-YearInflow   8/28/1951  8:18       1.3
100-YearInflow   8/28/1951  8:29       1.6
100-YearInflow   8/28/1951  8:40       1.8
100-YearInflow   8/28/1951  8:51       2.6
100-YearInflow   8/28/1951  9:02       3.7
100-YearInflow   8/28/1951  9:13       13.44
100-YearInflow   8/28/1951  9:24       2.1
100-YearInflow   8/28/1951  9:35       1.4
100-YearInflow   8/28/1951  9:46       1.1
100-YearInflow   8/28/1951  9:57       0.9
100-YearInflow   8/28/1951  10:08      0.8
100-YearInflow   8/28/1951  10:19      0.7
100-YearInflow   8/28/1951  10:30      0.7
100-YearInflow   8/28/1951  10:41      0.6
100-YearInflow   8/28/1951  10:52      0.6
100-YearInflow   8/28/1951  11:03      0.5
100-YearInflow   8/28/1951  11:14      0
;
100-Year-inflowHydrograph 8/28/1951  5:00       0
100-Year-inflowHydrograph 8/28/1951  5:09       0
100-Year-inflowHydrograph 8/28/1951  5:18       0.3
100-Year-inflowHydrograph 8/28/1951  5:27       0.3
100-Year-inflowHydrograph 8/28/1951  5:36       0.3
100-Year-inflowHydrograph 8/28/1951  5:45       0.3
100-Year-inflowHydrograph 8/28/1951  5:54       0.3
100-Year-inflowHydrograph 8/28/1951  6:03       0.3
100-Year-inflowHydrograph 8/28/1951  6:12       0.3
100-Year-inflowHydrograph 8/28/1951  6:21       0.3
100-Year-inflowHydrograph 8/28/1951  6:30       0.3
100-Year-inflowHydrograph 8/28/1951  6:39       0.4
100-Year-inflowHydrograph 8/28/1951  6:48       0.4
100-Year-inflowHydrograph 8/28/1951  6:57       0.4
100-Year-inflowHydrograph 8/28/1951  7:06       0.4
100-Year-inflowHydrograph 8/28/1951  7:15       0.4
100-Year-inflowHydrograph 8/28/1951  7:24       0.4
100-Year-inflowHydrograph 8/28/1951  7:33       0.5
100-Year-inflowHydrograph 8/28/1951  7:42       0.5
100-Year-inflowHydrograph 8/28/1951  7:51       0.5
100-Year-inflowHydrograph 8/28/1951  8:00       0.6
100-Year-inflowHydrograph 8/28/1951  8:09       0.6
100-Year-inflowHydrograph 8/28/1951  8:18       0.7
100-Year-inflowHydrograph 8/28/1951  8:27       0.8
100-Year-inflowHydrograph 8/28/1951  8:36       1
100-Year-inflowHydrograph 8/28/1951  8:45       1.1
100-Year-inflowHydrograph 8/28/1951  8:54       1.6
100-Year-inflowHydrograph 8/28/1951  9:03       2.2
100-Year-inflowHydrograph 8/28/1951  9:12       8.05
100-Year-inflowHydrograph 8/28/1951  9:21       1.3
100-Year-inflowHydrograph 8/28/1951  9:30       0.9
100-Year-inflowHydrograph 8/28/1951  9:39       0.7
100-Year-inflowHydrograph 8/28/1951  9:48       0.6
100-Year-inflowHydrograph 8/28/1951  9:57       0.5
100-Year-inflowHydrograph 8/28/1951  10:06      0.4
```

```
100-Year-inflowHydrograph 8/28/1951  10:15      0.4
100-Year-inflowHydrograph 8/28/1951  10:24      0.4
100-Year-inflowHydrograph 8/28/1951  10:33      0.3
100-Year-inflowHydrograph 8/28/1951  10:42      0.3
100-Year-inflowHydrograph 8/28/1951  10:51      0.3
100-Year-inflowHydrograph 8/28/1951  11:00      0.3
100-Year-inflowHydrograph 8/28/1951  11:09      0

[REPORT]
;;Reporting Options
SUBCATCHMENTS ALL
NODES ALL
LINKS ALL

[TAGS]

[MAP]
DIMENSIONS 1196.632 7154.180 2292.457 8209.745
Units      None

[COORDINATES]
;;Node           X-Coord            Y-Coord
;;-------------- ------------------ ------------------
POC1-PR          810.251            7890.895
Attenuated-flow-Vault2 1770.082           7615.564
Attenuated-flow-vault1 2585.591           7658.127
HMP-1            838.412            7976.285
HMP-2            1028.082           7828.907
Node108          1760.803           7842.048
Node204          2577.079           7877.753

[VERTICES]
;;Link           X-Coord            Y-Coord
;;-------------- ------------------ ------------------

[Polygons]
;;Subcatchment   X-Coord            Y-Coord
;;-------------- ------------------ ------------------
DMA1-D           895.641            8031.698
DMA1-C           993.749            8028.973
DMA3EX-D+DMA3-DProposed 1053.704           7578.404
DMA3EX-C+DM3-CProposed 996.474            7503.915
DMA2-C           1210.857           7942.674
DMA2-D           1237.201           7877.269
DMA4-C           1186.855           7707.975
SELFMITIGATING   717.594            8036.240
DMA5             1161.114           7959.331
DeMinimis        729.858            7897.254

[SYMBOLS]
;;Gage           X-Coord            Y-Coord
;;-------------- ------------------ ------------------
OCENSIDE         1105.483           8110.729
```

```
EPA STORM WATER MANAGEMENT MODEL - VERSION 5.1 (Build 5.1.014)
--------------------------------------------------------------

LAS POSAS - Post-project Condition


**********************************************************
NOTE: The summary statistics displayed in this report are
based on results found at every computational time step,
not just on results from each reporting time step.
**********************************************************

***************
Analysis Options
***************
Flow Units ............... CFS
Process Models:
  Rainfall/Runoff ........ YES
  RDII ................... NO
  Snowmelt ............... NO
  Groundwater ............ NO
  Flow Routing ........... YES
  Ponding Allowed ........ NO
  Water Quality .......... NO
Infiltration Method ...... GREEN_AMPT
Flow Routing Method ...... KINWAVE
Starting Date ............ 08/28/1951 05:00:00
Ending Date .............. 05/23/2008 23:00:00
Antecedent Dry Days ...... 0.0
Report Time Step ......... 01:00:00
Wet Time Step ............ 00:15:00
Dry Time Step ............ 04:00:00
Routing Time Step ........ 60.00 sec


*************************        Volume         Depth
Runoff Quantity Continuity     acre-feet        inches
*************************     ---------       -------
Total Precipitation ......       371.275       675.250
Evaporation Loss .........        44.860        81.587
Infiltration Loss ........        83.823       152.451
Surface Runoff ...........       246.272       447.902
Final Storage ............         0.019         0.035
Continuity Error (%) .....        -0.996


*************************        Volume        Volume
Flow Routing Continuity        acre-feet      10^6 gal
*************************     ---------     ---------
Dry Weather Inflow .......         0.000         0.000
Wet Weather Inflow .......       246.271        80.251
Groundwater Inflow .......         0.000         0.000
RDII Inflow ..............         0.000         0.000
External Inflow ..........         1.065         0.347
```

External Outflow	247.287	80.582
Flooding Loss	0.000	0.000
Evaporation Loss	0.000	0.000
Exfiltration Loss	0.000	0.000
Initial Stored Volume	0.329	0.107
Final Stored Volume	0.335	0.109
Continuity Error (%)	0.018	

****
Highest Flow Instability Indexes
****
All links are stable.

****
Routing Time Step Summary
****

Minimum Time Step	:	60.00 sec
Average Time Step	:	60.00 sec
Maximum Time Step	:	60.00 sec
Percent in Steady State	:	0.00
Average Iterations per Step	:	1.00
Percent Not Converging	:	0.00

****
Subcatchment Runoff Summary
****

Subcatchment	Total Precip in	Total Runon in	Total Evap in	Total Infil in	Imperv Runoff in	Perv Runoff in	Total Runoff in	Total Runoff 10^6 gal	Peak Runoff CFS	Runoff Coeff
DMA1-D	675.25	0.00	76.90	159.81	389.92	57.82	447.74	3.28	0.32	0.663
DMA1-C	675.25	0.00	83.82	139.94	443.80	13.71	457.51	20.50	1.96	0.678
DMA3EX-D+DMA3-DProposed	675.25	0.00	83.52	102.55	450.96	47.76	498.72	4.10	0.36	0.739
DMA3EX-C+DM3-CProposed	675.25	0.00	77.00	168.15	420.23	17.16	437.38	2.85	0.28	0.648
DMA2-C	675.25	0.00	69.35	205.41	386.89	21.74	408.62	4.77	0.51	0.605
DMA2-D	675.25	0.00	85.58	141.49	408.26	45.89	454.14	37.36	3.57	0.673
DMA4-C	675.25	0.00	74.26	160.49	431.73	19.06	450.79	1.35	0.13	0.668
SELFMITIGATING	675.25	0.00	5.95	604.35	0.00	70.42	70.42	0.23	0.14	0.104
DMA5	675.25	0.00	84.01	120.84	465.79	12.94	478.73	5.72	0.52	0.709
DeMinimis	675.25	0.00	98.26	0.00	589.48	0.00	589.48	0.08	0.01	0.873

****
Node Depth Summary
****

Node	Type	Average Depth Feet	Maximum Depth Feet	Maximum HGL Feet	Time of Max Occurrence days hr:min	Reported Max Depth Feet

POC1-PR	OUTFALL	0.00	0.00	0.00	0	00:00	0.00
Attenuated-flow-Vault2	OUTFALL	0.00	0.00	0.00	0	00:00	0.00
Attenuated-flow-vault1	OUTFALL	0.00	0.00	0.00	0	00:00	0.00
HMP-1	STORAGE	0.02	4.29	4.29	18857	12:05	4.26
HMP-2	STORAGE	0.02	4.73	4.73	18857	12:07	4.67
Node108	STORAGE	2.60	5.83	5.83	0	04:22	4.43
Node204	STORAGE	2.50	5.21	5.21	0	04:20	3.87

****
Node Inflow Summary
****

Node	Type	Maximum Lateral Inflow CFS	Maximum Total Inflow CFS	Time of Max Occurrence days	Time of Max Occurrence hr:min	Lateral Inflow Volume 10^6 gal	Total Inflow Volume 10^6 gal	Flow Balance Error Percent
POC1-PR	OUTFALL	1.44	6.24	18857	12:01	14.3	80.2	0.000
Attenuated-flow-Vault2	OUTFALL	0.00	5.85	0	04:22	0	0.227	0.000
Attenuated-flow-vault1	OUTFALL	0.00	2.79	0	04:20	0	0.12	0.000
HMP-1	STORAGE	2.28	2.28	18857	12:01	23.8	23.8	0.020
HMP-2	STORAGE	4.08	4.08	18857	12:01	42.1	42.1	0.022
Node108	STORAGE	13.44	13.44	0	04:14	0.227	0.295	0.006
Node204	STORAGE	8.05	8.05	0	04:13	0.12	0.159	0.006

****
Node Flooding Summary
****

No nodes were flooded.

****
Storage Volume Summary
****

Storage Unit	Average Volume 1000 ft3	Avg Pcnt Full	Evap Pcnt Loss	Exfil Pcnt Loss	Maximum Volume 1000 ft3	Max Pcnt Full	Time of Max Occurrence days	Time of Max Occurrence hr:min	Maximum Outflow CFS
HMP-1	0.048	0	0	0	9.017	66	18857	12:05	1.87
HMP-2	0.078	0	0	0	16.549	73	18857	12:07	3.01
Node108	9.100	37	0	0	20.416	83	0	04:21	5.85
Node204	5.250	38	0	0	10.943	80	0	04:20	2.79

****
Outfall Loading Summary
****

Outfall Node	Flow Freq Pcnt	Avg Flow CFS	Max Flow CFS	Total Volume 10^6 gal
POC1-PR	9.32	0.06	6.24	80.229
Attenuated-flow-Vault2	0.01	0.21	5.85	0.227
Attenuated-flow-vault1	0.00	0.34	2.79	0.120
System	3.11	0.62	2.79	80.576

****
Link Flow Summary
****

Link	Type	Maximum |Flow| CFS	Time of Max Occurrence days	hr:min	Maximum |Veloc| ft/sec	Max/ Full Flow	Max/ Full Depth
WQ-Vault1	DUMMY	0.11	141	06:41			
HMP1-Vault1	DUMMY	1.77	18857	12:05			
WQ-Vault2	DUMMY	0.22	141	06:38			
HMP-Vault2	DUMMY	2.79	18857	12:07			
HMP-DetentionVault2	DUMMY	5.85	0	04:22			
HMP-DETENTION-Vault1	DUMMY	2.79	0	04:20			

****
Conduit Surcharge Summary
****

No conduits were surcharged.

Analysis begun on: Tue Feb 22 14:33:33 2022
Analysis ended on: Tue Feb 22 14:34:38 2022
Total elapsed time: 00:01:05

ATTACHMENT 5 - SWMM Explanation of Significant Variables

In the prior section the viewer can view the associated input and output parameters within the EPA-SWMM Model in both pre-development and post-development conditions. Each portion, i.e., sub-catchments, outfalls, storage units, ponding in the vaults (modeled as a storage unit), weir as a discharge, and outfalls (point of compliance), are also shown.

Variables for modeling are associated with typical recommended values by the EPA-SWMM model, typical values found in technical literature (such as Maidment's Handbook of Hydrology). Recommended values for the SWMM model have been attained from the City of San Marcos BMP manual Appendix G.

Soil characteristics of the existing soils were determined from the USGS sources.

Some values incorporated within the SWMM model have been determined from the professional experience of H&A using conservative assumption that have a tendency to increase the size of the needed BMP and also generate a long-term runoff as a percentage of rainfall similar to those measured in gage stations in Southern California by the USGS.

Description of model parameters and assumptions:

N-Imperv – Manning's N for impervious surfaces

0.012 (typical)

N-Perv – Manning's N for pervious surfaces

0.15 (typical)

Dstore-Imperv – Depth of depression storage on impervious area (in)

0.05 (typical)

Dstore-Perv – Depth of depression storage on pervious area (in)

0.10 (typical)

%Zero-Imperv – Percentage of impervious area with no depression storage (%)

25 (typical)

Suction Head – Soil capillary suction head (in)

Conductivity – Soil saturated hydraulic conductivity (in/hr)

-75% of these values if sub catchment is graded/compacted

Initial Deficit – Initial moisture deficit (fraction)

Soil Type	Suction Head	Conductivity	Initial Deficit
A	1.5	0.3	0.30
B	3	0.2	0.31
C	6	0.1	0.32
D	9	0.025	0.33

NOTE: These values are based on City of San Marcos BMP Manual Effective February 2016 in Appendix G.

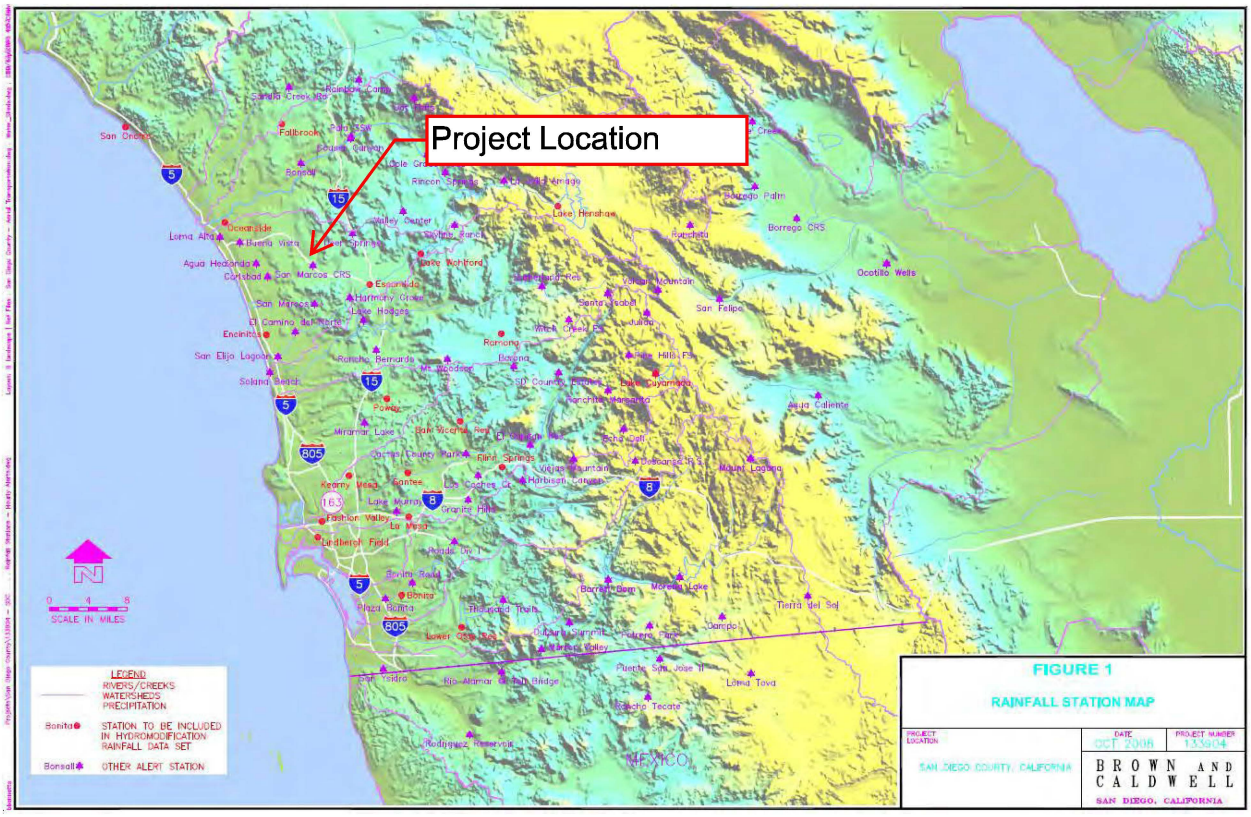


Figure G.1-1: Rainfall Station Map

Project applicants preparing continuous simulation models shall select the most appropriate rainfall data set from the rainfall record files provided on the Project Clean Water website. For a given project location, the following factors should be considered in the selection of the appropriate rainfall data set:

- In most cases, the rainfall data set in closest proximity to the project site will be the appropriate choice (refer to the rainfall station map).
- In some cases, the rainfall data set in closest proximity to the project site may not be the most applicable data set. Such a scenario could involve a data set with an elevation significantly different from the project site. In addition to a simple elevation comparison, the project proponent may also consult with the San Diego County's average annual precipitation isopluvial map, which is provided in the San Diego County Hydrology Manual (2003). Review of this map could provide an initial estimate as to whether the project site is in a similar rainfall zone as compared to the rainfall stations. Generally, precipitation totals in San Diego County increase with increasing elevation.
- Where possible, rainfall data sets should be chosen so that the data set and the project location are both located in the same topographic zone (coastal, foothill, mountain) and

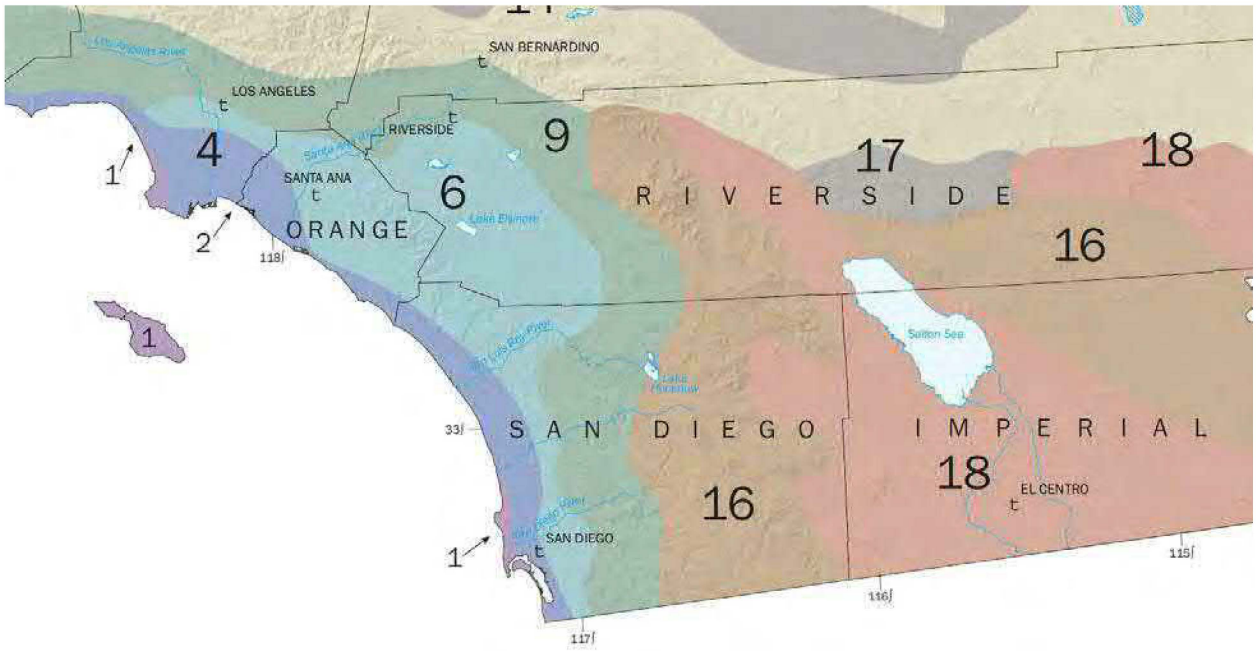


Figure G.1-2: California Irrigation Management Information System "Reference Evapotranspiration Zones"

Table G.1-1: Monthly Average Reference Evapotranspiration by ETo Zone (inches/month and inches/day) for use in SWMM Models for Hydromodification Management Studies in San Diego County CIMIS Zones 1, 4, 6, 9, and 16 (See CIMIS ETo Zone Map)

	January	February	March	April	May	June	July	August	September	October	November	December
Zone	in/month	in/month	in/month	in/month	in/month	in/month	in/month	in/month	in/month	in/month	in/month	in/month
1	0.93	1.4	2.48	3.3	4.03	4.5	4.65	4.03	3.3	2.48	1.2	0.62
4	1.86	2.24	3.41	4.5	5.27	5.7	5.89	5.58	4.5	3.41	2.4	1.86
6	1.86	2.24	3.41	4.8	5.58	6.3	6.51	6.2	4.8	3.72	2.4	1.86
9	2.17	2.8	4.03	5.1	5.89	6.6	7.44	6.82	5.7	4.03	2.7	1.86
16	1.55	2.52	4.03	5.7	7.75	8.7	9.3	8.37	6.3	4.34	2.4	1.55
	January	February	March	April	May	June	July	August	September	October	November	December
Days	31	28	31	30	31	30	31	31	30	31	30	31
Zone	in/day	in/day	in/day	in/day	in/day	in/day	in/day	in/day	in/day	in/day	in/day	in/day
1	0.030	0.050	0.080	0.110	0.130	0.150	0.150	0.130	0.110	0.080	0.040	0.020
4	0.060	0.080	0.110	0.150	0.170	0.190	0.190	0.180	0.150	0.110	0.080	0.060
6	0.060	0.080	0.110	0.160	0.180	0.210	0.210	0.200	0.160	0.120	0.080	0.060
9	0.070	0.100	0.130	0.170	0.190	0.220	0.240	0.220	0.190	0.130	0.090	0.060
16	0.050	0.090	0.130	0.190	0.250	0.290	0.300	0.270	0.210	0.140	0.080	0.050

Parameters within SDHM are documented in "San Diego Hydrology Model User Manual," prepared by Clear Creek Solutions, Inc. (as of the development of the Manual, the current version of the SDHM User Manual is dated January 2012). Parameters established for SDHM represent "grass" (non-turf grasslands), "dirt," "gravel," and "urban" cover. The documented PERLND and IMPLND parameters for the various land covers and soil types have been pre-loaded into SDHM. SDHM users shall use the parameters that have been pre-loaded into the program without modification unless the preparer can provide documentation to substantiate use of other parameters.

G.1.4.2 Rainfall Loss Parameters for SWMM

In SWMM, rainfall loss parameters (parameters that describe processes occurring when rainfall lands on pervious lands and impervious lands) are entered in the "subcatchment" module. In addition to specifying parameters, the SWMM user must also select an infiltration model.

The SWMM Manual provides details regarding the subcatchment parameters and summary tables of possible ranges of these parameters. For SWMM studies for hydromodification management in San Diego, subcatchment parameters shall fall within the range provided in the SWMM Manual. Some of the parameters depend on the selection of the infiltration model. For consistency across the San Diego region, SWMM users shall use the Green-Ampt infiltration model for hydromodification management studies. Table G.1-4 presents SWMM subcatchment parameters for use in hydromodification management studies in the San Diego region.

Table G.1-4: Subcatchment Parameters for SWMM Studies for Hydromodification Management in San Diego

SWMM Parameter Name	Unit	Range	Use in San Diego
Name X-Coordinate Y-Coordinate Description Tag Rain Gage Outlet	N/A	N/A – project-specific	Project-specific
Area	acres (ac)	Project-specific	Project-specific
Width	feet (ft)	Project-specific	Project-specific
% Slope	percent (%)	Project-specific	Project-specific
% Imperv	percent (%)	Project-specific	Project-specific
N-imperv	--	0.011 – 0.024 presented in Table A.6 of SWMM Manual	default use 0.012 for smooth concrete, otherwise provide documentation of other surface consistent with Table A.6 of SWMM Manual
N-Perv	--	0.05 – 0.80 presented in Table A.6 of SWMM Manual	default use 0.15 for short prairie grass, otherwise provide documentation of other surface consistent with Table A.6 of SWMM Manual
Dstore-Imperv	inches	0.05 – 0.10 inches presented in Table A.5 of SWMM Manual	0.05
Dstore-Perv	inches	0.10 – 0.30 inches presented in Table A.5 of SWMM Manual	0.10
%ZeroImperv	percent (%)	0% – 100%	25%
Subarea routing	--	OUTLET IMPERVIOUS PERVIOUS	Project-specific, typically OUTLET
Percent Routed	%	0% – 100%	Project-specific, typically 100%
Infiltration	Method	HORTON GREEN_AMPT CURVE_NUMBER	GREEN_AMPT

SWMM Parameter Name	Unit	Range	Use in San Diego
Suction Head (Green-Ampt)	Inches	1.93 – 12.60 presented in Table A.2 of SWMM Manual	Hydrologic Soil Group A: 1.5 Hydrologic Soil Group B: 3.0 Hydrologic Soil Group C: 6.0 Hydrologic Soil Group D: 9.0
Conductivity (Green-Ampt)	Inches per hour	0.01 – 4.74 presented in Table A.2 of SWMM Manual by soil texture class 0.00 – ≥0.45 presented in Table A.3 of SWMM Manual by hydrologic soil group	Hydrologic Soil Group A: 0.3 Hydrologic Soil Group B: 0.2 Hydrologic Soil Group C: 0.1 Hydrologic Soil Group D: 0.025 Note: reduce conductivity by 25% in the post-project condition when native soils will be compacted. Conductivity may also be reduced by 25% in the pre-development condition model for redevelopment areas that are currently concrete or asphalt but must be modeled according to their underlying soil characteristics. For fill soils in post-project condition, see Section G.1.4.3.
Initial Deficit (Green-Ampt)		The difference between soil porosity and initial moisture content. Based on the values provided in Table A.2 of SWMM Manual, the range for completely dry soil would be 0.097 to 0.375	Hydrologic Soil Group A: 0.30 Hydrologic Soil Group B: 0.31 Hydrologic Soil Group C: 0.32 Hydrologic Soil Group D: 0.33 Note: in long-term continuous simulation, this value is not important as the soil will reach equilibrium after a few storm events regardless of the initial moisture content specified.
Groundwater	yes/no	yes/no	NO
LID Controls			Project Specific
Snow Pack Land Uses Initial Buildup Curb Length			Not applicable to hydromodification management studies

EXPLANATION OF SELECTED VARIABLES

Parameters for the pre- and post-developed models include soil type C and D in accordance with the San Diego County Hydrology Manual and the USGS Soil Survey Map (attached at the end of this appendix). Suction head, conductivity and initial deficit corresponds to average values expected for soils type B, C and D, according to sources consulted, professional experience, and approximate values obtained by City of San Marcos BMP manual.

Selection of a Kinematic Approach: As the continuous model is based on hourly rainfall, and the time of concentration for the pre-development and post-development conditions is significantly smaller than 60 minutes, precise routing of the flows through the impervious surfaces, the underdrain pipe system, and the discharge pipe was considered unnecessary. The truncation error of the precipitation into hourly steps is much more significant than the precise routing in a system where the time of concentration is much smaller than 1 hour.

Sub-catchment Defined:
DMA1: Newly developed portion of the site which will be directed through Vault HMP-1 for detention and flow control (hydromod) requirements .
DMA2: Newly developed portion of the site a small portion of the exisitng driveway which will be directed through the vault HMP-2 for detention and flow control (hydromod) requirements .
DMA3: Newly developed portion of the site (very small portion of the driveways and sidewalks from the souther townhomes that can be routed t o the vaults) which will be directed through flowbased MWS unit BF-3-3 and will be counted for by over detaining within the proposed vaults.

DMA-3-EX: Offsite Exisitng driveway and parking areas that has been treated via sand filter in the existng conditions. The sand filter will be removed in the developed conditions and a flowbased MWS unit will be proposed to treat this area instead BF-3-3
Selfmitigating: Pervious slope areas which won't be directed through any vaults
DMA-4: A portion of the driveway by Mission Road south, that can't be routed to the vaults. which will be directed through flowbased MWS unit BF-3-3 and will be counted for by over detaining within the proposed vaults.
DMA5: Newly developed portion of the site which will be directed through flowbased MWS unit BF-3-5 and will be counted for by over detaining within the proposed vaults.

Note: Subcatchments have been divided into minor subcatchments to represent each soil type in the major subcatchment
DMA-Subcatchment number- Soil type

Note: The generated flow from DMA-1 and DMA-2 will be routed to the vaults which have internal riser.
The vaults are utilized as a storage for the water qulaity design captured volume (1.5 DCV), inaddition to the required storage for HMP and peak flow attenuation. The very low orifice in the risers is sized to draw down the 1.5 DCV (design captured volume) in 36 hrs. The flow from this orifice will be directed to a downstream volume based MWS unit to address water quality requirements. An internal surface control weir will be built inside the riser with an invert elevation set at the water surface elevation associated with the water quality volume in the

vault. The riser internal weir will divert the flows below its invert towards the modular wetland unit downstream of the vault.
The low flow orifice that directs the flow to the MWS unit is modeled in the SWMM with a rating table up to the water quality HGL in the vault and labeled as WQ orifice.

Note:
The complete storage and rating curves and the respective explanation is shown at the end of this appendix. A variable area vs. elevation storage curve was used for the final model, and a discharge that is a function of the outlet structure in the surface was used also.

ATTACHMENT 6 - Drying Time of the Surface Layer of Bio-retention cells

The discharge of the lower Water quality orifice when the surface layer is at the WQ HGL is considered submerged.

The drying time interval between an elevation yi and another elevation $yi - \Delta y$ can be obtained by:

$$\Delta t_i(hours) = \frac{(Q(yi)+Q(yi-\Delta y))}{7200\ (V(yi)-V(yi-\Delta y))} = \frac{Q_{ave}}{3600\ \Delta V}$$

$$t - \sum_{i=1}^{n} \Delta t_i\ (hours)$$

Q_{ave} represents the average discharge between elevation y_i and y_{i+1} obtained by $\frac{Q(yi)+Q(yi-\Delta y)}{2}$ where ΔV represents the fraction of the volume that must be discharged at a peak flow $Q_{ave}(V(yi) - V(yi - \Delta y))$.

The volume and the discharge change as the elevation changes; the calculation takes into account this change.

WQ Volume

Total Vault 1 Draw Down

Elevation	Q_{AVG} (CFS)	DV (CF)	DT (HR)	Total T
0.1	0.01	210	11.25	37.12
0.2	0.02	210	3.30	25.87
0.3	0.03	210	2.01	22.57
0.4	0.04	210	1.61	20.56
0.5	0.04	210	1.38	18.95
0.6	0.05	210	1.23	17.57
0.7	0.05	210	1.12	16.34
0.8	0.06	210	1.03	15.22
0.9	0.06	210	0.96	14.19
1.0	0.06	210	0.91	13.22
1.1	0.07	210	0.86	12.31
1.2	0.07	210	0.82	11.45
1.3	0.07	210	0.78	10.63
1.4	0.08	210	0.75	9.85
1.5	0.08	210	0.73	9.09
1.6	0.08	210	0.70	8.37
1.7	0.09	210	0.68	7.67
1.8	0.09	210	0.66	6.99
1.9	0.09	210	0.64	6.33
2.0	0.09	210	0.62	5.69
2.1	0.10	210	0.61	5.07
2.2	0.10	210	0.59	4.46
2.3	0.10	210	0.58	3.87
2.4	0.10	210	0.56	3.30
2.5	0.11	210	0.55	2.73
2.6	0.13	210	0.46	2.18
2.7	0.20	210	0.30	1.72
2.8	0.32	210	0.18	1.42
2.9	0.46	210	0.13	1.24
3.0	0.57	210	0.10	1.11
3.1	0.65	210	0.09	1.01
3.2	0.71	210	0.08	0.92
3.3	0.77	210	0.08	0.84
3.4	0.83	210	0.07	0.76
3.5	0.88	210	0.07	0.69
3.6	0.95	210	0.06	0.63
3.7	1.06	210	0.05	0.56
3.8	1.23	210	0.05	0.51
3.9	1.41	210	0.04	0.46
4.0	1.56	210	0.04	0.42
4.1	1.67	210	0.03	0.38
4.2	1.77	210	0.03	0.35
4.3	1.87	210	0.03	0.32
4.4	1.96	210	0.03	0.28

4.5	2.04	210	0.03	0.25
4.6	2.14	210	0.03	0.23
4.7	2.27	210	0.03	0.20
4.8	2.43	210	0.02	0.17
4.9	2.57	210	0.02	0.15
5.0	2.68	210	0.02	0.13
5.1	2.79	210	0.02	0.10
5.2	2.89	210	0.02	0.08
5.3	3.47	210	0.02	0.06
5.4	4.95	210	0.01	0.05
5.5	7.58	210	0.01	0.03
5.6	11.59	210	0.01	0.03
5.7	16.66	210	0.00	0.02
5.8	22.56	210	0.00	0.02
5.9	29.17	210	0.00	0.02
6.0	25.24	210	0.00	0.01
6.1	19.75	210	0.00	0.01
6.2	23.70	210	0.00	0.01
6.3	27.93	210	0.00	0.01
6.4	31.59	210	0.00	0.00
6.5	33.82	210	0.00	0.00

WQ Volume

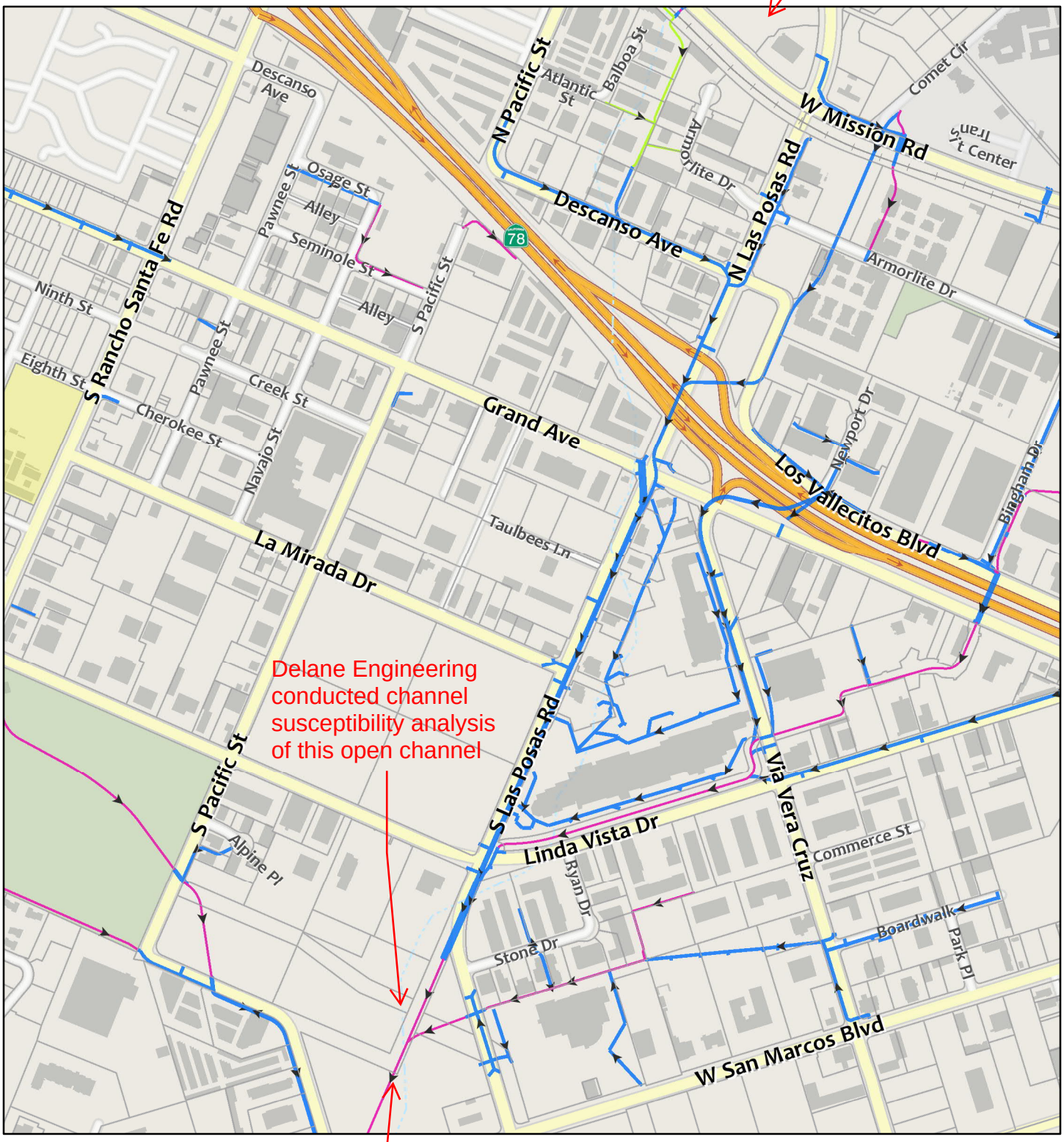
Total Vault2 Draw Down

Elevation	Q_{AVG} (CFS)	DV (CF)	DT (HR)	Total T
0.1	0.01	350	14.58	39.00
0.2	0.03	350	3.35	24.43
0.3	0.05	350	1.79	21.08
0.4	0.07	350	1.37	19.29
0.5	0.08	350	1.16	17.92
0.6	0.10	350	1.02	16.76
0.7	0.11	350	0.93	15.73
0.8	0.11	350	0.85	14.81
0.9	0.12	350	0.79	13.96
1.0	0.13	350	0.75	13.16
1.1	0.14	350	0.70	12.42
1.2	0.14	350	0.67	11.71
1.3	0.15	350	0.64	11.04
1.4	0.16	350	0.61	10.40
1.5	0.16	350	0.59	9.79
1.6	0.17	350	0.57	9.19
1.7	0.18	350	0.55	8.62
1.8	0.18	350	0.54	8.07
1.9	0.19	350	0.52	7.54
2.0	0.19	350	0.51	7.02
2.1	0.20	350	0.49	6.51
2.2	0.20	350	0.48	6.02
2.3	0.21	350	0.47	5.54
2.4	0.21	350	0.46	5.07
2.5	0.22	350	0.45	4.61
2.6	0.22	350	0.44	4.16
2.7	0.23	350	0.42	3.72
2.8	0.25	350	0.38	3.30
2.9	0.28	350	0.35	2.92
3.0	0.29	350	0.33	2.57
3.1	0.31	350	0.32	2.24
3.2	0.32	350	0.30	1.92
3.3	0.33	350	0.29	1.62
3.4	0.34	350	0.28	1.33
3.5	0.43	350	0.23	1.04
3.6	0.72	350	0.14	0.82
3.7	1.15	350	0.08	0.68
3.8	1.51	350	0.06	0.60
3.9	1.75	350	0.06	0.53
4.0	1.96	350	0.05	0.48
4.1	2.14	350	0.05	0.43
4.2	2.31	350	0.04	0.38
4.3	2.47	350	0.04	0.34
4.4	2.61	350	0.04	0.30

4.5	2.75	350	0.04	0.26
4.6	2.88	350	0.03	0.23
4.7	3.00	350	0.03	0.19
4.8	3.12	350	0.03	0.16
4.9	3.23	350	0.03	0.13
5.0	3.34	350	0.03	0.10
5.1	4.50	350	0.02	0.07
5.2	7.66	350	0.01	0.05
5.3	12.30	350	0.01	0.04
5.4	17.81	350	0.01	0.03
5.5	24.01	350	0.00	0.02
5.6	30.86	350	0.00	0.02
5.7	38.32	350	0.00	0.02
5.8	46.34	350	0.00	0.01
5.9	54.89	350	0.00	0.01
6.0	63.93	350	0.00	0.01
6.1	73.92	350	0.00	0.01
6.2	85.26	350	0.00	0.01
6.3	97.70	350	0.00	0.01
6.4	111.02	350	0.00	0.00
6.5	125.14	350	0.00	0.00
6.6	139.99	350	0.00	0.00
6.7	155.52	350	0.00	0.00
6.8	171.70	350	0.00	0.00
6.9	188.50	350	0.00	0.00
7.0	203.93	350	0.00	0.00

ATTACHMENT 7 – Hydromodification Watershed Maps

City of San Marcos, CA



June 21, 2021

1:9,028

0 412.5 825 1,650 ft

0 125 250 500 m

City of San Marcos GIS

Disclaimer: Map and parcel data are believed to be accurate, but accuracy is not guaranteed. This is not a legal document and should not be substituted for a title search,appraisal, survey, or for zoning verification.

Hydrologic Soil Group—San Diego County Area, California



Map Scale: 1:2,520 if printed on A portrait (8.5" x 11") sheet.

N

Meters: 0 35 70 140 210

Feet: 0 100 200 400 600

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 11N WGS84

MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Rating Polygons

A

A/D

B

B/D

C

C/D

D

Not rated or not available

Soil Rating Lines

A

A/D

B

B/D

C

C/D

D

Not rated or not available

Soil Rating Points

A

A/D

B

B/D

C

C/D

D

Not rated or not available

Water Features

Streams and Canals

Transportation

Rails

Interstate Highways

US Routes

Major Roads

Local Roads

Background

Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: San Diego County Area, California
Survey Area Data: Version 15, May 27, 2020

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jan 24, 2020—Feb 12, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
HrC	Huerhuero loam, 2 to 9 percent slopes	D	4.3	42.8%
PeC	Placentia sandy loam, 2 to 9 percent slopes, warm MAAT, MLRA 19	C	5.7	57.2%
Totals for Area of Interest			**10.0**	**100.0%**

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

ATTACHMENT 3
Structural BMP Maintenance Information

This is the cover sheet for Attachment 3.

Indicate which Items are Included behind this cover sheet:

Attachment Sequence	Contents	Checklist
Attachment 3a	Structural BMP Maintenance Thresholds and Actions (Required)	☒ Included See Structural BMP Maintenance Information Checklist on the back of this Attachment cover sheet.
Attachment 3b	Draft Maintenance Agreement (when applicable)	☐ Included ☐ Not Applicable

Use this checklist to ensure the required information has been included in the Structural BMP Maintenance Information Attachment:

☒ Preliminary Design / Planning / CEQA level submittal:

Attachment 3a must identify:

- ☒ Typical maintenance indicators and actions for proposed structural BMP(s) based on Section 7.7 of the BMP Design Manual

Attachment 3b is not required for preliminary design / planning / CEQA level submittal.

☐ Final Design level submittal:

Attachment 3a must identify:

- ☐ Specific maintenance indicators and actions for proposed structural BMP(s). This shall be based on Section 7.7 of the BMP Design Manual and enhanced to reflect actual proposed components of the structural BMP(s)
- ☐ How to access the structural BMP(s) to inspect and perform maintenance
- ☐ Features that are provided to facilitate inspection (e.g., observation ports, cleanouts, silt posts, or other features that allow the inspector to view necessary components of the structural BMP and compare to maintenance thresholds)
- ☐ Manufacturer and part number for proprietary parts of structural BMP(s) when applicable
- ☐ Maintenance thresholds specific to the structural BMP(s), with a location-specific frame of reference (e.g., level of accumulated materials that triggers removal of the materials, to be identified based on viewing marks on silt posts or measured with a survey rod with respect to a fixed benchmark within the BMP)
- ☐ Recommended equipment to perform maintenance
- ☐ When applicable, necessary special training or certification requirements for inspection and maintenance personnel such as confined space entry or hazardous waste management

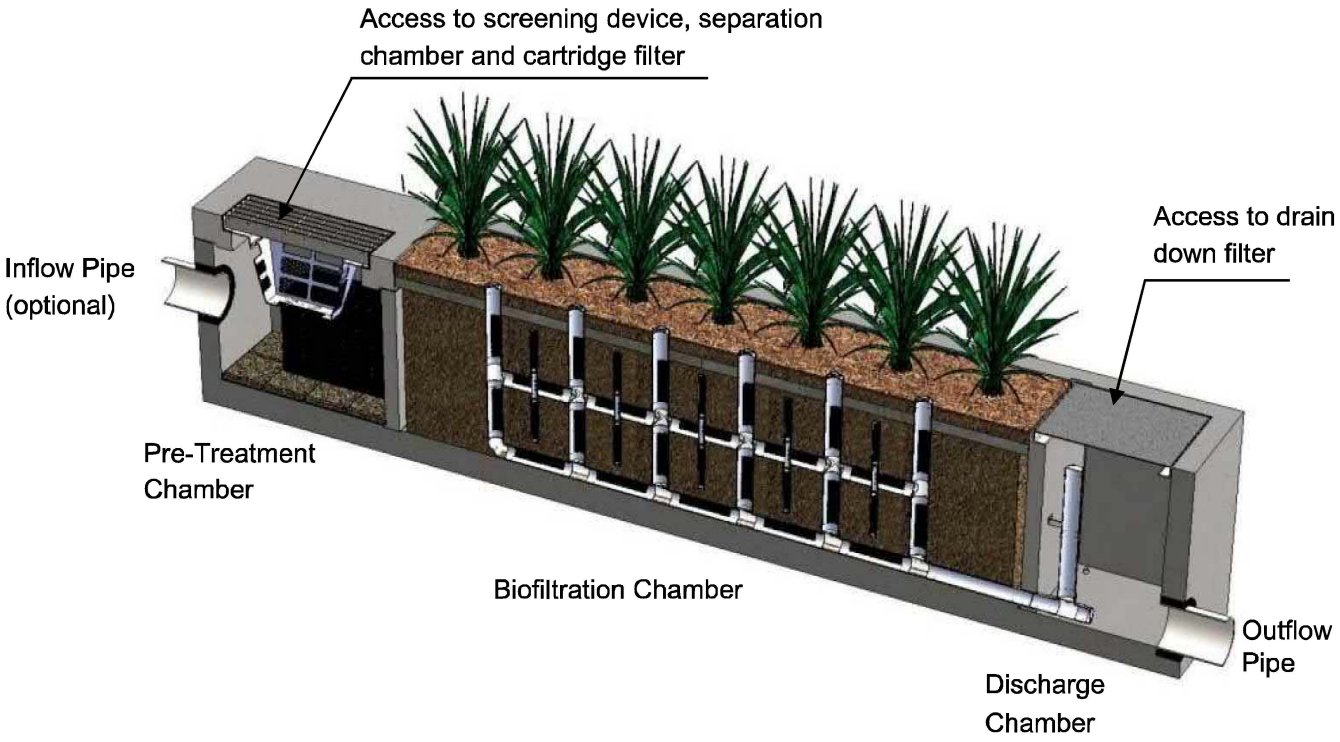
Attachment 3b: For private entity operation and maintenance, Attachment 3b shall include a draft maintenance agreement in the local jurisdiction's standard format (PDP applicant to contact the [City Engineer] to obtain the current maintenance agreement forms).

Maintenance Guidelines for Modular Wetland System - Linear

Maintenance Summary

- Remove Trash from Screening Device – average maintenance interval is 6 to 12 months.
  - (*5 minute average service time*).
- Remove Sediment from Separation Chamber – average maintenance interval is 12 to 24 months.
  - (*10 minute average service time*).
- Replace Cartridge Filter Media – average maintenance interval 12 to 24 months.
  - (*10-15 minute per cartridge average service time*).
- Replace Drain Down Filter Media – average maintenance interval is 12 to 24 months.
  - (*5 minute average service time*).
- Trim Vegetation – average maintenance interval is 6 to 12 months.
  - (*Service time varies*).

System Diagram



Maintenance Procedures

Screening Device

1. Remove grate or manhole cover to gain access to the screening device in the Pre-Treatment Chamber. Vault type units do not have screening device. Maintenance can be performed without entry.
2. Remove all pollutants collected by the screening device. Removal can be done manually or with the use of a vacuum truck. The hose of the vacuum truck will not damage the screening device.
3. Screening device can easily be removed from the Pre-Treatment Chamber to gain access to separation chamber and media filters below. Replace grate or manhole cover when completed.

Separation Chamber

1. Perform maintenance procedures of screening device listed above before maintaining the separation chamber.
2. With a pressure washer spray down pollutants accumulated on walls and cartridge filters.
3. Vacuum out Separation Chamber and remove all accumulated pollutants. Replace screening device, grate or manhole cover when completed.

Cartridge Filters

1. Perform maintenance procedures on screening device and separation chamber before maintaining cartridge filters.
2. Enter separation chamber.
3. Unscrew the two bolts holding the lid on each cartridge filter and remove lid.
4. Remove each of 4 to 8 media cages holding the media in place.
5. Spray down the cartridge filter to remove any accumulated pollutants.
6. Vacuum out old media and accumulated pollutants.
7. Reinstall media cages and fill with new media from manufacturer or outside supplier. Manufacturer will provide specification of media and sources to purchase.
8. Replace the lid and tighten down bolts. Replace screening device, grate or manhole cover when completed.

Drain Down Filter

1. Remove hatch or manhole cover over discharge chamber and enter chamber.
2. Unlock and lift drain down filter housing and remove old media block. Replace with new media block. Lower drain down filter housing and lock into place.
3. Exit chamber and replace hatch or manhole cover.

Maintenance Notes

1. Following maintenance and/or inspection, it is recommended the maintenance operator prepare a maintenance/inspection record. The record should include any maintenance activities performed, amount and description of debris collected, and condition of the system and its various filter mechanisms.

2. The owner should keep maintenance/inspection record(s) for a minimum of five years from the date of maintenance. These records should be made available to the governing municipality for inspection upon request at any time.

3. Transport all debris, trash, organics and sediments to approved facility for disposal in accordance with local and state requirements.

4. Entry into chambers may require confined space training based on state and local regulations.

5. No fertilizer shall be used in the Biofiltration Chamber.

6. Irrigation should be provided as recommended by manufacturer and/or landscape architect. Amount of irrigation required is dependent on plant species. Some plants may require irrigation.

Maintenance Procedure Illustration

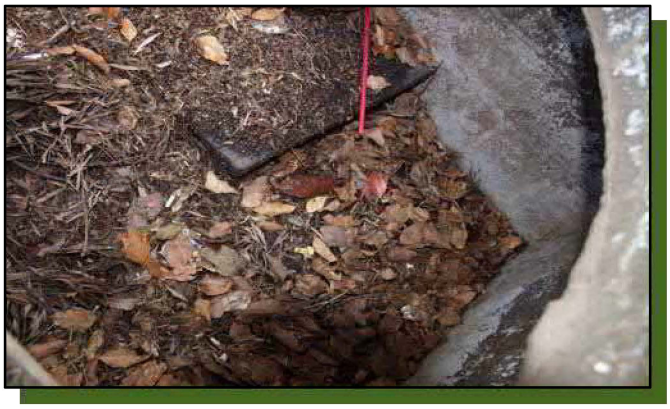
Screening Device

The screening device is located directly under the manhole or grate over the Pre-Treatment Chamber. It's mounted directly underneath for easy access and cleaning. Device can be cleaned by hand or with a vacuum truck.



Separation Chamber

The separation chamber is located directly beneath the screening device. It can be quickly cleaned using a vacuum truck or by hand. A pressure washer is useful to assist in the cleaning process.







Cartridge Filters

The cartridge filters are located in the Pre-Treatment chamber connected to the wall adjacent to the biofiltration chamber. The cartridges have removable tops to access the individual media filters. Once the cartridge is open media can be easily removed and replaced by hand or a vacuum truck.







Drain Down Filter

The drain down filter is located in the Discharge Chamber. The drain filter unlocks from the wall mount and hinges up. Remove filter block and replace with new block.



Trim Vegetation

Vegetation should be maintained in the same manner as surrounding vegetation and trimmed as needed. No fertilizer shall be used on the plants. Irrigation per the recommendation of the manufacturer and or landscape architect. Different types of vegetation requires different amounts of irrigation.









Inspection Form



Modular Wetland System, Inc.
P. 760.433-7640
F. 760-433-3176
E. Info@modularwetlands.com

www.modularwetlands.com

Inspection Report
Modular Wetlands System

Project Name _____

Project Address _____
(city) (Zip Code)

Owner / Management Company _____

Contact _____ Phone ( ) –

Inspector Name _____ Date ____/____/____ Time _____ AM / PM

For Office Use Only
(Reviewed By)
(Date)
Office personnel to complete section to the left.

Type of Inspection ☐ Routine ☐ Follow Up ☐ Complaint ☐ Storm Storm Event in Last 72-hours? ☐ No ☐ Yes

Weather Condition _____ Additional Notes _____

Inspection Checklist

Modular Wetland System Type (Curb, Grate or UG Vault): _____ Size (22', 14' or etc.): _____

Structural Integrity:	**Yes**	**No**	**Comments**
Damage to pre-treatment access cover (manhole cover/grate) or cannot be opened using normal lifting pressure?			
Damage to discharge chamber access cover (manhole cover/grate) or cannot be opened using normal lifting pressure?			
Does the MWS unit show signs of structural deterioration (cracks in the wall, damage to frame)?			
Is the inlet/outlet pipe or drain down pipe damaged or otherwise not functioning properly?			
Working Condition:			
Is there evidence of illicit discharge or excessive oil, grease, or other automobile fluids entering and clogging the unit?			
Is there standing water in inappropriate areas after a dry period?			
Is the filter insert (if applicable) at capacity and/or is there an accumulation of debris/trash on the shelf system?			
Does the depth of sediment/trash/debris suggest a blockage of the inflow pipe, bypass or cartridge filter? If yes, specify which one in the comments section. Note depth of accumulation in in pre-treatment chamber.			Depth:
Does the cartridge filter media need replacement in pre-treatment chamber and/or discharge chamber?			Chamber:
Any signs of improper functioning in the discharge chamber? Note issues in comments section.			
Other Inspection Items:			
Is there an accumulation of sediment/trash/debris in the wetland media (if applicable)?			
Is it evident that the plants are alive and healthy (if applicable)? Please note Plant Information below.			
Is there a septic or foul odor coming from inside the system?			

Waste:	**Yes**	**No**
Sediment / Silt / Clay		
Trash / Bags / Bottles		
Green Waste / Leaves / Foliage		

Recommended Maintenance	
No Cleaning Needed	
Schedule Maintenance as Planned	
Needs Immediate Maintenance	

Plant Information	
Damage to Plants	
Plant Replacement	
Plant Trimming	

Additional Notes: _____

2972 San Luis Rey Road, Oceanside, CA 92058 P (760) 433-7640 F (760) 433-3176

Maintenance Report



Modular Wetland System, Inc.
P. 760.433-7640
F. 760-433-3176
E. Info@modularwetlands.com

www.modularwetlands.com

Cleaning and Maintenance Report
Modular Wetlands System

Project Name _____

Project Address _____
(city) (Zip Code)

Owner / Management Company _____

Contact _____ Phone ( ) –

Inspector Name _____ Date ____/____/____ Time _____AM / PM

For Office Use Only
(Reviewed By)
(Date)
Office personnel to complete section to the left.

Type of Inspection ☐ Routine ☐ Follow Up ☐ Complaint ☐ Storm Storm Event in Last 72-hours? ☐ No ☐ Yes

Weather Condition _____ Additional Notes _____

Site Map #	GPS Coordinates of Insert	Manufacturer / Description / Sizing	Trash Accumulation	Foliage Accumulation	Sediment Accumulation	Total Debris Accumulation	Condition of Media 25/50/75/100 (will be changed @ 75%)	Operational Per Manufactures' Specifications (If not, why?)
	Lat: Long:	MWS Catch Basins						
		MWS Sedimentation Basin						
		Media Filter Condition						
		Plant Condition						
		Drain Down Media Condition						
		Discharge Chamber Condition						
		Drain Down Pipe Condition						
		Inlet and Outlet Pipe Condition						

Comments:

2972 San Luis Rey Road, Oceanside, CA 92058 P. 760.433.7640 F. 760.433.3176

ATTACHMENT 4
Copy of Plan Sheets Showing Permanent Storm Water BMPs

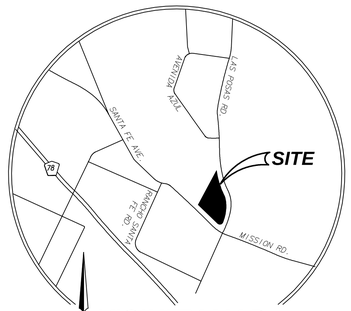
This is the cover sheet for Attachment 4.

Use this checklist to ensure the required information has been included on the plans:

The plans must identify:

☒ Structural BMP(s) with ID numbers matching Form I-6 Summary of PDP Structural BMPs
☒ The grading and drainage design shown on the plans must be consistent with the delineation of DMAs shown on the DMA exhibit
☒ Details and specifications for construction of structural BMP(s)
☒ Signage indicating the location and boundary of structural BMP(s) as required by the [City Engineer]
☒ How to access the structural BMP(s) to inspect and perform maintenance
☒ Features that are provided to facilitate inspection (e.g., observation ports, cleanouts, silt posts, or other features that allow the inspector to view necessary components of the structural BMP and compare to maintenance thresholds)
☒ Manufacturer and part number for proprietary parts of structural BMP(s) when applicable
☒ Maintenance thresholds specific to the structural BMP(s), with a location-specific frame of reference (e.g., level of accumulated materials that triggers removal of the materials, to be identified based on viewing marks on silt posts or measured with a survey rod with respect to a fixed benchmark within the BMP)
☒ Recommended equipment to perform maintenance
☒ When applicable, necessary special training or certification requirements for inspection and maintenance personnel such as confined space entry or hazardous waste management
☒ Include landscaping plan sheets showing vegetation requirements for vegetated structural BMP(s)
☒ All BMPs must be fully dimensioned on the plans
☒ When proprietary BMPs are used, site-specific cross section with outflow, inflow, and model number shall be provided. Photocopies of general brochures are not acceptable.

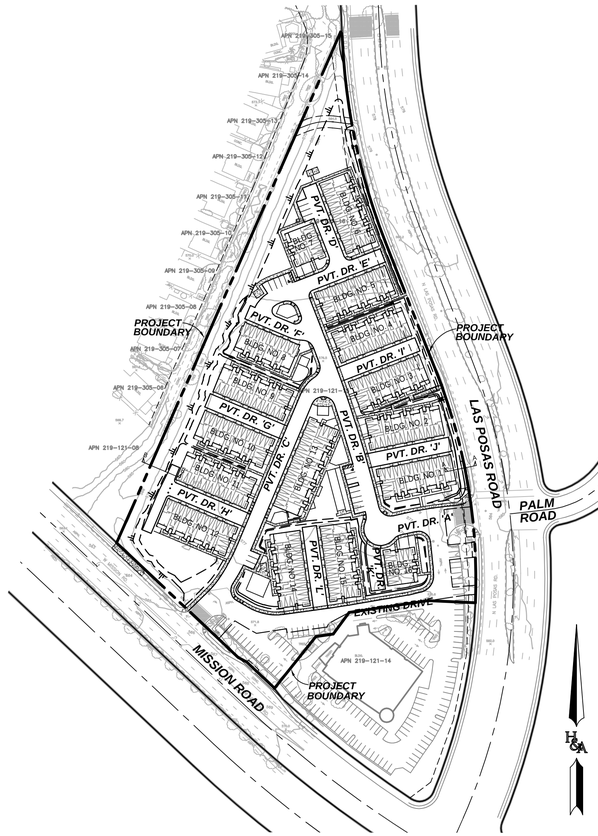
SITE DEVELOPMENT PLAN
GRAN VISTA
City of San Marcos, California



VICINITY MAP
NTS

LEGEND

- PROJECT BOUNDARY
- PROPOSED LOT LINE
- PROPOSED RIGHT-OF-WAY LINE
- PROPOSED SIDEWALK
- EXISTING GAS LINE — GAS
- EXISTING SEWER MAIN WITH MANHOLE
- PROPOSED SEWER MAIN WITH MANHOLE
- EXISTING WATER MAIN — W
- PROPOSED WATER MAIN — W
- EXISTING FIRE HYDRANT
- PROPOSED FIRE HYDRANT
- EXISTING ST. LIGHT
- PROPOSED STORM DRAIN SYSTEM — PIPE — MODULAR WETLAND
- PROPOSED FOCALPOINT
- PROPOSED STORM WATER VAULT
- EXISTING STORM DRAIN SYSTEM — CLEANOUT — CATCH BASIN/INLET
- EXISTING RETAINING WALL
- PROPOSED RETAINING WALL
- % OF GRADE — 1.27%
- PROPOSED CENTERLINE PVT. ST. ELEVATION — 528.0FS
- EXISTING CONTOURS — 600
- PROPOSED SLOPE (2: 1 MAX.)
- PROPOSED PARKING — P-10
- PROPOSED ACCESSIBLE UNIT
- EXISTING BFE CONTOURS — 567



PROJECT MAP
N.T.S.

ABBREVIATIONS

FL	FLOW LINE	R/W	RIGHT OF WAY
TW	TOP OF WALL	PL	PROPERTY LINE
BW	BOTTOM OF WALL	GB	GRADE BREAK
TF	TOP OF FOOTING	PI	POINT OF INTERSECTION (V.C.)
FS	FINISH SURFACE	P	PAD ELEVATION
S	SEWER	SF	GROSS SQ. FT.
W	WATER	NSF	NET SQ. FT.
RW	RECLAIMED WATER	FP	FLOOD PLAIN
SD	STORM DRAIN	VC	VERTICAL CURVE
NTS	NOT TO SCALE	MH	MANHOLE
ELEV	ELEVATION	RCP	REINFORCED CONCRETE PIPE
IE	INVERT ELEVATION	WM	WATER METER
BF	BACKFLOW	TP	TELEPHONE PED
T	TRANSFORMER PAD		

PUBLIC UTILITIES AND DISTRICTS

GAS AND ELECTRIC	SAN DIEGO GAS AND ELECTRIC
WATER	VALLECITOS WATER DISTRICT
SEWER	VALLECITOS WATER DISTRICT
FIRE	SAN MARCOS FIRE PROTECTION DISTRICT
ELEMENTARY SCHOOL	SAN MARCOS UNIFIED SCHOOL DISTRICT
HIGH SCHOOL	SAN MARCOS UNIFIED SCHOOL DISTRICT

LEGAL DESCRIPTION

PARCELS 2 AND 3 OF PARCEL MAP NO. 20629, IN THE CITY OF SAN MARCOS, COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, FILED IN THE OFFICE OF THE COUNTY RECORDER OF SAN DIEGO COUNTY ON FEBRUARY 19, 2009 AS FILE NO. 2009-0071729 OF OFFICIAL RECORDS.

EXCEPTING THEREFROM ONE-HALF OF ALL OIL, GAS AND MINERALS IN SAID LAND AS RESERVED IN DEED FROM VISTA IRRIGATION DISTRICT TO GOODWIN M. TRENT AND DOROTHEY F. TREN, HUSBAND AND WIFE RECORDED FEBRUARY 16, 1939 IN BOOK 861, PAGE 414 OF OFFICIAL RECORDS.

ALSO EXCEPTING THEREFROM ALL WATER FROM THE WATER SYSTEM AND WATER SUPPLY OWNED BY VISTA IRRIGATION DISTRICT, AND ANY AND ALL RIGHT TO RECEIVE WATER FROM SAID WATER SYSTEM AND WATER SUPPLY COVERING SAID LAND AS RESERVED IN DEED FROM VISTA IRRIGATION DISTRICT TO GOODWIN M. TRENT AND DOROTHEY F. TREN, HUSBAND AND WIFE RECORDED FEBRUARY 16, 1939 IN BOOK 861, PAGE 414 OF OFFICIAL RECORDS.

EASEMENT NOTES

SEE SHEET 12.

TOPOGRAPHY

TOPO SOURCE: HUNSAKER & ASSOCIATES SAN DIEGO, INC.FLOWN: JULY 5, 2018

BENCHMARK: CITY OF SAN MARCOS BM SMVC033 - 3" BRASS DISC, IN STANDARD STREET WELL MONUMENT, STAMPED "CITY ENGINEER". 0.4 MILES EAST OF INTERSECTION OF MISSION ROAD AND LAS POSAS ROAD; AT CENTERLINE/POINT-OF-CURVE OF MISSION ROAD. DATUM: NAVD 88 ELEV. 569.82'

SOILS REPORT

PREPARED BY LGC GEOTECHNICAL
DATED AUGUST 2021.

WATER QUALITY

PREPARED BY H&A DATED AUGUST 2021.

DRAINAGE REPORT

PREPARED BY H&A DATED AUGUST 2021.

CONDOMINIUM NOTE

THIS IS A MAP OF A RESIDENTIAL CONDOMINIUM PROJECT AS DEFINED IN SECTION 4125 OF THE CIVIL CODE OF THE STATE OF CALIFORNIA AND IS FILED PURSUANT TO THE SUBDIVISION MAP ACT. THE PROJECT PROPOSES A MAXIMUM NUMBER OF 120 RESIDENTIAL DWELLING UNITS.

PARKING SUMMARY

PARKING REQUIRED - STANDARD

TYPE	NO. UNITS	MULTIPLIER	SPACES REQ.
2+ BD/RM	120	2 SPACES/UNIT	240
GUEST PARKING	120	1 SPACE/3 UNITS	40
	SUB-TOTAL		280
ADDITIONAL		MAIL	1
	TOTAL		281

PARKING PROVIDED

PROPOSED ON-SITE	SPACES
GARAGE	240
STANDARD	18
ACCESSIBLE	2
SUB-TOTAL	260
EXISTING ON-SITE	37
TOTAL ON-SITE	297
EXISTING OFF-SITE	99
TOTAL (ON-SITE & OFF-SITE)	396

GENERAL NOTES

1. GROSS SITE AREA: 7.59 AC
2. EXISTING LOTS: 2
   PROPOSED LOTS: 1
3. TOTAL RESIDENTIAL CONDO UNITS: 120
4. ASSESSOR'S PARCEL NUMBER: 219-121-15-00 & 219-121-16-00
5. EXISTING GENERAL PLAN DESIGNATION: COMMERCIAL
6. PROPOSED GENERAL PLAN DESIGNATION: SPECIFIC PLAN
7. EXISTING ZONE: COMMERCIAL
8. PROPOSED ZONE: SPA

GENERAL DESIGN NOTES

1. ALL PRIVATE STREET DESIGNS, PRIVATE STREET LIGHTS, AND FIRE HYDRANTS SHALL CONFORM TO CITY OF SAN MARCOS DESIGN STANDARDS AND/OR AS APPROVED BY THE CITY ENGINEER.
2. EASEMENTS SHALL BE PER CITY ENGINEER AND PUBLIC UTILITIES AND DISTRICTS.
3. CONTOUR INTERVALS: 1 AND 5 FOOT
4. FINISHED GRADES ARE APPROXIMATE ONLY AND SUBJECT TO CHANGE IN FINAL DESIGN CONSISTENT WITH THE CITY'S SUBSTANTIAL CONFORMANCE POLICY.
5. APPROXIMATE GRADING QUANTITIES CUT: 9,335 CU. YARDS
   FILL: 9,335 CU. YARDS
   QUANTITIES SHOWN ABOVE DO NOT INCLUDE THE EFFECTS OF REMEDIAL GRADING.
6. CUT AND FILL SLOPES SHALL NOT EXCEED 2: 1.
7. ALL PROPOSED UNITS SHALL BE ON A SANITARY SEWER SYSTEM.
8. ALL PROPOSED SEWER AND WATER IMPROVEMENTS SHOWN ON THIS MAP SHALL BE PRIVATE WITHIN THE PROJECT BOUNDARY AND PUBLIC OUTSIDE OF THE BOUNDARY.
9. INDIVIDUAL TRASH PICKUP FOR RESIDENTIAL UNITS.

OWNER'S CERTIFICATE

I (WE) HEREBY CERTIFY THAT I (WE) AM (ARE) THE RECORD OWNER OF THE PROPERTY SHOWN ON THE SITE DEVELOPMENT PLAN AND THAT SAID MAP SHOWS ALL MY (OUR) CONTIGUOUS OWNERSHIP IN WHICH I (WE) HAVE ANY DEED OR TRUST INTEREST. I (WE) UNDERSTAND THAT MY (OUR) PROPERTY IS CONSIDERED CONTIGUOUS EVEN IF IT IS SEPARATED BY ROADS, PRIVATE STREETS, UTILITY EASEMENTS, OR RAILROAD RIGHTS OF WAY.

OWNER

WPI-LAS POSAS/MISSION, LLC UNDIVIDED 55% INTEREST
ANDREW SUN UNDIVIDED 45% INTEREST
18300 VON KARMAN AVE
SUITE 880
IRVINE, CA 92612

ANDREW SUN DATE
OWNER & MANAGING MEMBER OF WPI-LAS POSAS/MISSION LLC

APPLICANT

MERITAGE HOMES
JOHANNA CROOKER
5 PETERS CANYON ROAD
SUITE 310
IRVINE, CA 92606

JOHANNA CROOKER DATE
APPLICANT

ENGINEER

REGISTERED PROFESSIONAL ENGINEER — ALISA S. VIALPANDO — No. 47945 — CIVIL — STATE OF CALIFORNIA

ALISA S. VIALPANDO R.C.E. 47945 DATE

EARTHWORK

CUT: APPROX. 9,335 CU. YARDS
FILL: APPROX. 9,335 CU. YARDS

GRADING QUANTITIES SHOWN ARE RAW QUANTITIES ONLY AND DO NOT INCLUDE THE EFFECT OF REMEDIAL GRADING SHOWN IN THE PRELIMINARY SOILS REPORT.

SHEET INDEX

SHEET C-1 TITLE SHEET
SHEET C-2 DETAILS
SHEET C-3 STREET SECTIONS
SHEET C-4 EXISTING SITE CONDITIONS
SHEET C-5 EXISTING SITE CONDITIONS
SHEET C-6 PROJECT DESIGN
SHEET C-7 PROJECT DESIGN
SHEET C-8 FIRE TRUCK TURNING
SHEET C-9 FIRE TRUCK TURNING
SHEET C-10 OPEN SPACE
SHEET C-11 OPEN SPACE
SHEET C-12 ACCESSIBLE ROUTE
SHEET C-13 ACCESSIBLE ROUTE
SHEET C-14 BOUNDARY & ENCUMBRANCES

CONDITION OF APPROVAL

"I(WE),_____, THE OWNER(S) OR THE OWNER'S REPRESENTATIVE, HAVE READ, UNDERSTAND AND AGREE TO THE CONDITIONS OF TENTATIVE SUBDIVISION MAP 21-0003" AS STATED IN THE FINAL RESOLUTION.

JOSEPH FARACE DATE
PLANNING DIVISION MANAGER

STEPHANIE KELLAR DATE
P.W. DIRECTOR/CITY ENGINEER

PREPARED BY:
HUNSAKER & ASSOCIATES SAN DIEGO, INC
PLANNING 9707 Waples Street
ENGINEERING San Diego, Ca 92121
SURVEYING PH(858)558-4500· FX(858)558-1414

NO.	REVISIONS	DATE	BY
1	FIRST SUBMITTAL	10/19/21	H&A
2	SECOND SUBMITTAL	02/24/22	H&A
3	THIRD SUBMITTAL	05/20/22	H&A
4			
5			
6			
7			

CITY OF SAN MARCOS

SITE DEVELOPMENT PLAN NUMBER:

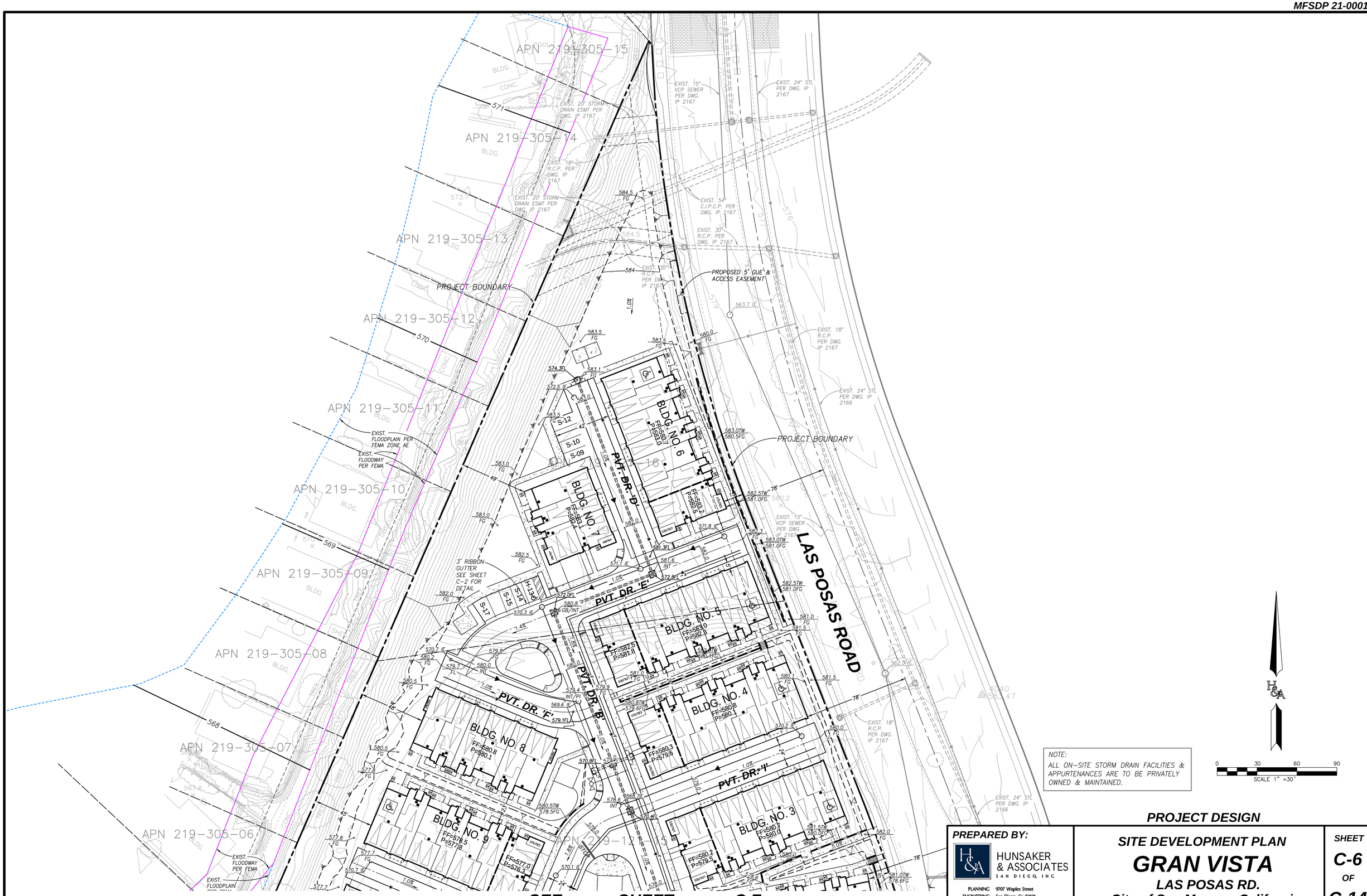
OWNER: WPI-LAS POSAS/MISSION, LLC & ANDREW SUN					PH: (949)943-8550	
ADDRESS: 18300 VON KARMAN AVE., SUITE 880, IRVIINE, CA 92612						
ENGINEER	HUNSAKER & ASSOC., SAN DIEGO, INC.				PH: (858)558-4500	
ADDRESS: 9707 WAPLES ST., SAN DIEGO, CA 92121						
TYPE OF DEVELOPMENT: MULTI-FAMILY						
ZONING: SPECIFIC PLAN			ASSESSOR'S PARCEL NO(S): 219-121-15 & -16			
SITE DATA			DWELLING UNITS		OPEN SPACE DATA (S.F.)	
AREA (SQ. FT.)		COVERAGE %	3 BDRM	120	COMMON	PRIVATE
GROSS LOT:	330,787	100%			148,297	17,325
BUILDING:	97,837	30%				
STREET/PARK:	93,779	28%				
LANDSCAPING:	139,172	42%				
			TOTAL	120		
PARKING	ORD. REQ.		DRIVE WAY (SIZE & SLOPE)		SETBACKS	
GARAGE 240	LOADING	N/A	ONE WAY: ——		FRONT SPEC.	REAR ——
GUEST 19	HANDICAP	1	2-WAY: ——		L. SIDE N/A	SPECIAL ——
OPEN N/A	TOTAL	260	SLOPE: ——		R. SIDE N/A	ACCES. BLDG.—

SITE DEVELOPMENT PLAN
GRAN VISTA
LAS POSAS RD.
City of San Marcos, California

SHEET C-1 OF C-14

W.O. 3087-0007

R: \1482\&Pln\Las Posas - SDP Sht 01.dwg[ ]May-20-2022: 16: 58



NOTE:
ALL ON-SITE STORM DRAIN FACILITIES & APPURTENANCES ARE TO BE PRIVATELY OWNED & MAINTAINED.

0 30 60 90
SCALE 1" =30'

PROJECT DESIGN

PREPARED BY:

HUNSAKER & ASSOCIATES SAN DIEGO, INC

PLANNING 9707 Waples Street
ENGINEERING San Diego, Ca 92121
SURVEYING PH(858)558-4500· FX(858)558-1414

SITE DEVELOPMENT PLAN

GRAN VISTA

LAS POSAS RD.
City of San Marcos, California

SHEET C-6 OF C-14

W.O. 5087-0007

R: \1482\&Pln\Las Posas - SDP Sht 06.dwg[ ]May-20-2022: 16: 53

SEE SHEET C-6



NOTE:
ALL ON-SITE STORM DRAIN FACILITIES & APPURTENANCES ARE TO BE PRIVATELY OWNED & MAINTAINED.

PREPARED BY:
HUNSAKER & ASSOCIATES SAN DIEGO, INC
PLANNING 9707 Waples Street
ENGINEERING San Diego, Ca 92121
SURVEYING PH(858)558-4500 FX(858)558-1414

SITE DEVELOPMENT PLAN

GRAN VISTA

LAS POSAS RD.
City of San Marcos, California

SHEET C-7 OF C-14

W.O. 1482-6000

Appendix I
Noise Technical Report

Noise Technical Report

Gran Vista Project

FEBRUARY 2023

Prepared for:

CITY OF SAN MARCOS
1 Civic Center Drive
San Marcos, California 92069

Prepared by:

DUDEK

605 Third Street
Encinitas, California 92024
Contact: Connor Burke, INCE

Printed on 30% post-consumer recycled material.

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Acronyms and Abbreviations

Acronym/Abbreviation	Definition
Caltrans	California Department of Transportation
CEQA	California Environmental Quality Act
City	City of San Marcos
CNEL	Community Noise Equivalent Level
CNMP	construction noise management plan
dB	decibel
dBA	A-weighted decibel
FTA	Federal Transit Administration
ips	inches per second
L_{dn}	day–night average noise level
L_{eq}	equivalent noise level
L_{max}	maximum sound level
L_{min}	minimum sound level
Gran Vista	proposed project
PPV	peak particle velocity
RCNM	Roadway Construction Noise Model
SLM	Sound level meter
SPA	Specific Plan Area
SPL	Sound pressure level
ST	Short-term
STC	Sound Transmission Class
TL	Transmission Loss
VdB	Velocity Decibel

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1 Introduction

1.1 Report Purpose and Scope

The purpose of this technical report is to assess the potential noise impacts associated with construction and operation of the Gran Vista project (project). This analysis uses the significance thresholds in Appendix G of the California Environmental Quality Act (CEQA) Guidelines (14 CCR 15000 et seq.).

1.2 Regional and Local Setting

The site is located in the land use jurisdictions of both the City of San Marcos (City) and the County of San Diego (County); however, it is proposed to be annexed into the City of San Marcos. The site is located at the southeastern portion of the City of San Marcos, bordering the City of Escondido to the east and unincorporated County of San Diego lands to the south. The project site is bounded by Las Posas Road along the eastern boundary, W. Mission Road along the southwest boundary, an existing CVS store to the south, and existing single-family residential development to the west/northwest (Figure 1, Project Location). Nearby land uses in the vicinity of the project site include industrial and commercial uses to the west on the other side of W. Mission Road, the Santa Fe Hills residential community to the north, and Palomar College approximately half a mile to the east. The project site is comprised of Assessor's Parcel Numbers (APNs) 219-121-1500 and 219-121-1600.

1.3 Project Description

The residential component of the Project consists of 120 townhomes, a mix of 2- and 3-bedroom units. The project includes approximately 148,297 square feet of recreation area on-site and up to 198 square feet of private open space per unit (Figure 2, Site Plan). Amenities on site would include tot lots and recreational areas, a dog park, a community garden, and a landscaped pedestrian path along the Las Posas Road frontage. The project would include two points of entry: one off N. Las Posas Road, and the other off of W. Mission Road. A total of 264 parking spaces would be provided for the total residential dwelling units, including 20 new guest spaces. Existing spaces on the project site will meet the remaining guest parking requirements. The project site is currently zoned for Commercial (C) use with an existing General Plan designation of Commercial and is within the City's General Plan Neighborhood College area. The project proposes a General Plan and Zoning Amendment to change the land use designation to Specific Plan Area (SPA).

1.4 Fundamentals of Noise and Vibration

The following is a brief discussion of fundamental noise concepts and terminology.

1.4.1 Sound, Noise, and Acoustics

Sound is actually a process that consists of three components: the sound source, sound path, and sound receiver. All three components must be present for sound to exist. Without a source to produce sound, there is no sound. Similarly, without a medium to transmit sound pressure waves, there is no sound. Finally, sound must be received; a hearing organ, sensor, or object must be present to perceive, register, or be affected by sound or noise. In most

situations, there are many different sound sources, paths, and receptors rather than just one of each. Acoustics is the field of science that deals with the production, propagation, reception, effects, and control of sound. Noise is defined as sound that is loud, unpleasant, unexpected, or undesired.

1.4.2 Sound Pressure Levels and Decibels

The amplitude of a sound determines its loudness. Loudness of sound increases with increasing amplitude. Sound pressure amplitude is measured in units of micronewton per square meter, also called micropascal. One micropascal is approximately one-hundred billionth (0.00000000001) of normal atmospheric pressure. The pressure of a very loud sound may be 200 million micropascals, or 10 million times the pressure of the weakest audible sound. Because expressing sound levels in terms of micropascal would be very cumbersome, sound pressure level in logarithmic units is used instead to describe the ratio of actual sound pressure to a reference pressure squared. These units are called Bels. To provide a finer resolution, a Bel is subdivided into 10 decibels (dB).



SOURCE: SanGIS 2020

DUDEK

0 500 1,000 Feet

FIGURE 1

Project Location

Gran Vista, Las Posas Project

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SOURCE: SANGIS 2020, 2021; GMP 2021

DUDEK

0 75 150 Feet

FIGURE 2

Site Plan

Gran Vista, Las Posas Project

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1.4.3 A-Weighted Sound Level

Sound pressure level alone is not a reliable indicator of loudness. The frequency, or pitch, of a sound also has a substantial effect on how humans will respond. Although the intensity (energy per unit area) of the sound is a purely physical quantity, the loudness, or human response, is determined by the characteristics of the human ear.

Human hearing is limited not only in the range of audible frequencies, but also in the way it perceives the sound in that range. In general, the healthy human ear is most sensitive to sounds between 1,000 and 5,000 hertz, and it perceives a sound within that range as more intense than a sound of higher or lower frequency with the same magnitude. To approximate the frequency response of the human ear, a series of sound level adjustments is usually applied to the sound measured by a sound level meter. The adjustments (referred to as a weighting network) are frequency-dependent.

The A-scale weighting network approximates the frequency response of the average young ear when listening to ordinary sounds. When people make judgments about the relative loudness or annoyance of a sound, their judgments correlate well with the A-scale sound levels of those sounds. Other weighting networks have been devised to address high noise levels or other special situations (e.g., B-scale, C-scale, D-scale), but these scales are rarely used in conjunction with most environmental noise. Noise levels are typically reported in terms of A-weighted sound levels. All sound levels discussed in this report are A-weighted decibels (dBA). Examples of typical noise levels for common indoor and outdoor activities are depicted in Table 1.

Table 1. Typical Sound Levels in the Environment and Industry

Common Outdoor Activities	Noise Level (dB)	Common Indoor Activities
—	110	Rock band
Jet fly over at 300 meters (1,000 feet)	100	—
Gas lawn mower at 1 meter (3 feet)	90	—
Diesel truck at 15 meters (50 feet), at 80 kilometers per hour (50 miles per hour)	80	Food blender at 1 meter (3 feet); garbage disposal at 1 meter (3 feet)
Noisy urban area, daytime; gas lawn mower at 30 meters (100 feet)	70	Vacuum cleaner at 3 meters (10 feet)
Commercial area; heavy traffic at 90 meters (300 feet)	60	Normal speech at 1 meter (3 feet)
Quiet urban, daytime	50	Large business office; dishwasher next room
Quiet urban, nighttime	40	Theater; large conference room (background)
Quiet suburban, nighttime	30	Library
Quiet rural, nighttime	20	Bedroom at night; concert hall (background)
—	10	Broadcast/Recording studio
Lowest threshold of human hearing	0	Lowest threshold of human hearing

Source: Caltrans 2013.

1.4.4 Human Response to Changes in Noise Levels

Under controlled conditions in an acoustics laboratory, the trained, healthy human ear is able to discern changes in sound levels of 1 dBA when exposed to steady, single-frequency signals in the mid-frequency range. Outside such controlled conditions, the trained ear can detect changes of 2 dBA in normal environmental noise. It is widely accepted that the average healthy ear, however, can barely perceive noise level changes of 3 dBA. A change of 5 dBA is readily perceptible, and a change of 10 dBA is *perceived* as twice (if a gain) or half (if a loss) as loud. A doubling of sound energy results in a 3-dBA increase in sound, which means that a doubling of sound energy (e.g., doubling the volume of traffic on a road) would result in a barely perceptible change in sound level.

1.4.5 Noise Descriptors

Additional units of measure have been developed to evaluate the long-term characteristics of sound. The energy-equivalent sound level (L_{eq}) is also referred to as the time-average sound level. It is the equivalent steady-state or constant sound level that in a stated period of time would contain the same acoustical energy as the time-varying sound level during the same time period. For instance, the 1-hour A-weighted equivalent sound level, $L_{eq}(h)$, is the energy average of the A-weighted sound levels occurring during a 1-hour period, and is the basis for most of the County Noise Ordinance standards.

People are generally more sensitive to and thus potentially more annoyed by noise occurring during the evening and nighttime hours. Hence, another noise descriptor used in community noise assessments—the community noise equivalent level (CNEL)—represents a time-weighted, 24-hour average noise level based on the A-weighted sound level. However, unlike an unmodified 24 hour L_{eq} value, the CNEL descriptor accounts for increased noise sensitivity during the evening (7 p.m. to 10 p.m.) and nighttime (10 p.m. to 7 a.m.) by adding 5 dBA and 10 dBA, respectively, to the average sound levels occurring during these defined hours within a 24-hour period.

1.4.6 Sound Propagation

Sound propagation (i.e., the traverse of sound from a noise emission source position to a receiver location) is influenced by multiple factors that include geometric spreading, ground absorption, atmospheric effects, and occlusion by natural terrain and/or features of the built environment.

Sound levels attenuate (or diminish) geometrically at a rate of approximately 6 dBA per doubling of distance from an outdoor point-type source due to the spherical spreading of sound energy with increasing distance travelled. The effects of atmospheric conditions such as humidity, temperature, and wind gradients are typically distance-dependent and can also temporarily either increase or decrease sound levels measured or perceived at a receptor location. In general, the greater the distance the receiver is from the source of sound emission, the greater the potential for variation in sound levels at the receptor due to these atmospheric effects. Additional attenuation can result from sound path occlusion and diffraction due to intervention of natural (ridgelines, dense forests, etc.) and built features (such as solid walls, buildings and other structures).

1.4.7 Groundborne Vibration Fundamentals

Groundborne vibration is fluctuating or oscillatory motion transmitted through the ground mass (i.e., soils, clays, and rock strata). The strength of groundborne vibration attenuates rapidly over distance. Some soil types transmit vibration quite efficiently; other types (primarily sandy soils) do not. Several basic measurement units are commonly

used to describe the intensity of ground vibration. The descriptors used by the Federal Transit Administration (FTA) are peak particle velocity (PPV), in units of inches per second (ips), and velocity decibel (VdB) that is based on a root-mean square (RMS) of the vibration signal magnitude. The calculation to determine PPV at a given distance is as follows:

$$PPV_{distance} = PPV_{ref}*(25/D)^{1.5}$$

Where:

$PPV_{distance}$ = the peak particle velocity in inches per second of the equipment adjusted for distance

PPV_{ref} = the reference vibration level in inches per second at 25 feet

D = the distance from the equipment to the receiver

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2 Regulatory Setting

2.1 Federal

In its Transit Noise and Vibration Impact Assessment guidance manual, the Federal Transit Administration (FTA) recommends a daytime construction noise level threshold of 80 dBA L_{eq} over an 8-hour period (FTA 2018) when detailed construction noise assessments are performed to evaluate potential impacts to community residences surrounding a project. Although this FTA guidance is not a regulation, it can serve as a quantified standard in the absence of such noise limits at the state and local jurisdictional levels.

2.2 State

2.2.1 California Code of Regulations, Title 24

Title 24 of the California Code of Regulations sets standards that new development in California must meet. According to Title 24, interior noise levels are not to exceed 45 dBA CNEL in any habitable room (ICC 2019).

2.2.2 California Department of Health Services Guidelines

The California Department of Health Services has developed guidelines of community noise acceptability for use by local agencies (OPR 2017). Selected relevant levels are listed here:

- Below 60 dBA CNEL: normally acceptable for low-density residential use
- 50 to 70 dBA: conditionally acceptable for low-density residential use
- Below 65 dBA CNEL: normally acceptable for high-density residential use and transient lodging
- 60 to 70 dBA CNEL: conditionally acceptable for high-density residential, transient lodging, churches, educational, and medical facilities

The normally acceptable exterior noise level for high-density residential use is up to 65 dBA CNEL. Additionally, this exterior noise level limit is consistent with the City of Chula Vista General Plan Noise Element, which considers multi-family unit noise-sensitive land uses.

2.2.3 California Department of Transportation

In its Transportation and Construction Vibration Guidance Manual (Caltrans 2020), the California Department of Transportation (Caltrans) recommends 0.5 ips PPV as a threshold for the avoidance of structural damage to typical newer residential buildings exposed to continuous or frequent intermittent sources of groundborne vibration. For transient vibration events, such as blasting, the damage risk threshold would be 1.0 ips PPV (Caltrans 2020) at the same type of newer residential structures. For older structures, these guidance thresholds would be more stringent: 0.3 ips PPV for continuous/intermittent vibration sources, and 0.5 ips PPV for transient vibration events. With respect to human annoyance, Caltrans guidance indicates that building occupants exposed to continuous groundborne vibration in the range of 0.2-0.6 ips PPV would find it “unpleasant or “annoying” and thus a likely significant impact. Although these Caltrans guidance thresholds are not regulations, they can serve as quantified standards in the absence of such limits at the local jurisdictional level.

2.3 Local

2.3.1 Noise Ordinance

San Marcos Municipal Code Chapter 10.24.020.b.9 addresses construction activity, with exemption from chapter provisions between 7:00 a.m. and 6:00 p.m. Monday through Friday and on Saturdays from 8:00 a.m. to 5:00 p.m. (City of San Marcos 2017). The Municipal Codes does not set noise limits on construction activities; however, on occasion the City of San Marcos has adopted the County of San Diego's Noise Ordinance noise limit of 75 dBA L_{eq} (8-hour average) attributed to construction activities as received by an occupied property.

Section 20.300.070.E from the City of San Marcos Municipal Code describes exterior noise limits as reproduced in Table 2. Allowable decibel increases from what appears in Table 2 are based on duration, such as +5 dBA for up to a cumulative duration of 15 minutes in an hour (City of San Marcos 2017).

Table 2. City of San Marcos Exterior Noise Standards by Zone

Zone	Allowable Noise Level (dBA L_{eq}) Measured from the Property Line
Single-Family Residential (A, R-1, R-2) [1, 2]	
7 a.m. to 10 p.m. (daytime)	60
10 p.m. to 7 a.m. (overnight)	50
Multifamily Residential (R-3) [1, 2]	
7 a.m. to 10 p.m. (daytime)	65
10 p.m. to 7 a.m. (overnight)	55
Commercial (C, O-P, SR) [3]	
7 a.m. to 10 p.m. (daytime)	65
10 p.m. to 7 a.m. (overnight)	55
Industrial	
7 a.m. to 10 p.m. (daytime)	65
10 p.m. to 7 a.m. (overnight)	60

Source: San Marcos 2017 (Table 20.300-4)

Notes:

1 For single-family detached dwelling units, the "exterior noise level" is defined as the noise level measured at an outdoor living area which adjoins and is on the same lot as the dwelling, and which contains at least the following minimum net lot area: (i) for lots less than 4,000 square feet in area, the exterior area shall include 400 square feet, (ii) for lots between 4,000 square feet to 10 acres in area, the exterior area shall include 10 percent of the lot area; (iii) for lots over 10 acres in area, the exterior area shall include 1 acre.

2 For all other residential land uses, "exterior noise level" is defined as noise measured at exterior areas which are provided for private or group usable open space purposes. "Private Usable Open Space" is defined as usable open space intended for use of occupants of one dwelling unit, normally including yards, decks, and balconies. When the noise limit for Private Usable Open Space cannot be met, then a Group Usable Open Space that meets the exterior noise level standard shall be provided. "Group Usable Open Space" is defined as usable open space intended for common use by occupants of a development, either privately owned and maintained or dedicated to a public agency, normally including swimming pools, recreation courts, patios, open landscaped areas, and greenbelts with pedestrian walkways and equestrian and bicycle trails, but not including off-street parking and loading areas or driveways.

3 For non-residential noise sensitive land uses, exterior noise level is defined as noise measured at the exterior area provided for public use.

With respect to vibration, Section 20.300.070 of the Performance Standards also indicates that "no person or use shall create, maintain, or cause ground vibration that is discernible without instruments to a person of normal sensitivity at any point on a property that is adjacent to the property of the vibration source. The ground vibration caused by moving vehicles, trains, aircraft, or temporary construction or demolition is exempted." Due to these exemptions, vibration due to construction of the proposed project, or vibration from nearby roads and rail received by new buildings or its occupants associated with the proposed project would be compatible with these City standards.

2.3.2 General Plan Noise Element

To control transportation related noise sources such as arterial roads, freeways, airports, and railroads, the City of San Marcos has established guidelines for acceptable community noise levels in the Noise Element of the General Plan (San Marcos 2012). For noise sensitive rural and single family residential uses, schools, libraries, parks and recreational areas the City Noise Element requires an exterior noise levels of less than 60 dBA CNEL for outdoor usable area. For multi-family developments the standard is 65 dBA CNEL and a standard of 70 dBA CNEL is typically applied to commercial uses. The City has also established an interior noise limit of 45 dBA CNEL for all residential uses.

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3 Existing Conditions

SPL measurements were conducted near the proposed project site on April 26, 2022, to quantify and characterize the existing outdoor ambient sound levels. Table 3 provides the location, date, and time period at which these baseline noise level measurements were performed by an attending Dudek field investigator using a Rion-branded Model NL-52 sound level meter (SLM) equipped with a 0.5 inch, pre-polarized condenser microphone with pre-amplifier. The SLM meets the current American National Standards Institute standard for a Type 1 (Precision Grade) sound level meter. The accuracy of the SLM was verified using a field calibrator before and after the measurements, and the measurements were conducted with the microphone positioned approximately 5 feet above the ground.

Four (4) short-term (ST) noise level measurement locations (ST1–ST4) that represent existing noise-sensitive receivers were selected on and near the proposed project site. These locations are depicted as receivers ST1–ST4 on Figure 3, Noise Measurement Locations. The measured L_{eq} and L_{max} noise levels are provided in Table 3. The primary noise sources at the sites identified in Table 3 consisted of traffic along adjacent roadways, the sounds of leaves rustling, and birdsong. As shown in Table 3, the measured SPL ranged from approximately 47.3 dBA Leq at ST4 to 64.2 dBA Leq at ST1. Beyond the summarized information presented in Table 3, detailed noise measurement data is included in Appendix A, Baseline Noise Measurement Field Data.

Table 3. Measured Baseline Outdoor Ambient Noise Levels

Site	Location/Address	Date/Time	L_{eq} (dBA)	L_{max} (dBA)
ST1	Southwest in CVS Parking Lot	2022-04-26, 04:00 PM to 04:10 PM	64.2	73.6
ST2	Northern boundary of CVS Parking Lot	2022-04-26, 04:20 PM to 04:30 PM	63.5	74.5
ST3	In dirt lot, west of Property at 1333 Granite Road, San Marcos CA, 92069, east of N Las Posas Road	2022-04-26, 04:40 PM to 04:50 PM	60.2	68.5
ST4	Front yard of 389 Palmac St, San Marcos, CA 92069	2022-04-26, 05:00 PM to 05:10 PM	47.3	58.1

Source: Appendix A.
Notes: L_{eq} = equivalent continuous sound level (time-averaged sound level); L_{max} = maximum sound level during the measurement interval; dBA = A-weighted decibels; ST = short-term noise measurement locations.

Generally, the measured samples of daytime L_{eq} agree with expectations: ST1, ST2, and ST3 L_{eq} values are above 60 dBA due largely to proximity to Mission Boulevard and/or N. Las Posas Road that are major roadways; ST4, however, is behind residential walls west of the western boundary of the proposed project and more distant from these sources of roadway traffic noise, which results in a substantially lower sampled L_{eq} value.

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SOURCE: SANGIS 2020, 2021

DUDEK

0 75 150 Feet

FIGURE 3

Noise Measurement Locations

Gran Vista, Las Posas Project

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4 Thresholds of Significance

The following significance criteria are based on Appendix G of the California Environmental Quality Act Guidelines (14 CCR 15000 et seq.) and will be used to determine the significance of potential noise and vibration impacts. Impacts associated with noise and vibration would be significant if the proposed project would result in:

- Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.
- Generation of excessive groundborne vibration or groundborne noise levels.
- Expose people residing or working in the project area to excessive noise levels (for a project located within the vicinity of a private airstrip or an airport land use plan, or where such a plan has not been adopted, within 2 miles of a public airport or public use airport).

In light of these above significance criteria, this analysis uses the following standards to evaluate potential noise and vibration impacts.

- Construction noise –the City has adopted the County threshold for construction equipment noise, which must not exceed an eight-hour L_{eq} value of 75 dBA L_{eq} when assessed at an occupied property. Construction shall only occur between the hours of 7:00 a.m. through 6:00 p.m., Monday through Friday, and after 8:00 a.m. through 5:00 p.m. on Saturday.
- Off-site project-attributed transportation noise – For purposes for this analysis, a direct roadway noise impact would be considered significant if increases in roadway traffic noise levels attributed to the proposed project were greater than 3 dBA CNEL at an existing noise-sensitive land use.
- Off-site project-attributed stationary noise – For purposes for this analysis, a noise impact would be considered significant if noise from typical operation of heating, ventilation, and air conditioning and other electro-mechanical systems associated with the proposed project exceeded the following:
  - 60 dBA hourly Leq at the property line of an offsite single-family residence from 7:00 a.m. to 10:00 p.m., and 50 dBA hourly Leq from 10:00 p.m. to 7:00 a.m.; and
  - 65 dBA hourly Leq at the property line of an offsite commercial land use from 7:00 a.m. to 10:00 p.m., and 55 dBA hourly Leq from 10:00 p.m. to 7:00 a.m.
- Construction vibration – Although exempted by the City, guidance from Caltrans indicates that a vibration velocity level of 0.2 ips PPV received at a structure would be considered annoying by occupants within (Caltrans 2020). As for the receiving structure itself, aforementioned Caltrans guidance from Section 2 recommends that a vibration level of 0.3 ips PPV would represent the threshold for building damage risk.

For purposes of disclosure, since current CEQA noise criteria listed above do not consider it, this analysis also evaluates compatibility of on-site traffic noise exposure levels with the City of San Marcos exterior and interior noise standards of 65 dBA CNEL and 45 dBA CNEL, respectively.

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5 Impact Discussion

Potential noise and vibration impacts attributed to project construction and operation are studied in the following subsections that are categorized by the CEQA Guidelines Appendix G significance for noise.

a) Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Short-Term Construction

Construction noise and vibration are temporary phenomena, with emission levels varying from hour to hour and day to day, depending on the equipment in use, the operations performed, and the distance between the source and receptor. Equipment that would be in use during construction would include, in part, graders, backhoes, rubber-tired dozers, loaders, cranes, forklifts, pavers, rollers, and air compressors. The typical maximum noise levels at a distance of 50 feet from various pieces of construction equipment and activities anticipated for use on the proposed project site are presented in Table 4. Note that the equipment noise levels presented in Table 4 are maximum noise levels. Usually, construction equipment operates in alternating cycles of full power and low power, producing average noise levels over time that are less than the maximum noise level. The average sound level of construction activity also depends on the amount of time that the equipment operates and the intensity of construction activities during that time.

Table 4. Typical Construction Equipment Maximum Noise Levels

Equipment Type	Typical Equipment (L_{max}, dBA at 50 Feet)
All Other Equipment > 5 HP	85
Backhoe	78
Compressor (air)	78
Concrete Saw	90
Crane	81
Dozer	82
Excavator	81
Flat Bed Truck	74
Front End Loader	79
Generator	72
Grader	85
Man Lift	75
Paver	77
Roller	80
Scraper	84
Welder / Torch	73

Source: DOT 2006.
Note: L_{max} = maximum sound level; dBA = A-weighted decibels.

Aggregate noise emission from proposed project construction activities, broken down by sequential phase, was predicted at two evaluation distances to the nearest existing noise-sensitive receptor: 1) from the nearest position of the construction site boundary and 2) from the geographic center of the construction site, which serves as the time-averaged location or geographic *acoustical centroid* of active construction equipment for the phase under study. The intent of the former distance is to help evaluate anticipated construction noise from a limited quantity of equipment or vehicle activity expected to be at the boundary for some period of time, which would be most appropriate for phases such as site preparation, grading, and paving. The latter distance is used in a manner similar to the general assessment technique as described in the FTA guidance for construction noise assessment, when the location of individual equipment for a given construction phase is uncertain over some extent of (or the entirety of) the construction site area. In this studied scenario, because of the equipment location uncertainty, all the equipment for a construction phase is assumed to operate—on average—from the acoustical centroid position. Table 5 summarizes these two distances to the apparent closest noise-sensitive receptor for each of the seven sequential construction phases. At the site boundary, this analysis assumes that up to only one piece of equipment of each listed type per phase will be involved in the construction activity for a limited portion of the 8-hour period. In other words, at such proximity, the operating equipment cannot "stack" or crowd the vicinity and still operate. For the acoustical centroid case, which intends to be a geographic average position for all equipment during the indicated phase, this analysis assumes that the equipment may be operating up to all 8 hours per day.

Table 5. Estimated Distances between Construction Activities and the Nearest Noise-sensitive Receptors

Construction Phase (and Equipment Types Involved)	Distance from Nearest Noise-Sensitive Receptor to Construction Site Boundary (Feet)	Distance from Nearest Noise-Sensitive Receptor to Acoustical Centroid of Site (Feet)
Demolition (concrete saw, backhoe, dozer)	80	160
Site Preparation (grader, scraper, backhoe)	80	160
Grading (grader, dozer, backhoe)	80	160
Building construction (crane, man-lift, generator, backhoe, welder)	80	160
Paving (paver, roller, concrete mixer truck)	80	160
Architectural Coating (compressor)	80	160

A Microsoft Excel–based noise prediction model emulating and using reference data from the Federal Highway Administration Roadway Construction Noise Model (RCNM) (FHWA 2008) was used to estimate construction noise levels at the nearest occupied noise-sensitive land use. (Although the RCNM was funded and promulgated by the Federal Highway Administration, it is often used for non-roadway projects, because the same types of construction equipment used for roadway projects are often used for other types of construction.) Input variables for the predictive modeling consist of the equipment type and number of each

(e.g., two graders, a loader, a tractor), the duty cycle for each piece of equipment (e.g., percentage of time within a specific time period, such as an hour, when the equipment is expected to operate at full power or capacity and thus make noise at a level comparable to what is presented in Table 4), and the distance from the noise-sensitive receiver. The predictive model also considers how many hours that equipment may be on site and operating (or idling) within an established work shift. Conservatively, no topographical or structural shielding was assumed in the modeling. The RCNM has default duty-cycle values for the various pieces of equipment, which were derived from an extensive study of typical construction activity patterns. Those default duty-cycle values were used for this noise analysis, which is detailed in Appendix B, Construction Noise Modeling Input and Output, and produce the predicted results displayed in Table 6.

Table 6. Predicted Construction Noise Levels per Activity Phase

Construction Phase (and Equipment Types Involved)	8-Hour L_{eq} at Nearest Noise-Sensitive Receptor to Construction Site Boundary (dBA)	8-Hour L_{eq} at Nearest Noise-Sensitive Receptor to Acoustical Centroid of Site (dBA)
Demolition (concrete saw, backhoe, dozer)	74.8	71.6
Site Preparation (grader, scraper, backhoe)	74.2	70.3
Grading (grader, dozer, backhoe)	73.5	70.0
Building construction (crane, man-lift, generator, backhoe, welder)	68.5	67.1
Paving (paver, roller, concrete mixer truck)	70.3	67.1
Architectural Coating (compressor)	62.6	59.1

Notes: L_{eq} = equivalent noise level; dBA = A-weighted decibels.

As presented in Table 6, the highest estimated construction noise levels are predicted to stay below 75 dBA L_{eq} over an 8-hour period at the nearest existing residences (as close as 80 feet away) when demolition activities take place near the western project boundaries. Note that these estimated noise levels at a source-to-receiver distance of 80 feet would only occur when noted pieces of heavy equipment would each operate for a cumulative period of up to 2 hours a day. By way of example, a grader might make multiple passes on site that are this close to a receiver; but, for the remaining time during the day, the grader is sufficiently farther away, performing work at a more distant location, or simply not operating.

Should operation of construction equipment and processes be sufficiently proximate to the project's western boundary for greater than 2 hours a day, construction activity noise levels might exceed an 8 hour L_{eq} value of 75 dBA L_{eq} and thereby exceed the City's adopted daytime threshold for construction noise exposure at an occupied property. Therefore, the following suggested practices would be incorporated into the project's construction program as project design features:

- Administrative controls (e.g., reduce operating time of equipment and/or prohibit usage of equipment type[s] within certain distances).
- Engineering controls (upgrade noise controls, such as install better engine exhaust mufflers).

- Install noise abatement on the site boundary fencing (or within, as practical and appropriate) in the form of sound blankets or comparable temporary barriers to occlude construction noise emission between the site (or specific equipment operation as the situation may define) and offsite noise-sensitive receptor(s) of concern.
- At the outset of a project construction activity, an unattended noise level monitor might be deployed onsite to measure and document that noise exposure levels attributed to project construction activity at adjacent offsite sensitive receptors are in conformance with the 75 dBA 8 hour L_{eq} threshold.

The above design features would be implemented as site conditions may warrant. Proper application of temporary noise barriers or comparable sound abatement can feasibly reduce noise levels by at least 5 dB due to direct path occlusion between the noise source and receptor.

In summary, daytime construction noise would not exceed the City's 75 dBA threshold and Thus, temporary construction-related noise impacts would be considered **less than significant.**

Long-Term Operational

Off-Site Traffic Noise Exposure

The proposed project would result in the creation of additional vehicle trips on local arterial roadways (i.e., Mission Boulevard and N. Las Posas Road), which could result in increased traffic noise levels at adjacent noise-sensitive land uses. Appendix C, Traffic Noise Modeling Input and Output, contains a spreadsheet with traffic volume data (average daily traffic) for Mission Boulevard and N. Las Posas Road. In particular, the proposed project would create additional traffic along N. Las Posas Road, which according to the Traffic Impact Assessment prepared for the proposed project (CR Associates, 2022) would add 960 total average daily trips to adjacent to the project site.

Potential noise effects from vehicular traffic were assessed using the Federal Highway Administration's Traffic Noise Model version 2.5 (FHWA 2004). Information used in the model included the roadway geometry, existing (year 2022), existing plus project, near-term (opening day) and near-term (opening day) plus project traffic volumes and posted traffic speeds. Noise levels were modeled at representative noise-sensitive receivers ST1 through ST4, as shown in Figure 3. The receivers were modeled to be 5 feet above the local ground elevation. The noise model results are summarized in Table 7. Based on results of the model, implementation of the proposed project would not result in readily perceptible increases in traffic noise.

Table 7. Roadway Traffic Noise Modeling Results

Modeled Receiver No.	Existing (2022) Noise Level (dBA CNEL)	Existing with Project Noise Level (dBA CNEL)	Near-Term (Opening Day) without Project Noise Level (dBA CNEL)	Near-Term (Opening Day) with Project Noise Level (dBA CNEL)	Horizon (2050) without Project Noise Level (dBA CNEL)	Horizon (2050) with Project Noise Level (dBA CNEL)	Maximum Project-Related Noise Level Increase (dB)
ST1	68.3	68.3	68.6	68.6	69.4	69.4	0.0
ST2	69.0	69.2	69.6	69.8	70.2	70.4	0.2

Table 7. Roadway Traffic Noise Modeling Results

Modeled Receiver No.	Existing (2022) Noise Level (dBA CNEL)	Existing with Project Noise Level (dBA CNEL)	Near-Term (Opening Day) without Project Noise Level (dBA CNEL)	Near-Term (Opening Day) with Project Noise Level (dBA CNEL)	Horizon (2050) without Project Noise Level (dBA CNEL)	Horizon (2050) with Project Noise Level (dBA CNEL)	Maximum Project-Related Noise Level Increase (dB)
ST3	66.5	66.7	67.1	67.2	67.7	67.9	0.2
ST4	52.7	51.2	53.2	51.7	53.9	52.4	< 0*

Source: Appendix C.
Notes: dBA = A-weighted decibel; CNEL = community noise equivalent level; dB = decibel.
*Noise level change is negative.

Table 7 shows that at all four listed representative receivers, the addition of proposed project traffic to the roadway network would result in an increase in the CNEL of less than 3 dB, which is below the discernible level of change for the average healthy human ear. Thus, a less-than-significant impact is expected for proposed project-related off-site traffic noise increases affecting existing residences in the vicinity.

On-site Traffic Interior Noise Exposure

Aside from exposure to aviation traffic noise, current CEQA noise-related guidelines at the state level do not require an assessment of exterior-to-interior noise intrusion, environmental noise exposure to occupants of newly-created project residences, or environmental noise exposure to exterior non-residential uses attributed to the development of the proposed project. Nevertheless, the City's General Plan and the California Building Code requires that interior background noise levels not exceed a CNEL of 45 dB within habitable rooms. Hence, the following predictive analysis of traffic noise exposure at the exteriors of occupied residences and outdoor living areas is provided below.

In addition to the prediction results presented in Table 7, the FHWA TNM software was also used to predict the Horizon-with-project scenario traffic noise levels at multiple on-site exterior areas, as listed in Table 8. These on-site modeled receptor locations, which appear in Figure 3 and in the Appendix C isometric view of the modeled TNM space, include representative positions for the exteriors of multiple floors and positions of six of the proposed project building facades. Predicted exterior sound levels presented in Table 8 that are higher than 65 dBA CNEL indicate locations where an exterior-to-interior noise analysis should be performed for the proximate occupied residential unit.

Table 8. Future Ambient Noise Levels at Residential Facades

Modeled Receptor	Predicted Noise Level (A-weighted CNEL)		
	1st Floor	2nd Floor	3rd Floor
M1–1	65	65	65
M1–2	64	64	64
M2–1	58	60	60
M2–2	62	63	63

Table 8. Future Ambient Noise Levels at Residential Facades

Modeled Receptor	Predicted Noise Level (A-weighted CNEL)		
	1st Floor	2nd Floor	3rd Floor
M3–1	56	59	59
M3–2	58	60	61
M4–1	64	65	65
M5–1	61	62	62
M5–2	65	65	65
M6–1	68	69	68
M6–2	68	68	68
OS–1	65		
OS–2	65		

The prediction results from Table 8 indicate that future traffic noise levels would not exceed 69 dBA CNEL. With the 45 dBA CNEL interior background sound level limit, this means the minimum composite sound transmission class (STC) rating for the exterior shell separating the habitable interior space from the outdoor sound level should be at least 24. The composite STC rating for the portion of a building shell that separates an interior space from the outdoors is calculated from the area-dependent contributions of its elements: windows, wall assemblies, and doors.

Many of the residential units feature porches or balconies on the 1st or 2nd floor, for which access would likely be provided by single-panel, out-swing fiberglass French doors with hinges comparable to a Milgard Essence series model (or similar from another manufacturer). Alternately, they could be a sliding door type. For purposes of this analysis, either of these patio/balcony door design styles are assumed to feature a dual-pane glazing system similar to a standard residential window assembly (i.e., two 1/8"-thick glass panes separated by a 3/8" wide airgap) in narrow-perimeter frames compatible with modern thermal insulation (and thus energy conserving) design. The analysis also assumes that these door products feature good seals and related hardware, so that when closed, the effective sound insulating performance is represented by the glass. Viracon data indicates that such glazing should demonstrate an STC rating of 31 (Viracon 2019).

This study further assumes an exterior wall assembly that includes: one layer of 5/8" gypsum wallboard (GWB) on the interior-facing side, 2"x4" wood studs, glass fiber batt insulation in the stud cavities, and a dual-layer of 5/8" GWB on the exterior-facing side. Acoustical transmission loss (TL) data is available on this representative assembly (Halliwell 1998), and is used as part of estimating the composite STC ratings reported herein. For purposes of this analysis, the dual-layer GWB on the exterior surface approximates the mass and solidity of what may be other approved material options as determined by the Project architect, such as cement fiber siding panels, brick masonry veneer, or cement plaster attached to layers of fiberglass mat sheathing and plywood sheathing.

Table 9 summarizes the calculated noise levels after applying the STC ratings for a set of studied occupied room facades that are anticipated to be exposed to predicted exterior noise levels greater than 60 dBA CNEL. Details of these calculations that account for the façade surface area and its composite areas of exterior wall assembly and windows appear in Appendix D.

Clearly, an open window or open door to an adjoining patio or balcony greatly compromises the sound insulation performance of the façade wall assembly, as presented for the sample units appearing in Table 9. However, when such windows and doors are closed, all facades are anticipated to exhibit a predicted STC rating of at least 35, and thus would provide sufficient exterior-to-interior sound insulation from outdoor traffic noise to yield interior background sound levels that are less than 45 dBA CNEL and thus compliant with the City and state standards. Recall that none of the predicted exterior traffic noise levels at the studied receptor locations exceeded 69 dBA CNEL; thus, the STC rating value (for closed windows and doors) subtracted from these exterior noise values must result in interior noise levels of less than 45 dBA CNEL (e.g., 69 – 35 = 34 dBA CNEL, which is less than 45). This apparent requirement for closed windows and doors means that the design of these habitable rooms should feature mechanical ventilation or an air-conditioning system to provide interior comfort of the occupants. Detailed transmission loss data is included in Appendix D, Transmission Loss Predictions. Thus, the City's threshold of 45 dB CNEL within habitable rooms would not be exceeded and thus demonstrates expected project compliance with this standard.

Table 9. Predicted Net Sound Transmission Class of Occupied Room Façade

Occupied Room Facade	Predicted Net Sound Transmission Class (STC) for Scenario	
	Closed Window(s) and Door *	Open Window(s) and Closed French Door*
1st floor living room w/ porch, eastern facade	35	6
2nd floor living room w/ balcony, eastern Façade	35	6
3rd floor Bedroom, eastern Façade	38	15

Notes:
n/a = not applicable
* Doors are only modeled for scenarios that contain the balcony door.

Open Space and Balconies

Where predicted exterior noise levels exceed 65 dBA CNEL proximate to shared or common usable outdoor space, and such space would count towards the outdoor usable space associated with the project, according to the City's General Plan, feasible noise reduction techniques should be analyzed and incorporated to make the outdoor activities acceptable at locations that are currently above the City's 65 dBA CNEL standard. With the implementation of project design feature **PDF-1**, the resultant exterior noise levels would meet the City's exterior noise standard of 65 dBA CNEL.

PDF-1: Where exterior noise levels are predicted to exceed 65 dBA CNEL at useable open space areas, the project should install noise-reducing features external to or upon the useable open space areas (or within, as practical and appropriate) in the form of sound walls, fencing, landscape berms, or similarly performing barriers to occlude incoming roadway traffic noise.

For proposed project residential units that feature patios or balconies expected as outdoor useable areas, predicted future traffic noise exposure levels presented in Table 8 suggest that up to 4 dBA of noise reduction would be needed to keep sound on such balconies at levels below the 65 dBA CNEL compatibility

standard. With the implementation of project design feature **PDF-2**, the resultant exterior noise levels would meet the City's exterior noise standard of 65 dBA CNEL.

PDF-2: Residential unit patios or balconies along roadway-facing building facades predicted to be exposed to external noise levels in excess of 65 A-weighted decibels community noise equivalent level shall feature railings or other partial-height barriers comprising sufficiently solid and dense materials (e.g., acrylic, glass, wood, etc. that exhibits a sound transmission class rating of at least 20) and of a 42-inch minimum height (from floor or deck of the balcony surface) that occludes direct sound path from the noise-producing roadway of concern and a seated patio or balcony occupant.

Stationary Noise Sources

The incorporation of new multi-family homes and a mix of open space uses attributed to development of the proposed project will add a variety of noise-producing electro-mechanical equipment that include those presented and discussed in the following paragraphs. Most of these noise-producing equipment or sound sources would be considered stationary, or limited in mobility to a defined area. Using a Microsoft Excel–based outdoor sound propagation prediction model, project-attributed operational noise at nearby community receptors was predicted using several assumptions:

- Treatment of exposed patio air-cooled condensing units as point-type sound emission sources; and,
- Point-source sound propagation (i.e., 6 dB per doubling of distance) that conservatively ignores acoustical absorption from atmospheric and ground surface effects.

Please see Appendix E for quantitative details of the inputs and outputs that form the basis of the following assessment presentations.

Residential Unit Heating, Ventilation, and Air Conditioning Noise

For purposes of this analysis, each of the new occupied residential units would be expected to feature a split-system type air-conditioning unit, with an air-cooled refrigeration (2-ton capacity) condenser unit in the patio area as currently depicted by the site plan (dated June 24, 2020).

Assuming each condenser unit has an SPL of 68 dBA at 3 feet based on available data from a likely manufacturer (Carrier 2012), the site plan suggests that these condenser units would generally be installed near the patio (i.e., apparent "front porch"). Therefore, the closest existing noise-sensitive residential receptor to the west of the proposed project's westernmost unit would be as close as 90 horizontal feet to the nearest of these condenser units. However, due to the 6 foot tall property line wall proposed along the western property boundary, the predicted sound emission level from the combination of all eight operating condenser units as received by this offsite single-family home would be 46 dBA L_{eq} and thus be compliant with the City's nighttime threshold of 50 dBA hourly L_{eq}. Under such conditions, the operation of residential air-conditioning units would result in a **less-than-significant noise impact**.

b) Would the project result in generation of excessive groundborne vibration or groundborne noise levels?

Construction activities may expose persons to excessive groundborne vibration, causing a potentially significant impact. Caltrans has collected groundborne vibration information related to construction activities (Caltrans 2020). Information from Caltrans indicates that continuous vibrations with a PPV of approximately 0.2 ips is considered "annoying." For context, heavier pieces of construction equipment, such as a bulldozer that may be expected on the project site, have peak particle velocities of approximately 0.089 ips or less at a reference distance of 25 feet (DOT 2006).

Groundborne vibration attenuates rapidly—even over short distances. And when groundborne vibration encounters a building foundation, a coupling loss occurs depending on the mass and design. For typical wood-framed houses, like those near the proposed project, this coupling loss is 5 vibration velocity decibels according to FTA guidance (FTA 2006). The attenuation of groundborne vibration as it propagates from source to receptor through intervening soils and rock strata can be estimated with expressions found in FTA and Caltrans guidance. By way of example, for a bulldozer operating on site and as close as the western project boundary (that is 80 feet from the nearest receiving sensitive land use) the estimated vibration velocity level would be 0.024 ips and thus no greater than the annoyance threshold recommended by Caltrans. Therefore, vibration-induced annoyance to occupants of nearby existing homes would be less than significant.

Construction vibration, at sufficiently high levels, can also present a building damage risk. However, anticipated construction vibration from conventional heavy equipment associated with this proposed project would not yield levels that surpass this risk. Per Caltrans, the recommended PPV threshold for newer residential structures is 0.5 ips and 0.3 ips for older residential structures—both of which are less stringent that the aforementioned threshold to annoy occupants of such structures; thus vibration damage risk to nearby structures is considered less than significant.

Once operational, the proposed project would not be expected to feature major producers of groundborne vibration. Anticipated mechanical systems like heating, ventilation, and air-conditioning units are designed and manufactured to feature rotating (fans, motors) and reciprocating (compressors) components that are well-balanced with isolated vibration within or external to the equipment casings. On this basis, vibration due to proposed project operation should be less than significant.

C) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

There are no private airstrips within the vicinity of the project site. The closest airport to the proposed project site is the McClellan-Palomar Airport, approximately 5 miles west southwest of the site and would therefore not expose people residing or working in the project area to excessive noise levels. Impacts would be **less than significant.**

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6 Summary of Findings

This noise report was conducted for the proposed project. The results indicate that potential impacts during construction would **be less than significant**; nevertheless, construction best practices that incorporate noise reduction techniques would be incorporated into the project construction process. Noise impacts due to operation of the proposed project (including traffic noise) would be **less than significant**, with project design features PDF-1 and PDF-2 offered to reduce exterior noise intrusion to project outdoor spaces. No noise and vibration mitigation measures are anticipated at this time.

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Appendix A

Baseline Noise Measurement Field Data

FORMS FIELD DATA REPORT

Field Noise Measurement Data

Record: 1422	
Project Name	*Gran Vista*
Observer(s)	*Connor Burke*
Date	*2022-04-26*

Instrument and Calibrator Information	
Instrument Name List	*(ENC) Rion NL-52*
Instrument Name	*(ENC) Rion NL-52*
Instrument Name Lookup Key	*(ENC) Rion NL-52*
Manufacturer	*Rion*
Model	*NL-52*
Serial Number	*553896*
Calibrator Name	*(ENC) LD CAL150*
Calibrator Name	*(ENC) LD CAL150*
Calibrator Name Lookup Key	*(ENC) LD CAL150*
Calibrator Manufacturer	*Larson Davis*
Calibrator Model	*LD CAL150*
Calibrator Serial #	*5152*
Pre-Test (dBA SPL)	*94*
Post-Test (dBA SPL)	*94*
Windscreen	*Yes*
Weighting?	*A-WTD*
Slow/Fast?	*Slow*
ANSI?	*Yes*

Monitoring	
Record #	*1*
Site ID	*ST1*
Site Location Lat/Long	*33.149330, -117.190025*
Begin (Time)	*16:00:00*
End (Time)	*16:10:00*
Leq	*64.2*
Lmax	*73.6*
Lmin	*53.3*
Other Lx?	*L90, L50, L10*
L90	*54.7*
L50	*61.6*
L10	*68.20*
Other Lx (Specify Metric)	*L*
Primary Noise Source	*Traffic*
Other Noise Sources (Background)	*Birds, Distant Aircraft, Distant Traffic, Rustling Leaves*
Is the same instrument and calibrator being used as previously noted?	*Yes*
Are the meteorological conditions the same as previously noted?	*Yes*

Description / Photos

Site Photos

Photo	
	

Monitoring

Record #	*2*
Site ID	*ST2*
Site Location Lat/Long	*33.150105, -117.188957*
Begin (Time)	*16:20:00*
End (Time)	*16:30:00*
Leq	*63.5*
Lmax	*74.5*
Lmin	*51.3*
Other Lx?	*L90, L50, L10*
L90	*52.10*
L50	*58.4*
L10	*67.7*
Other Lx (Specify Metric)	*L*
Primary Noise Source	*Traffic*
Other Noise Sources (Background)	*Birds, Distant Aircraft, Rustling Leaves*
Other Noise Sources Additional Description	*Distant rail noise*
Is the same instrument and calibrator being used as previously noted?	*Yes*
Are the meteorological conditions the same as previously noted?	*Yes*

Description / Photos

Site Photos

Photo	
	

Monitoring

Record #	*3*
Site ID	*ST3*
Site Location Lat/Long	*33.151010, -117.188464*
Begin (Time)	*16:40:00*
End (Time)	*16:50:00*
Leq	*60.2*
Lmax	*68.5*
Lmin	*50.4*
Other Lx?	*L90, L50, L10*
L90	*52.5*
L50	*56.7*
L10	*64.3*
Other Lx (Specify Metric)	*L*
Primary Noise Source	*Traffic*
Other Noise Sources (Background)	*Birds, Distant Aircraft, Distant Traffic, Rustling Leaves*
Is the same instrument and calibrator being used as previously noted?	*Yes*
Are the meteorological conditions the same as previously noted?	*Yes*

Description / Photos

Site Photos

Photo	
	

Monitoring

Record #	*3*
Site ID	*ST3*
Site Location Lat/Long	*33.151010, -117.188464*
Begin (Time)	*16:40:00*
End (Time)	*16:50:00*
Leq	*60.2*
Lmax	*68.5*
Lmin	*50.4*
Other Lx?	*L90, L50, L10*
L90	*52.5*
L50	*56.7*
L10	*64.3*
Other Lx (Specify Metric)	*L*
Primary Noise Source	*Traffic*
Other Noise Sources (Background)	*Birds, Distant Aircraft, Distant Traffic, Rustling Leaves*
Is the same instrument and calibrator being used as previously noted?	*Yes*
Are the meteorological conditions the same as previously noted?	*Yes*

Description / Photos

Site Photos

Photo


Monitoring

Record #	*4*
Site ID	*ST4*
Site Location Lat/Long	*33.150680, -117.190914*
Begin (Time)	*17:00:00*
End (Time)	*17:10:00*
Leq	*47.3*
Lmax	*58.1*
Lmin	*42.9*
Other Lx?	*L90, L50, L10*
L90	*44.1*
L50	*46.5*
L10	*50.20*
Other Lx (Specify Metric)	*L*
Primary Noise Source	*Distant traffic*
Other Noise Sources (Background)	*Birds, Rustling Leaves*
Is the same instrument and calibrator being used as previously noted?	*Yes*
Are the meteorological conditions the same as previously noted?	*Yes*

Description / Photos

Site Photos

Photo	
Comments / Description	

Appendix B

Construction Noise Modeling Input and Output

To User: bordered cells are inputs, unbordered cells have formulae

noise level limit for construction phase at "occupied property", per County of San Diego 36.409 = 75

allowable hours over which Leq is to be averaged = 8

= temporary barrier (TB) of input height inserted between source and receptor

Construction Activity	Equipment	Total Equipment Qty	AUF % (from FHWA RCNM)	Reference Lmax @ 50 ft. from FHWA RCNM	Client Equipment Description, Data Source and/or Notes	Source to NSR Distance (ft.)	*Temporary Barrier Insertion Loss (dB)*	*Additional Noise Reduction*	Distance-Adjusted Lmax	Allowable Operation Time (hours)	Allowable Operation Time (minutes)	Predicted 8-hour Leq	Source Elevation (ft)	Receiver Elevation (ft)	Barrier Height (ft)	Source to Barr. ("A") Horiz. (ft)	Rcvr. to Barr. ("B") Horiz. (ft)	Source to Rcvr. ("C") Horiz. (ft)	"A" (ft)	"B" (ft)	"C" (ft)	Path Length Diff. "P" (ft)	Abarr (dB)	Heff (with barrier)	Heff (wout barrier)	G (with barrier)	G (without barrier)	ILbarr (dB)
Demolition	concrete saw	1	20	90		80	0.1		84.6	2	120	72	5	5	0	75	5	80	75.2	7.1	80.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	dozer	1	40	82		80	0.1		76.6	2	120	67	5	5	0	75	5	80	75.2	7.1	80.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	backhoe	1	40	78		80	0.1		72.6	2	120	63	5	5	0	75	5	80	75.2	7.1	80.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	concrete saw	1	20	90		160	0.1		76.3	6	360	68	5	5	0	155	5	160	155.1	7.1	160.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	dozer	1	40	82		160	0.1		68.3	6	360	63	5	5	0	155	5	160	155.1	7.1	160.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	backhoe	1	40	78		160	0.1		64.3	6	360	59	5	5	0	155	5	160	155.1	7.1	160.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
									Total for Demolition Phase:			**74.8**																
Site Preparation	grader	1	40	85		80	0.1		79.6	2	120	70	5	5	0	75	5	80	75.2	7.1	80.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	scraper	1	40	84		80	0.1		78.6	2	120	69	5	5	0	75	5	80	75.2	7.1	80.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	backhoe	1	40	78		80	0.1		72.6	2	120	63	5	5	0	75	5	80	75.2	7.1	80.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	grader	1	40	85		160	0.1		71.3	6	360	66	5	5	0	155	5	160	155.1	7.1	160.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	scraper	1	40	84		160	0.1		70.3	6	360	65	5	5	0	155	5	160	155.1	7.1	160.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	backhoe	1	40	78		160	0.1		64.3	6	360	59	5	5	0	155	5	160	155.1	7.1	160.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
									Total for Site Preparation Phase:			**74.2**																
Grading	grader	1	40	85		80	0.1		79.6	2	120	70	5	5	0	75	5	80	75.2	7.1	80.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	dozer	1	40	82		80	0.1		76.6	2	120	67	5	5	0	75	5	80	75.2	7.1	80.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	backhoe	1	40	78		80	0.1		72.6	2	120	63	5	5	0	75	5	80	75.2	7.1	80.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	grader	1	40	85		160	0.1		71.3	6	360	66	5	5	0	155	5	160	155.1	7.1	160.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	dozer	1	40	82		160	0.1		68.3	6	360	63	5	5	0	155	5	160	155.1	7.1	160.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	backhoe	1	40	78		160	0.1		64.3	6	360	59	5	5	0	155	5	160	155.1	7.1	160.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
									Total for Grading Phase:			**73.5**																
Building Construction	crane	1	16	81		80	0.1		75.6	2	120	62	5	5	0	75	5	80	75.2	7.1	80.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	man lift	1	20	75		80	0.1		69.6	2	120	57	5	5	0	75	5	80	75.2	7.1	80.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	generator	1	50	72		80	0.1		66.6	2	120	58	5	5	0	75	5	80	75.2	7.1	80.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	backhoe	1	40	78		80	0.1		72.6	2	120	63	5	5	0	75	5	80	75.2	7.1	80.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	welder / torch	1	40	73		80	0.1		67.6	2	120	58	5	5	0	75	5	80	75.2	7.1	80.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	crane	1	16	81		160	0.1		67.3	6	360	58	5	5	0	155	5	160	155.1	7.1	160.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	man lift	1	20	75		160	0.1		61.3	6	360	53	5	5	0	155	5	160	155.1	7.1	160.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	generator	1	50	72		160	0.1		58.3	6	360	54	5	5	0	155	5	160	155.1	7.1	160.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	backhoe	1	40	78		160	0.1		64.3	6	360	59	5	5	0	155	5	160	155.1	7.1	160.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	welder / torch	1	40	73		160	0.1		59.3	6	360	54	5	5	0	155	5	160	155.1	7.1	160.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
									Total for Building Construction Phase:			**68.5**																
Paving	concrete mixer truck	1	40	79		80	0.1		73.6	2	120	64	5	5	0	75	5	80	75.2	7.1	80.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	paver	1	50	77		80	0.1		71.6	2	120	63	5	5	0	75	5	80	75.2	7.1	80.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	backhoe	1	40	78		80	0.1		72.6	2	120	63	5	5	0	75	5	80	75.2	7.1	80.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	roller	1	20	80		80	0.1		74.6	2	120	62	5	5	0	75	5	80	75.2	7.1	80.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	concrete mixer truck	1	40	79		160	0.1		65.3	6	360	60	5	5	0	155	5	160	155.1	7.1	160.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	paver	1	50	77		160	0.1		63.3	6	360	59	5	5	0	155	5	160	155.1	7.1	160.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	backhoe	1	40	78		160	0.1		64.3	6	360	59	5	5	0	155	5	160	155.1	7.1	160.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	roller	1	20	80		160	0.1		66.3	6	360	58	5	5	0	155	5	160	155.1	7.1	160.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
									Total for Paving Phase:			**70.3**																

To User: bordered cells are inputs, unbordered cells have formulae

noise level limit for construction phase at "occupied property", per County of San Diego 36.409 = 75

allowable hours over which Leq is to be averaged = 8

= temporary barrier (TB) of input height inserted between source and receptor

Construction Activity	Equipment	Total Equipment Qty	AUF % (from FHWA RCNM)	Reference Lmax @ 50 ft. from FHWA RCNM	Client Equipment Description, Data Source and/or Notes	Source to NSR Distance (ft.)	*Temporary Barrier Insertion Loss (dB)*	*Additional Noise Reduction*	Distance-Adjusted Lmax	Allowable Operation Time (hours)	Allowable Operation Time (minutes)	Predicted 8-hour Leq	Source Elevation (ft)	Receiver Elevation (ft)	Barrier Height (ft)	Source to Barr. ("A") Horiz. (ft)	Rcvr. to Barr. ("B") Horiz. (ft)	Source to Rcvr. ("C") Horiz. (ft)	"A" (ft)	"B" (ft)	"C" (ft)	Path Length Diff. "P" (ft)	Abarr (dB)	Heff (with barrier)	Heff (wout barrier)	G (with barrier)	G (without barrier)	ILbarr (dB)
Demolition	concrete saw	1	20	90		160	0.1		76.3	8	480	69	5	5	0	155	5	160	155.1	7.1	160.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	dozer	1	40	82		160	0.1		68.3	8	480	64	5	5	0	155	5	160	155.1	7.1	160.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	backhoe	3	40	78		160	0.1		64.3	8	480	65	5	5	0	155	5	160	155.1	7.1	160.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
									Total for Demolition Phase:			**71.6**																
Site Preparation	grader	1	40	85		160	0.1		71.3	8	480	67	5	5	0	155	5	160	155.1	7.1	160.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	scraper	1	40	84		160	0.1		70.3	8	480	66	5	5	0	155	5	160	155.1	7.1	160.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	backhoe	1	40	78		160	0.1		64.3	8	480	60	5	5	0	155	5	160	155.1	7.1	160.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
									Total for Site Preparation Phase:			**70.3**																
Grading	grader	1	40	85		160	0.1		71.3	8	480	67	5	5	0	155	5	160	155.1	7.1	160.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	dozer	1	40	82		160	0.1		68.3	8	480	64	5	5	0	155	5	160	155.1	7.1	160.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	backhoe	2	40	78		160	0.1		64.3	7	420	63	5	5	0	155	5	160	155.1	7.1	160.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
									Total for Grading Phase:			**70.0**																
Building Construction	crane	1	16	81		160	0.1		67.3	8	480	59	5	5	0	155	5	160	155.1	7.1	160.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	man lift	2	20	75		160	0.1		61.3	7	420	57	5	5	0	155	5	160	155.1	7.1	160.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	generator	1	50	72		160	0.1		58.3	8	480	55	5	5	0	155	5	160	155.1	7.1	160.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	backhoe	3	40	78		160	0.1		64.3	6	360	64	5	5	0	155	5	160	155.1	7.1	160.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	welder / torch	3	40	73		160	0.1		59.3	8	480	60	5	5	0	155	5	160	155.1	7.1	160.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
									Total for Building Construction Phase:			**67.1**																
Paving	concrete mixer truck	1	40	79		160	0.1		65.3	8	480	61	5	5	0	155	5	160	155.1	7.1	160.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	paver	1	50	77		160	0.1		63.3	8	480	60	5	5	0	155	5	160	155.1	7.1	160.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	backhoe	1	40	78		160	0.1		64.3	8	480	60	5	5	0	155	5	160	155.1	7.1	160.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	roller	2	20	80		160	0.1		66.3	8	480	62	5	5	0	155	5	160	155.1	7.1	160.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
									Total for Paving Phase:			**67.2**																

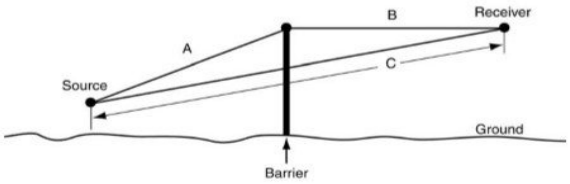
Equipment Description	Impact Device?	Acoustical Use Factor (%)	Lesser of or available Lmax	Spec. 721 Lmax	Measured L_{max} @50ft (dBA, slow)
All Other Equipment > 5 HP	No	50	85	85	-- N/A --
Auger Drill Rig	No	20	84	85	84
Backhoe	No	40	78	80	78
Bar Bender	No	20	80	80	-- N/A --
Blasting	Yes	-- N/A --	94	94	-- N/A --
Boring Jack Power Unit	No	50	80	80	83
Chain Saw	No	20	84	85	84
Clam Shovel (dropping)	Yes	20	87	93	87
Compactor (ground)	No	20	80	80	83
Compressor (air)	No	40	78	80	78
Concrete Batch Plant	No	15	83	83	-- N/A --
Concrete Mixer Truck	No	40	79	85	79
Concrete Pump Truck	No	20	81	82	81
Concrete Saw	No	20	90	90	90
Crane	No	16	81	85	81
Dozer	No	40	82	85	82
Drill Rig Truck	No	20	79	84	79
Drum Mixer	No	50	80	80	80
Dump Truck	No	40	76	84	76
Excavator	No	40	81	85	81
Flat Bed Truck	No	40	74	84	74
Front End Loader	No	40	79	80	79
Generator	No	50	72	72	81
Generator (<25KVA, VMS signs)	No	50	70	70	73
Gradall	No	40	83	85	83
Grader	No	40	85	85	-- N/A --
Grapple (on backhoe)	No	40	85	85	87
Horizontal Boring Hydr. Jack	No	25	80	80	82
Hydra Break Ram	Yes	10	90	90	-- N/A --
Impact Pile Driver	Yes	20	95	95	101
Jackhammer	Yes	20	85	85	89
Man Lift	No	20	75	85	75
Mounted Impact Hammer (hoe ram)	Yes	20	90	90	90
Pavement Scarafier	No	20	85	85	90
Paver	No	50	77	85	77
Pickup Truck	No	40	55	55	75
Pneumatic Tools	No	50	85	85	85
Pumps	No	50	77	77	81
Refrigerator Unit	No	100	73	82	73
Rivit Buster/chipping gun	Yes	20	79	85	79
Rock Drill	No	20	81	85	81
Roller	No	20	80	85	80
Sand Blasting (Single Nozzle)	No	20	85	85	96
Scraper	No	40	84	85	84
Shears (on backhoe)	No	40	85	85	96
Slurry Plant	No	100	78	78	78
Slurry Trenching Machine	No	50	80	82	80
Soil Mix Drill Rig	No	50	80	80	-- N/A --
Tractor	No	40	84	84	-- N/A --
Vacuum Excavator (Vac-truck)	No	40	85	85	85
Vacuum Street Sweeper	No	10	80	80	82
Ventilation Fan	No	100	79	85	79
Vibrating Hopper	No	50	85	85	87
Vibratory Concrete Mixer	No	20	80	80	80
Vibratory Pile Driver	No	20	95	95	101
Warning Horn	No	5	83	85	83
Welder / Torch	No	40	73	73	74

$Source_{elev}$	5.0	A_{horiz}	24.0	A	25.0
$Receiver_{elev}$	10.0	B_{horiz}	38.0	B	38.1
C	62.2	C_{horiz}	62.0		
P	0.85				
$Barrier_{elev}$	12				
Abarr	12.3				

The above calculations, refering to inputs from the figure at right, helps a user estimate what barrier attenuation (Abarr) to expect (i.e., up to 15 per formula to right) based upon source height (above grade), barrier height, and receiver height, and the horizontal distances between the source and receiver to the barrier. The FTA-based formula in the worksheets use these path length (P) and Abarr values to determine the barrier's insertion loss.

Barrier Parameter P

P= A+B-C



For all other barriers, and for protrusion of terrain above the line of sight:	$A_{barrier} = \min\left\{15 or\left[20\times\log\left(\frac{2.51\sqrt{P}}{\tanh\left[4.46\sqrt{P}\right]}\right)+5\right]\right\}$
Barrier Insertion Loss	$IL_{barrier} = \max\left\{0 or\left[A_{barrier} - 10(G_{NB} - G_B)\log\left(\frac{D}{50}\right)\right]\right\}$

D = closest distance between the receiver and the source, in feet
P = path length difference, in feet (see figure below)
G_{NB} = Ground factor G computed *without barrier* (see Figure 6-5)
G_B = Ground factor G computed *with barrier* (see Figure 6-5)

† The term "tanh(variable)" stands for hyperbolic tangent, available on many scientific calculators. If "tanh" is not available, then compute E = exp(variable), and set tanh(variable) = (E - 1/E) / (E + 1/E), where exp(variable) is the "exponential" function, also written as e^x on calculator keypads.

Sources: Transit Noise & Vibration Impact Assessment (FTA 2006)

Appendix C

Traffic Noise Modeling Input and Output

Dudek					**30 June 2022**						
CB					**TNM 2.5**						
INPUT: ROADWAYS							**Average pavement type shall be used unless**				
PROJECT/CONTRACT:	**Gran Vista**						**a State highway agency substantiates the use**				
RUN:	**Existing**						**of a different type with the approval of FHWA**				
Roadway		**Points**									
Name	**Width**	**Name**	**No.**	**Coordinates (pavement)**			**Flow Control**			**Segment**	
				X	**Y**	**Z**	**Control Device**	**Speed Constraint**	**Percent Vehicles Affected**	**Pvmt Type**	**On Struct?**
	ft			ft	ft	ft		mph	%		
Mission West	35.0	point1	1	6,809,942.5	1,513,504.1	0.00				Average	
		point2	2	6,809,884.0	1,513,538.4	0.00				Average	
		point3	3	6,809,766.5	1,513,623.8	0.00				Average	
		point4	4	6,809,644.0	1,513,727.1	0.00				Average	
		point5	5	6,809,520.0	1,513,842.2	0.00				Average	
		point6	6	6,809,443.0	1,513,908.5	0.00				Average	
		point7	7	6,809,344.0	1,513,996.6	0.00				Average	
		point8	8	6,809,256.0	1,514,071.6	0.00				Average	
		point9	9	6,809,153.0	1,514,165.4	0.00				Average	
		point10	10	6,809,112.5	1,514,204.1	0.00				Average	
		point11	11	6,809,007.5	1,514,293.1	0.00				Average	
		point12	12	6,808,960.5	1,514,316.9	0.00					
Mission East	35.0	point13	13	6,808,953.0	1,514,294.1	0.00				Average	
		point14	14	6,808,996.0	1,514,268.8	0.00				Average	
		point15	15	6,809,054.5	1,514,213.2	0.00				Average	
		point16	16	6,809,087.5	1,514,185.1	0.00				Average	
		point17	17	6,809,168.0	1,514,111.6	0.00				Average	
		point18	18	6,809,247.5	1,514,036.6	0.00				Average	
		point19	19	6,809,335.5	1,513,955.8	0.00				Average	
		point20	20	6,809,454.0	1,513,846.0	0.00				Average	
		point21	21	6,809,556.0	1,513,755.4	0.00				Average	
		point22	22	6,809,646.0	1,513,672.0	0.00				Average	
		point23	23	6,809,734.5	1,513,596.1	0.00				Average	
		point24	24	6,809,928.5	1,513,450.4	0.00					
Las Posas North	40.0	point36	36	6,810,059.5	1,513,488.5	0.00				Average	

		point35	35	6,810,117.0	1,513,692.0	0.00				Average	
		point34	34	6,810,132.5	1,513,874.2	0.00				Average	
		point33	33	6,810,127.5	1,513,962.0	0.00				Average	
		point32	32	6,810,118.5	1,514,057.0	0.00				Average	
		point31	31	6,810,074.5	1,514,231.1	0.00				Average	
		point30	30	6,810,015.0	1,514,384.4	0.00				Average	
		point29	29	6,809,941.0	1,514,567.1	0.00				Average	
		point28	28	6,809,910.5	1,514,712.5	0.00				Average	
		point27	27	6,809,889.5	1,514,898.2	0.00				Average	
		point26	26	6,809,870.5	1,515,139.8	0.00				Average	
		point25	25	6,809,868.0	1,515,213.2	0.00					
Las Posas South	40.0	point48	48	6,809,811.0	1,515,209.5	0.00				Average	
		point47	47	6,809,823.0	1,514,958.5	0.00				Average	
		point46	46	6,809,847.0	1,514,713.8	0.00				Average	
		point45	45	6,809,881.5	1,514,547.5	0.00				Average	
		point44	44	6,809,921.0	1,514,450.5	0.00				Average	
		point43	43	6,809,993.5	1,514,273.4	0.00				Average	
		point42	42	6,810,046.0	1,514,124.4	0.00				Average	
		point41	41	6,810,070.0	1,513,990.0	0.00				Average	
		point40	40	6,810,071.0	1,513,878.8	0.00				Average	
		point39	39	6,810,064.0	1,513,722.1	0.00				Average	
		point38	38	6,810,034.5	1,513,597.0	0.00				Average	
		point37	37	6,810,008.0	1,513,505.1	0.00					
Roadway5	35.0	point49	49	6,810,912.5	1,513,110.2	0.00				Average	
		point50	50	6,810,575.5	1,513,229.6	0.00				Average	
		point51	51	6,810,349.0	1,513,312.6	0.00				Average	
		point52	52	6,810,082.0	1,513,426.1	0.00					
Roadway6	35.0	point58	58	6,810,071.0	1,513,379.0	0.00				Average	
		point57	57	6,810,276.5	1,513,294.0	0.00				Average	
		point56	56	6,810,455.5	1,513,227.5	0.00				Average	
		point55	55	6,810,608.5	1,513,177.6	0.00				Average	
		point54	54	6,810,786.0	1,513,109.2	0.00				Average	
		point53	53	6,810,968.0	1,513,046.2	0.00					
Roadway7	40.0	point59	59	6,809,817.0	1,512,914.1	0.00				Average	
		point60	60	6,810,024.0	1,513,397.9	0.00					
Roadway8	40.0	point62	62	6,809,967.5	1,513,429.8	0.00				Average	
		point61	61	6,809,755.5	1,512,933.4	0.00					

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30 June 2022
TNM 2.5

INPUT: TRAFFIC FOR LAeq1h Volumes
PROJECT/CONTRACT: Gran Vista
RUN: Existing

Roadway	Points		Segment									
Name	Name	No.	Autos		MTrucks		HTrucks		Buses		Motorcycles	
			V	S	V	S	V	S	V	S	V	S
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph
Mission West	point1	1	863	40	17	40	8	40	0	0	0	0
	point2	2	863	40	17	40	8	40	0	0	0	0
	point3	3	863	40	17	40	8	40	0	0	0	0
	point4	4	863	40	17	40	8	40	0	0	0	0
	point5	5	863	40	17	40	8	40	0	0	0	0
	point6	6	863	40	17	40	8	40	0	0	0	0
	point7	7	863	40	17	40	8	40	0	0	0	0
	point8	8	863	40	17	40	8	40	0	0	0	0
	point9	9	863	40	17	40	8	40	0	0	0	0
	point10	10	863	40	17	40	8	40	0	0	0	0
	point11	11	863	40	17	40	8	40	0	0	0	0
	point12	12										
Mission East	point13	13	863	40	17	40	8	40	0	0	0	0
	point14	14	863	40	17	40	8	40	0	0	0	0
	point15	15	863	40	17	40	8	40	0	0	0	0
	point16	16	863	40	17	40	8	40	0	0	0	0
	point17	17	863	40	17	40	8	40	0	0	0	0
	point18	18	863	40	17	40	8	40	0	0	0	0
	point19	19	863	40	17	40	8	40	0	0	0	0
	point20	20	863	40	17	40	8	40	0	0	0	0
	point21	21	863	40	17	40	8	40	0	0	0	0
	point22	22	863	40	17	40	8	40	0	0	0	0
	point23	23	863	40	17	40	8	40	0	0	0	0

	point24	24										
Las Posas North	point36	36	868	45	17	45	8	45	0	0	0	0
	point35	35	868	45	17	45	8	45	0	0	0	0
	point34	34	868	45	17	45	8	45	0	0	0	0
	point33	33	868	45	17	45	8	45	0	0	0	0
	point32	32	868	45	17	45	8	45	0	0	0	0
	point31	31	868	45	17	45	8	45	0	0	0	0
	point30	30	868	45	17	45	8	45	0	0	0	0
	point29	29	868	45	17	45	8	45	0	0	0	0
	point28	28	868	45	17	45	8	45	0	0	0	0
	point27	27	868	45	17	45	8	45	0	0	0	0
	point26	26	868	45	17	45	8	45	0	0	0	0
	point25	25										
Las Posas South	point48	48	868	45	17	45	8	45	0	0	0	0
	point47	47	868	45	17	45	8	45	0	0	0	0
	point46	46	868	45	17	45	8	45	0	0	0	0
	point45	45	868	45	17	45	8	45	0	0	0	0
	point44	44	868	45	17	45	8	45	0	0	0	0
	point43	43	868	45	17	45	8	45	0	0	0	0
	point42	42	868	45	17	45	8	45	0	0	0	0
	point41	41	868	45	17	45	8	45	0	0	0	0
	point40	40	868	45	17	45	8	45	0	0	0	0
	point39	39	868	45	17	45	8	45	0	0	0	0
	point38	38	868	45	17	45	8	45	0	0	0	0
	point37	37										
Roadway5	point49	49	863	40	17	40	8	40	0	0	0	0
	point50	50	863	40	17	40	8	40	0	0	0	0
	point51	51	863	40	17	40	8	40	0	0	0	0
	point52	52										
Roadway6	point58	58	863	40	17	40	8	40	0	0	0	0
	point57	57	863	40	17	40	8	40	0	0	0	0
	point56	56	863	40	17	40	8	40	0	0	0	0
	point55	55	863	40	17	40	8	40	0	0	0	0
	point54	54	863	40	17	40	8	40	0	0	0	0
	point53	53										
Roadway7	point59	59	106	40	2	40	1	40	0	0	0	0

	point60	60										
Roadway8	point62	62	106	40	2	40	1	40	0	0	0	0
	point61	61										

Dudek 30 June 2022
CB TNM 2.5

INPUT: RECEIVERS
PROJECT/CONTRACT: Gran Vista
RUN: Existing

Receiver Name	No.	#DUs	Coordinates (ground) X	Y	Z	Height above Ground	Input Sound Levels and Criteria Existing LAeq1h	Impact Criteria LAeq1h	Impact Criteria Sub'l	NR Goal	Active in Calc.
			ft	ft	ft	ft	dBA	dBA	dB	dB	
ST1	1	1	6,809,622.5	1,513,799.1	0.00	4.92	64.20	66	10.0	8.0	Y
ST2	2	1	6,810,016.5	1,514,042.0	0.00	4.92	63.50	66	10.0	8.0	Y
ST3	3	1	6,810,064.5	1,514,464.4	0.00	4.92	60.20	66	10.0	8.0	Y
ST4	4	1	6,809,396.0	1,514,259.4	0.00	4.92	47.30	66	10.0	8.0	Y

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CB TNM 2.5

INPUT: BARRIERS
PROJECT/CONTRACT: Gran Vista
RUN: Existing

Barrier									Points										
Name	Type	Height		If Wall	If Berm			Add'tnl	Name	No.	Coordinates (bottom)			Height	Segment				
		Min	Max	$ per	$ per	Top	Run:Rise	$ per			X	Y	Z	at	Seg Ht	Perturbs		On	Important
				Unit	Unit	Width		Unit						Point	Incre-	#Up	#Dn	Struct?	Reflec-
				Area	Vol.			Length							ment				tions?
		ft	ft	$/sq ft	$/cu yd	ft	ft:ft	$/ft			ft	ft	ft	ft	ft				
Barrier1	W	0.00	99.99	0.00				0.00	point1	1	6,809,527.5	1,514,236.2	0.00	8.00	0.00	0	0		
									point2	2	6,809,492.0	1,514,149.5	0.00	8.00	0.00	0	0		
									point3	3	6,809,279.0	1,514,341.5	0.00	8.00					

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30 June 2022
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: Gran Vista
RUN: Existing
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
ST1	1	1	64.2	68.3	66	4.1	10	Snd Lvl	68.3	0.0	8	-8.0
ST2	2	1	63.5	69.0	66	5.5	10	Snd Lvl	69.0	0.0	8	-8.0
ST3	3	1	60.2	66.5	66	6.3	10	Snd Lvl	66.5	0.0	8	-8.0
ST4	4	1	47.3	52.7	66	5.4	10	----	52.7	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	4	0.0	0.0	0.0
All Impacted	3	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

Dudek 30 June 2022
CB TNM 2.5

INPUT: ROADWAYS
PROJECT/CONTRACT: Gran Vista
RUN: Existing Plus Project

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with the approval of FHWA

Roadway Name	Width	Points Name	No.	Coordinates (pavement) X	Y	Z	Flow Control Control Device	Speed Constraint	Percent Vehicles Affected	Segment Pvmt Type	On Struct?
	ft			ft	ft	ft		mph	%		
Mission West	35.0	point1	1	6,809,942.5	1,513,504.1	0.00				Average	
		point2	2	6,809,884.0	1,513,538.4	0.00				Average	
		point3	3	6,809,766.5	1,513,623.8	0.00				Average	
		point4	4	6,809,644.0	1,513,727.1	0.00				Average	
		point5	5	6,809,520.0	1,513,842.2	0.00				Average	
		point6	6	6,809,443.0	1,513,908.5	0.00				Average	
		point7	7	6,809,344.0	1,513,996.6	0.00				Average	
		point8	8	6,809,256.0	1,514,071.6	0.00				Average	
		point9	9	6,809,153.0	1,514,165.4	0.00				Average	
		point10	10	6,809,112.5	1,514,204.1	0.00				Average	
		point11	11	6,809,007.5	1,514,293.1	0.00				Average	
		point12	12	6,808,960.5	1,514,316.9	0.00					
Mission East	35.0	point13	13	6,808,953.0	1,514,294.1	0.00				Average	
		point14	14	6,808,996.0	1,514,268.8	0.00				Average	
		point15	15	6,809,054.5	1,514,213.2	0.00				Average	
		point16	16	6,809,087.5	1,514,185.1	0.00				Average	
		point17	17	6,809,168.0	1,514,111.6	0.00				Average	
		point18	18	6,809,247.5	1,514,036.6	0.00				Average	
		point19	19	6,809,335.5	1,513,955.8	0.00				Average	
		point20	20	6,809,454.0	1,513,846.0	0.00				Average	
		point21	21	6,809,556.0	1,513,755.4	0.00				Average	
		point22	22	6,809,646.0	1,513,672.0	0.00				Average	
		point23	23	6,809,734.5	1,513,596.1	0.00				Average	
		point24	24	6,809,928.5	1,513,450.4	0.00					
Las Posas North	40.0	point36	36	6,810,059.5	1,513,488.5	0.00				Average	

		point35	35	6,810,117.0	1,513,692.0	0.00				Average	
		point34	34	6,810,132.5	1,513,874.2	0.00				Average	
		point33	33	6,810,127.5	1,513,962.0	0.00				Average	
		point32	32	6,810,118.5	1,514,057.0	0.00				Average	
		point31	31	6,810,074.5	1,514,231.1	0.00				Average	
		point30	30	6,810,015.0	1,514,384.4	0.00				Average	
		point29	29	6,809,941.0	1,514,567.1	0.00				Average	
		point28	28	6,809,910.5	1,514,712.5	0.00				Average	
		point27	27	6,809,889.5	1,514,898.2	0.00				Average	
		point26	26	6,809,870.5	1,515,139.8	0.00				Average	
		point25	25	6,809,868.0	1,515,213.2	0.00					
Las Posas South	40.0	point48	48	6,809,811.0	1,515,209.5	0.00				Average	
		point47	47	6,809,823.0	1,514,958.5	0.00				Average	
		point46	46	6,809,847.0	1,514,713.8	0.00				Average	
		point45	45	6,809,881.5	1,514,547.5	0.00				Average	
		point44	44	6,809,921.0	1,514,450.5	0.00				Average	
		point43	43	6,809,993.5	1,514,273.4	0.00				Average	
		point42	42	6,810,046.0	1,514,124.4	0.00				Average	
		point41	41	6,810,070.0	1,513,990.0	0.00				Average	
		point40	40	6,810,071.0	1,513,878.8	0.00				Average	
		point39	39	6,810,064.0	1,513,722.1	0.00				Average	
		point38	38	6,810,034.5	1,513,597.0	0.00				Average	
		point37	37	6,810,008.0	1,513,505.1	0.00					
Roadway5	35.0	point49	49	6,810,912.5	1,513,110.2	0.00				Average	
		point50	50	6,810,575.5	1,513,229.6	0.00				Average	
		point51	51	6,810,349.0	1,513,312.6	0.00				Average	
		point52	52	6,810,082.0	1,513,426.1	0.00					
Roadway6	35.0	point58	58	6,810,071.0	1,513,379.0	0.00				Average	
		point57	57	6,810,276.5	1,513,294.0	0.00				Average	
		point56	56	6,810,455.5	1,513,227.5	0.00				Average	
		point55	55	6,810,608.5	1,513,177.6	0.00				Average	
		point54	54	6,810,786.0	1,513,109.2	0.00				Average	
		point53	53	6,810,968.0	1,513,046.2	0.00					
Roadway7	40.0	point59	59	6,809,817.0	1,512,914.1	0.00				Average	
		point60	60	6,810,024.0	1,513,397.9	0.00					
Roadway8	40.0	point62	62	6,809,967.5	1,513,429.8	0.00				Average	
		point61	61	6,809,755.5	1,512,933.4	0.00					

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30 June 2022
TNM 2.5

INPUT: TRAFFIC FOR LAeq1h Volumes
PROJECT/CONTRACT: Gran Vista
RUN: Existing Plus Project

Roadway	Points		Segment									
Name	Name	No.	Autos		MTrucks		HTrucks		Buses		Motorcycles	
			V	S	V	S	V	S	V	S	V	S
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph
Mission West	point1	1	872	40	17	40	8	40	0	0	0	0
	point2	2	872	40	17	40	8	40	0	0	0	0
	point3	3	872	40	17	40	8	40	0	0	0	0
	point4	4	872	40	17	40	8	40	0	0	0	0
	point5	5	872	40	17	40	8	40	0	0	0	0
	point6	6	872	40	17	40	8	40	0	0	0	0
	point7	7	872	40	17	40	8	40	0	0	0	0
	point8	8	872	40	17	40	8	40	0	0	0	0
	point9	9	872	40	17	40	8	40	0	0	0	0
	point10	10	872	40	17	40	8	40	0	0	0	0
	point11	11	872	40	17	40	8	40	0	0	0	0
	point12	12										
Mission East	point13	13	872	40	17	40	8	40	0	0	0	0
	point14	14	872	40	17	40	8	40	0	0	0	0
	point15	15	872	40	17	40	8	40	0	0	0	0
	point16	16	872	40	17	40	8	40	0	0	0	0
	point17	17	872	40	17	40	8	40	0	0	0	0
	point18	18	872	40	17	40	8	40	0	0	0	0
	point19	19	872	40	17	40	8	40	0	0	0	0
	point20	20	872	40	17	40	8	40	0	0	0	0
	point21	21	872	40	17	40	8	40	0	0	0	0
	point22	22	872	40	17	40	8	40	0	0	0	0
	point23	23	872	40	17	40	8	40	0	0	0	0

	point24	24										
Las Posas North	point36	36	900	45	18	45	9	45	0	0	0	0
	point35	35	900	45	18	45	9	45	0	0	0	0
	point34	34	900	45	18	45	9	45	0	0	0	0
	point33	33	900	45	18	45	9	45	0	0	0	0
	point32	32	900	45	18	45	9	45	0	0	0	0
	point31	31	900	45	18	45	9	45	0	0	0	0
	point30	30	900	45	18	45	9	45	0	0	0	0
	point29	29	900	45	18	45	9	45	0	0	0	0
	point28	28	900	45	18	45	9	45	0	0	0	0
	point27	27	900	45	0	45	9	45	0	0	0	0
	point26	26	900	45	18	45	9	45	0	0	0	0
	point25	25										
Las Posas South	point48	48	900	45	18	45	9	45	0	0	0	0
	point47	47	900	45	18	45	9	45	0	0	0	0
	point46	46	900	45	18	45	9	45	0	0	0	0
	point45	45	900	45	18	45	9	45	0	0	0	0
	point44	44	900	45	18	45	9	45	0	0	0	0
	point43	43	900	45	18	45	9	45	0	0	0	0
	point42	42	900	45	18	45	9	45	0	0	0	0
	point41	41	900	45	18	45	9	45	0	0	0	0
	point40	40	900	45	18	45	9	45	0	0	0	0
	point39	39	900	45	18	45	9	45	0	0	0	0
	point38	38	900	45	18	45	9	45	0	0	0	0
	point37	37										
Roadway5	point49	49	877	40	18	40	9	40	0	0	0	0
	point50	50	877	40	18	40	9	40	0	0	0	0
	point51	51	877	40	18	40	9	40	0	0	0	0
	point52	52										
Roadway6	point58	58	877	40	18	40	9	40	0	0	0	0
	point57	57	877	40	18	40	9	40	0	0	0	0
	point56	56	877	40	18	40	9	40	0	0	0	0
	point55	55	877	40	18	40	9	40	0	0	0	0
	point54	54	877	40	18	40	9	40	0	0	0	0
	point53	53										
Roadway7	point59	59	125	40	2	40	1	40	0	0	0	0

	point60	60										
Roadway8	point62	62	125	40	2	40	1	40	0	0	0	0
	point61	61										

Dudek 30 June 2022
CB TNM 2.5

INPUT: RECEIVERS
PROJECT/CONTRACT: Gran Vista
RUN: Existing Plus Project

Receiver Name	No.	#DUs	Coordinates (ground) X	Y	Z	Height above Ground	Input Sound Levels and Criteria Existing LAeq1h	Impact Criteria LAeq1h	Impact Criteria Sub'l	NR Goal	Active in Calc.
			ft	ft	ft	ft	dBA	dBA	dB	dB	
ST1	1	1	6,809,622.5	1,513,799.1	0.00	4.92	64.20	66	10.0	8.0	Y
ST2	2	1	6,810,016.5	1,514,042.0	0.00	4.92	63.50	66	10.0	8.0	Y
ST3	3	1	6,810,064.5	1,514,464.4	0.00	4.92	60.20	66	10.0	8.0	Y
ST4	4	1	6,809,396.0	1,514,259.4	0.00	4.92	47.30	66	10.0	8.0	Y

Dudek 30 June 2022
CB TNM 2.5

INPUT: BARRIERS
PROJECT/CONTRACT: Gran Vista
RUN: Existing Plus Project

Barrier									Points										
Name	Type	Height		If Wall	If Berm			Add'tnl	Name	No.	Coordinates (bottom)			Height	Segment				
		Min	Max	$ per Unit Area	$ per Unit Vol.	Top Width	Run:Rise	$ per Unit Length			X	Y	Z	at Point	Seg Ht Incre-ment	Perturbs #Up	#Dn	On Struct?	Important Reflec-tions?
		ft	ft	$/sq ft	$/cu yd	ft	ft:ft	$/ft			ft	ft	ft	ft	ft				
Barrier1	W	0.00	99.99	0.00				0.00	point1	1	6,809,527.5	1,514,236.2	0.00	8.00	0.00	0	0		
									point2	2	6,809,492.0	1,514,149.5	0.00	8.00	0.00	0	0		
									point3	3	6,809,279.0	1,514,341.5	0.00	8.00					
Barrier2	W	0.00	99.99	0.00				0.00	point4	4	6,809,874.0	1,514,398.5	0.00	30.00	0.00	0	0		
									point77	77	6,809,867.0	1,514,411.8	0.00	30.00	0.00	0	0		
									point5	5	6,809,855.5	1,514,407.6	0.00	30.00	0.00	0	0		
									point6	6	6,809,825.5	1,514,498.5	0.00	30.00	0.00	0	0		
									point7	7	6,809,789.0	1,514,482.0	0.00	30.00	0.00	0	0		
									point8	8	6,809,828.0	1,514,378.9	0.00	30.00	0.00	0	0		
									point9	9	6,809,874.0	1,514,398.5	0.00	30.00					
Barrier3	W	0.00	99.99	0.00				0.00	point10	10	6,809,777.5	1,514,317.9	0.00	30.00	0.00	0	0		
									point78	78	6,809,794.5	1,514,277.6	0.00	30.00	0.00	0	0		
									point11	11	6,809,901.5	1,514,322.5	0.00	30.00	0.00	0	0		
									point12	12	6,809,887.0	1,514,359.1	0.00	30.00	0.00	0	0		
									point13	13	6,809,777.5	1,514,317.9	0.00	30.00					
Barrier4	W	0.00	99.99	0.00				0.00	point14	14	6,809,807.5	1,514,251.0	0.00	30.00	0.00	0	0		
									point79	79	6,809,825.5	1,514,215.8	0.00	30.00	0.00	0	0		
									point15	15	6,809,926.5	1,514,252.0	0.00	30.00	0.00	0	0		
									point16	16	6,809,910.5	1,514,292.2	0.00	30.00	0.00	0	0		
									point17	17	6,809,807.5	1,514,251.0	0.00	30.00					
Barrier5	W	0.00	99.99	0.00				0.00	point18	18	6,809,829.5	1,514,185.1	0.00	30.00	0.00	0	0		
									point80	80	6,809,846.5	1,514,147.4	0.00	30.00	0.00	0	0		
									point19	19	6,809,953.0	1,514,186.1	0.00	30.00	0.00	0	0		
									point20	20	6,809,937.0	1,514,225.5	0.00	30.00	0.00	0	0		
									point21	21	6,809,829.5	1,514,185.1	0.00	30.00					
Barrier6	W	0.00	99.99	0.00				0.00	point22	22	6,809,861.0	1,514,123.9	0.00	30.00	0.00	0	0		
									point81	81	6,809,869.5	1,514,083.9	0.00	30.00	0.00	0	0		
									point23	23	6,809,975.5	1,514,102.0	0.00	30.00	0.00	0	0		
									point24	24	6,809,968.0	1,514,145.0	0.00	30.00	0.00	0	0		
									point25	25	6,809,861.0	1,514,123.9	0.00	30.00					
Barrier7	W	0.00	99.99	0.00				0.00	point26	26	6,809,874.0	1,514,050.5	0.00	30.00	0.00	0	0		
									point82	82	6,809,884.0	1,514,008.4	0.00	30.00	0.00	0	0		
									point27	27	6,809,995.0	1,514,032.8	0.00	30.00	0.00	0	0		
									point28	28	6,809,988.0	1,514,075.5	0.00	30.00	0.00	0	0		
									point29	29	6,809,874.0	1,514,050.5	0.00	30.00					

Barrier8	W	0.00	99.99	0.00				0.00	point30	30	6,809,654.0	1,514,228.5	0.00	30.00	0.00	0	0		
									point31	31	6,809,741.5	1,514,194.5	0.00	30.00	0.00	0	0		
									point32	32	6,809,758.0	1,514,238.8	0.00	30.00	0.00	0	0		
									point33	33	6,809,671.0	1,514,269.2	0.00	30.00	0.00	0	0		
									point34	34	6,809,654.0	1,514,228.5	0.00	30.00					
Barrier9	W	0.00	99.99	0.00				0.00	point35	35	6,809,624.0	1,514,160.1	0.00	30.00	0.00	0	0		
									point36	36	6,809,731.5	1,514,123.8	0.00	30.00	0.00	0	0		
									point37	37	6,809,744.5	1,514,168.0	0.00	30.00	0.00	0	0		
									point38	38	6,809,637.5	1,514,205.6	0.00	30.00	0.00	0	0		
									point39	39	6,809,624.0	1,514,160.1	0.00	30.00					
Barrier10	W	0.00	99.99	0.00				0.00	point40	40	6,809,596.5	1,514,093.1	0.00	30.00	0.00	0	0		
									point41	41	6,809,701.5	1,514,051.1	0.00	30.00	0.00	0	0		
									point42	42	6,809,717.5	1,514,097.0	0.00	30.00	0.00	0	0		
									point43	43	6,809,612.5	1,514,132.0	0.00	30.00	0.00	0	0		
									point44	44	6,809,596.5	1,514,093.1	0.00	30.00					
Barrier11	W	0.00	99.99	0.00				0.00	point45	45	6,809,566.5	1,514,028.6	0.00	30.00	0.00	0	0		
									point46	46	6,809,676.0	1,513,988.5	0.00	30.00	0.00	0	0		
									point47	47	6,809,690.5	1,514,031.8	0.00	30.00	0.00	0	0		
									point48	48	6,809,584.0	1,514,068.1	0.00	30.00	0.00	0	0		
									point49	49	6,809,566.5	1,514,028.6	0.00	30.00					
Barrier12	W	0.00	99.99	0.00				0.00	point50	50	6,809,539.5	1,513,964.1	0.00	30.00	0.00	0	0		
									point51	51	6,809,646.0	1,513,921.0	0.00	30.00	0.00	0	0		
									point52	52	6,809,660.0	1,513,960.9	0.00	30.00	0.00	0	0		
									point53	53	6,809,553.5	1,514,003.4	0.00	30.00	0.00	0	0		
									point54	54	6,809,539.5	1,513,964.1	0.00	30.00					
Barrier13	W	0.00	99.99	0.00				0.00	point55	55	6,809,714.0	1,513,995.4	0.00	30.00	0.00	0	0		
									point56	56	6,809,758.0	1,513,981.6	0.00	30.00	0.00	0	0		
									point57	57	6,809,810.5	1,514,109.8	0.00	30.00	0.00	0	0		
									point58	58	6,809,771.5	1,514,125.0	0.00	30.00	0.00	0	0		
									point59	59	6,809,714.0	1,513,995.4	0.00	30.00					
Barrier14	W	0.00	99.99	0.00				0.00	point60	60	6,809,722.5	1,513,840.9	0.00	30.00	0.00	0	0		
									point61	61	6,809,716.5	1,513,956.4	0.00	30.00	0.00	0	0		
									point62	62	6,809,756.0	1,513,958.5	0.00	30.00	0.00	0	0		
									point63	63	6,809,769.0	1,513,844.2	0.00	30.00	0.00	0	0		
									point64	64	6,809,722.5	1,513,840.9	0.00	30.00					
Barrier15	W	0.00	99.99	0.00				0.00	point65	65	6,809,799.5	1,513,854.2	0.00	30.00	0.00	0	0		
									point66	66	6,809,786.5	1,513,964.2	0.00	30.00	0.00	0	0		
									point67	67	6,809,829.0	1,513,968.4	0.00	30.00	0.00	0	0		
									point68	68	6,809,846.5	1,513,859.9	0.00	30.00	0.00	0	0		
									point69	69	6,809,799.5	1,513,854.2	0.00	30.00					
Barrier16	W	0.00	99.99	0.00				0.00	point70	70	6,809,891.5	1,513,877.8	0.00	30.00	0.00	0	0		
									point71	71	6,809,883.0	1,513,928.4	0.00	30.00	0.00	0	0		
									point72	72	6,809,932.0	1,513,934.4	0.00	30.00	0.00	0	0		
									point73	73	6,809,935.5	1,513,920.5	0.00	30.00	0.00	0	0		
									point74	74	6,809,921.5	1,513,917.6	0.00	30.00	0.00	0	0		
									point75	75	6,809,931.5	1,513,880.1	0.00	30.00	0.00	0	0		
									point76	76	6,809,891.5	1,513,877.8	0.00	30.00					

Dudek
CB
30 June 2022
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: Gran Vista
RUN: Existing Plus Project
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
ST1	1	1	64.2	68.3	66	4.1	10	Snd Lvl	68.3	0.0	8	-8.0
ST2	2	1	63.5	69.2	66	5.7	10	Snd Lvl	69.2	0.0	8	-8.0
ST3	3	1	60.2	66.7	66	6.5	10	Snd Lvl	66.7	0.0	8	-8.0
ST4	4	1	47.3	51.2	66	3.9	10	----	51.2	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	4	0.0	0.0	0.0
All Impacted	3	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

Dudek					**30 June 2022**						
CB					**TNM 2.5**						
INPUT: ROADWAYS							**Average pavement type shall be used unless**				
PROJECT/CONTRACT:	**Gran Vista**						**a State highway agency substantiates the use**				
RUN:	**Near Term**						**of a different type with the approval of FHWA**				
Roadway		**Points**									
Name	**Width**	**Name**	**No.**	**Coordinates (pavement)**			**Flow Control**			**Segment**	
				X	**Y**	**Z**	**Control Device**	**Speed Constraint**	**Percent Vehicles Affected**	**Pvmt Type**	**On Struct?**
	ft			ft	ft	ft		mph	%		
Mission West	35.0	point1	1	6,809,942.5	1,513,504.1	0.00				Average	
		point2	2	6,809,884.0	1,513,538.4	0.00				Average	
		point3	3	6,809,766.5	1,513,623.8	0.00				Average	
		point4	4	6,809,644.0	1,513,727.1	0.00				Average	
		point5	5	6,809,520.0	1,513,842.2	0.00				Average	
		point6	6	6,809,443.0	1,513,908.5	0.00				Average	
		point7	7	6,809,344.0	1,513,996.6	0.00				Average	
		point8	8	6,809,256.0	1,514,071.6	0.00				Average	
		point9	9	6,809,153.0	1,514,165.4	0.00				Average	
		point10	10	6,809,112.5	1,514,204.1	0.00				Average	
		point11	11	6,809,007.5	1,514,293.1	0.00				Average	
		point12	12	6,808,960.5	1,514,316.9	0.00					
Mission East	35.0	point13	13	6,808,953.0	1,514,294.1	0.00				Average	
		point14	14	6,808,996.0	1,514,268.8	0.00				Average	
		point15	15	6,809,054.5	1,514,213.2	0.00				Average	
		point16	16	6,809,087.5	1,514,185.1	0.00				Average	
		point17	17	6,809,168.0	1,514,111.6	0.00				Average	
		point18	18	6,809,247.5	1,514,036.6	0.00				Average	
		point19	19	6,809,335.5	1,513,955.8	0.00				Average	
		point20	20	6,809,454.0	1,513,846.0	0.00				Average	
		point21	21	6,809,556.0	1,513,755.4	0.00				Average	
		point22	22	6,809,646.0	1,513,672.0	0.00				Average	
		point23	23	6,809,734.5	1,513,596.1	0.00				Average	
		point24	24	6,809,928.5	1,513,450.4	0.00					
Las Posas North	40.0	point36	36	6,810,059.5	1,513,488.5	0.00				Average	

		point35	35	6,810,117.0	1,513,692.0	0.00				Average	
		point34	34	6,810,132.5	1,513,874.2	0.00				Average	
		point33	33	6,810,127.5	1,513,962.0	0.00				Average	
		point32	32	6,810,118.5	1,514,057.0	0.00				Average	
		point31	31	6,810,074.5	1,514,231.1	0.00				Average	
		point30	30	6,810,015.0	1,514,384.4	0.00				Average	
		point29	29	6,809,941.0	1,514,567.1	0.00				Average	
		point28	28	6,809,910.5	1,514,712.5	0.00				Average	
		point27	27	6,809,889.5	1,514,898.2	0.00				Average	
		point26	26	6,809,870.5	1,515,139.8	0.00				Average	
		point25	25	6,809,868.0	1,515,213.2	0.00					
Las Posas South	40.0	point48	48	6,809,811.0	1,515,209.5	0.00				Average	
		point47	47	6,809,823.0	1,514,958.5	0.00				Average	
		point46	46	6,809,847.0	1,514,713.8	0.00				Average	
		point45	45	6,809,881.5	1,514,547.5	0.00				Average	
		point44	44	6,809,921.0	1,514,450.5	0.00				Average	
		point43	43	6,809,993.5	1,514,273.4	0.00				Average	
		point42	42	6,810,046.0	1,514,124.4	0.00				Average	
		point41	41	6,810,070.0	1,513,990.0	0.00				Average	
		point40	40	6,810,071.0	1,513,878.8	0.00				Average	
		point39	39	6,810,064.0	1,513,722.1	0.00				Average	
		point38	38	6,810,034.5	1,513,597.0	0.00				Average	
		point37	37	6,810,008.0	1,513,505.1	0.00					
Roadway5	35.0	point49	49	6,810,912.5	1,513,110.2	0.00				Average	
		point50	50	6,810,575.5	1,513,229.6	0.00				Average	
		point51	51	6,810,349.0	1,513,312.6	0.00				Average	
		point52	52	6,810,082.0	1,513,426.1	0.00					
Roadway6	35.0	point58	58	6,810,071.0	1,513,379.0	0.00				Average	
		point57	57	6,810,276.5	1,513,294.0	0.00				Average	
		point56	56	6,810,455.5	1,513,227.5	0.00				Average	
		point55	55	6,810,608.5	1,513,177.6	0.00				Average	
		point54	54	6,810,786.0	1,513,109.2	0.00				Average	
		point53	53	6,810,968.0	1,513,046.2	0.00					
Roadway7	40.0	point59	59	6,809,817.0	1,512,914.1	0.00				Average	
		point60	60	6,810,024.0	1,513,397.9	0.00					
Roadway8	40.0	point62	62	6,809,967.5	1,513,429.8	0.00				Average	
		point61	61	6,809,755.5	1,512,933.4	0.00					

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30 June 2022
TNM 2.5

INPUT: TRAFFIC FOR LAeq1h Volumes
PROJECT/CONTRACT: Gran Vista
RUN: Near Term

Roadway	Points		Segment									
Name	Name	No.	Autos		MTrucks		HTrucks		Buses		Motorcycles	
			V	S	V	S	V	S	V	S	V	S
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph
Mission West	point1	1	906	40	18	40	9	40	0	0	0	0
	point2	2	906	40	18	40	9	40	0	0	0	0
	point3	3	906	40	18	40	9	40	0	0	0	0
	point4	4	906	40	18	40	9	40	0	0	0	0
	point5	5	906	40	18	40	9	40	0	0	0	0
	point6	6	906	40	18	40	9	40	0	0	0	0
	point7	7	906	40	18	40	9	40	0	0	0	0
	point8	8	906	40	18	40	9	40	0	0	0	0
	point9	9	906	40	18	40	9	40	0	0	0	0
	point10	10	906	40	18	40	9	40	0	0	0	0
	point11	11	906	40	18	40	9	40	0	0	0	0
	point12	12										
Mission East	point13	13	906	40	18	40	9	40	0	0	0	0
	point14	14	906	40	18	40	9	40	0	0	0	0
	point15	15	906	40	18	40	9	40	0	0	0	0
	point16	16	906	40	18	40	9	40	0	0	0	0
	point17	17	906	40	18	40	9	40	0	0	0	0
	point18	18	906	40	18	40	9	40	0	0	0	0
	point19	19	906	40	18	40	9	40	0	0	0	0
	point20	20	906	40	18	40	9	40	0	0	0	0
	point21	21	906	40	18	40	9	40	0	0	0	0
	point22	22	906	40	18	40	9	40	0	0	0	0
	point23	23	906	40	18	40	9	40	0	0	0	0

	point24	24										
Las Posas North	point36	36	988	45	20	45	10	45	0	0	0	0
	point35	35	988	45	20	45	10	45	0	0	0	0
	point34	34	988	45	20	45	10	45	0	0	0	0
	point33	33	988	45	20	45	10	45	0	0	0	0
	point32	32	988	45	20	45	10	45	0	0	0	0
	point31	31	988	45	20	45	10	45	0	0	0	0
	point30	30	988	45	20	45	10	45	0	0	0	0
	point29	29	988	45	20	45	10	45	0	0	0	0
	point28	28	988	45	20	45	10	45	0	0	0	0
	point27	27	988	45	20	45	10	45	0	0	0	0
	point26	26	988	45	20	45	10	45	0	0	0	0
	point25	25										
Las Posas South	point48	48	988	45	20	45	10	45	0	0	0	0
	point47	47	988	45	20	45	10	45	0	0	0	0
	point46	46	988	45	20	45	10	45	0	0	0	0
	point45	45	988	45	20	45	10	45	0	0	0	0
	point44	44	988	45	20	45	10	45	0	0	0	0
	point43	43	988	45	20	45	10	45	0	0	0	0
	point42	42	988	45	20	45	10	45	0	0	0	0
	point41	41	988	45	20	45	10	45	0	0	0	0
	point40	40	988	45	20	45	10	45	0	0	0	0
	point39	39	988	45	20	45	10	45	0	0	0	0
	point38	38	988	45	20	45	10	45	0	0	0	0
	point37	37										
Roadway5	point49	49	907	40	18	40	9	40	0	0	0	0
	point50	50	907	40	18	40	9	40	0	0	0	0
	point51	51	907	40	18	40	9	40	0	0	0	0
	point52	52										
Roadway6	point58	58	907	40	18	40	9	40	0	0	0	0
	point57	57	907	40	18	40	9	40	0	0	0	0
	point56	56	907	40	18	40	9	40	0	0	0	0
	point55	55	907	40	18	40	9	40	0	0	0	0
	point54	54	907	40	18	40	9	40	0	0	0	0
	point53	53										
Roadway7	point59	59	1178	40	24	40	12	40	0	0	0	0

	point60	60										
Roadway8	point62	62	1178	40	24	40	12	40	0	0	0	0
	point61	61										

Dudek 30 June 2022
CB TNM 2.5

INPUT: RECEIVERS
PROJECT/CONTRACT: Gran Vista
RUN: Near Term

Receiver Name	No.	#DUs	Coordinates (ground) X	Y	Z	Height above Ground	Input Sound Levels and Criteria Existing LAeq1h	Impact Criteria LAeq1h	Impact Criteria Sub'l	NR Goal	Active in Calc.
			ft	ft	ft	ft	dBA	dBA	dB	dB	
ST1	1	1	6,809,622.5	1,513,799.1	0.00	4.92	64.20	66	10.0	8.0	Y
ST2	2	1	6,810,016.5	1,514,042.0	0.00	4.92	63.50	66	10.0	8.0	Y
ST3	3	1	6,810,064.5	1,514,464.4	0.00	4.92	60.20	66	10.0	8.0	Y
ST4	4	1	6,809,396.0	1,514,259.4	0.00	4.92	47.30	66	10.0	8.0	Y

Dudek 30 June 2022
CB TNM 2.5

INPUT: BARRIERS
PROJECT/CONTRACT: Gran Vista
RUN: Near Term

Barrier									Points										
Name	Type	Height		If Wall	If Berm			Add'tnl	Name	No.	Coordinates (bottom)			Height	Segment				
		Min	Max	$ per	$ per	Top	Run:Rise	$ per			X	Y	Z	at	Seg Ht	Perturbs		On	Important
				Unit	Unit	Width		Unit						Point	Incre-	#Up	#Dn	Struct?	Reflec-
				Area	Vol.			Length							ment				tions?
		ft	ft	$/sq ft	$/cu yd	ft	ft:ft	$/ft			ft	ft	ft	ft	ft				
Barrier1	W	0.00	99.99	0.00				0.00	point1	1	6,809,527.5	1,514,236.2	0.00	8.00	0.00	0	0		
									point2	2	6,809,492.0	1,514,149.5	0.00	8.00	0.00	0	0		
									point3	3	6,809,279.0	1,514,341.5	0.00	8.00					

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30 June 2022
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: Gran Vista
RUN: Near Term
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
ST1	1	1	64.2	68.6	66	4.4	10	Snd Lvl	68.6	0.0	8	-8.0
ST2	2	1	63.5	69.6	66	6.1	10	Snd Lvl	69.6	0.0	8	-8.0
ST3	3	1	60.2	67.1	66	6.9	10	Snd Lvl	67.1	0.0	8	-8.0
ST4	4	1	47.3	53.2	66	5.9	10	----	53.2	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	4	0.0	0.0	0.0
All Impacted	3	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

Dudek					**30 June 2022**						
CB					**TNM 2.5**						
INPUT: ROADWAYS							**Average pavement type shall be used unless**				
PROJECT/CONTRACT:	**Gran Vista**						**a State highway agency substantiates the use**				
RUN:	**Near Term + Project**						**of a different type with the approval of FHWA**				
Roadway		**Points**									
Name	**Width**	**Name**	**No.**	**Coordinates (pavement)**			**Flow Control**			**Segment**	
				X	**Y**	**Z**	**Control Device**	**Speed Constraint**	**Percent Vehicles Affected**	**Pvmt Type**	**On Struct?**
	ft			ft	ft	ft		mph	%		
Mission West	35.0	point1	1	6,809,942.5	1,513,504.1	0.00				Average	
		point2	2	6,809,884.0	1,513,538.4	0.00				Average	
		point3	3	6,809,766.5	1,513,623.8	0.00				Average	
		point4	4	6,809,644.0	1,513,727.1	0.00				Average	
		point5	5	6,809,520.0	1,513,842.2	0.00				Average	
		point6	6	6,809,443.0	1,513,908.5	0.00				Average	
		point7	7	6,809,344.0	1,513,996.6	0.00				Average	
		point8	8	6,809,256.0	1,514,071.6	0.00				Average	
		point9	9	6,809,153.0	1,514,165.4	0.00				Average	
		point10	10	6,809,112.5	1,514,204.1	0.00				Average	
		point11	11	6,809,007.5	1,514,293.1	0.00				Average	
		point12	12	6,808,960.5	1,514,316.9	0.00					
Mission East	35.0	point13	13	6,808,953.0	1,514,294.1	0.00				Average	
		point14	14	6,808,996.0	1,514,268.8	0.00				Average	
		point15	15	6,809,054.5	1,514,213.2	0.00				Average	
		point16	16	6,809,087.5	1,514,185.1	0.00				Average	
		point17	17	6,809,168.0	1,514,111.6	0.00				Average	
		point18	18	6,809,247.5	1,514,036.6	0.00				Average	
		point19	19	6,809,335.5	1,513,955.8	0.00				Average	
		point20	20	6,809,454.0	1,513,846.0	0.00				Average	
		point21	21	6,809,556.0	1,513,755.4	0.00				Average	
		point22	22	6,809,646.0	1,513,672.0	0.00				Average	
		point23	23	6,809,734.5	1,513,596.1	0.00				Average	
		point24	24	6,809,928.5	1,513,450.4	0.00					
Las Posas North	40.0	point36	36	6,810,059.5	1,513,488.5	0.00				Average	

		point35	35	6,810,117.0	1,513,692.0	0.00				Average	
		point34	34	6,810,132.5	1,513,874.2	0.00				Average	
		point33	33	6,810,127.5	1,513,962.0	0.00				Average	
		point32	32	6,810,118.5	1,514,057.0	0.00				Average	
		point31	31	6,810,074.5	1,514,231.1	0.00				Average	
		point30	30	6,810,015.0	1,514,384.4	0.00				Average	
		point29	29	6,809,941.0	1,514,567.1	0.00				Average	
		point28	28	6,809,910.5	1,514,712.5	0.00				Average	
		point27	27	6,809,889.5	1,514,898.2	0.00				Average	
		point26	26	6,809,870.5	1,515,139.8	0.00				Average	
		point25	25	6,809,868.0	1,515,213.2	0.00					
Las Posas South	40.0	point48	48	6,809,811.0	1,515,209.5	0.00				Average	
		point47	47	6,809,823.0	1,514,958.5	0.00				Average	
		point46	46	6,809,847.0	1,514,713.8	0.00				Average	
		point45	45	6,809,881.5	1,514,547.5	0.00				Average	
		point44	44	6,809,921.0	1,514,450.5	0.00				Average	
		point43	43	6,809,993.5	1,514,273.4	0.00				Average	
		point42	42	6,810,046.0	1,514,124.4	0.00				Average	
		point41	41	6,810,070.0	1,513,990.0	0.00				Average	
		point40	40	6,810,071.0	1,513,878.8	0.00				Average	
		point39	39	6,810,064.0	1,513,722.1	0.00				Average	
		point38	38	6,810,034.5	1,513,597.0	0.00				Average	
		point37	37	6,810,008.0	1,513,505.1	0.00					
Roadway5	35.0	point49	49	6,810,912.5	1,513,110.2	0.00				Average	
		point50	50	6,810,575.5	1,513,229.6	0.00				Average	
		point51	51	6,810,349.0	1,513,312.6	0.00				Average	
		point52	52	6,810,082.0	1,513,426.1	0.00					
Roadway6	35.0	point58	58	6,810,071.0	1,513,379.0	0.00				Average	
		point57	57	6,810,276.5	1,513,294.0	0.00				Average	
		point56	56	6,810,455.5	1,513,227.5	0.00				Average	
		point55	55	6,810,608.5	1,513,177.6	0.00				Average	
		point54	54	6,810,786.0	1,513,109.2	0.00				Average	
		point53	53	6,810,968.0	1,513,046.2	0.00					
Roadway7	40.0	point59	59	6,809,817.0	1,512,914.1	0.00				Average	
		point60	60	6,810,024.0	1,513,397.9	0.00					
Roadway8	40.0	point62	62	6,809,967.5	1,513,429.8	0.00				Average	
		point61	61	6,809,755.5	1,512,933.4	0.00					

Dudek
CB

30 June 2022
TNM 2.5

INPUT: TRAFFIC FOR LAeq1h Volumes
PROJECT/CONTRACT: Gran Vista
RUN: Near Term + Project

Roadway	Points		Segment									
Name	Name	No.	Autos		MTrucks		HTrucks		Buses		Motorcycles	
			V	S	V	S	V	S	V	S	V	S
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph
Mission West	point1	1	916	40	18	40	9	40	0	0	0	0
	point2	2	916	40	18	40	9	40	0	0	0	0
	point3	3	916	40	18	40	9	40	0	0	0	0
	point4	4	916	40	18	40	9	40	0	0	0	0
	point5	5	916	40	18	40	9	40	0	0	0	0
	point6	6	916	40	18	40	9	40	0	0	0	0
	point7	7	916	40	18	40	9	40	0	0	0	0
	point8	8	916	40	18	40	9	40	0	0	0	0
	point9	9	916	40	18	40	9	40	0	0	0	0
	point10	10	916	40	18	40	9	40	0	0	0	0
	point11	11	916	40	18	40	9	40	0	0	0	0
	point12	12										
Mission East	point13	13	916	40	18	40	9	40	0	0	0	0
	point14	14	916	40	18	40	9	40	0	0	0	0
	point15	15	916	40	18	40	9	40	0	0	0	0
	point16	16	916	40	18	40	9	40	0	0	0	0
	point17	17	916	40	18	40	9	40	0	0	0	0
	point18	18	916	40	18	40	9	40	0	0	0	0
	point19	19	916	40	18	40	9	40	0	0	0	0
	point20	20	916	40	18	40	9	40	0	0	0	0
	point21	21	916	40	18	40	9	40	0	0	0	0
	point22	22	916	40	18	40	9	40	0	0	0	0
	point23	23	916	40	18	40	9	40	0	0	0	0

	point24	24										
Las Posas North	point36	36	1021	45	21	45	10	45	0	0	0	0
	point35	35	1021	45	21	45	10	45	0	0	0	0
	point34	34	1021	45	21	45	10	45	0	0	0	0
	point33	33	1021	45	21	45	10	45	0	0	0	0
	point32	32	1021	45	21	45	10	45	0	0	0	0
	point31	31	1021	45	21	45	10	45	0	0	0	0
	point30	30	1021	45	21	45	10	45	0	0	0	0
	point29	29	1021	45	21	45	10	45	0	0	0	0
	point28	28	1021	45	21	45	10	45	0	0	0	0
	point27	27	1021	45	21	45	10	45	0	0	0	0
	point26	26	1021	45	21	45	10	45	0	0	0	0
	point25	25										
Las Posas South	point48	48	1021	45	21	45	10	45	0	0	0	0
	point47	47	1021	45	21	45	10	45	0	0	0	0
	point46	46	1021	45	21	45	10	45	0	0	0	0
	point45	45	1021	45	21	45	10	45	0	0	0	0
	point44	44	1021	45	21	45	10	45	0	0	0	0
	point43	43	1021	45	21	45	10	45	0	0	0	0
	point42	42	1021	45	21	45	10	45	0	0	0	0
	point41	41	1021	45	21	45	10	45	0	0	0	0
	point40	40	1021	45	21	45	10	45	0	0	0	0
	point39	39	1021	45	21	45	10	45	0	0	0	0
	point38	38	1021	45	21	45	10	45	0	0	0	0
	point37	37										
Roadway5	point49	49	921	40	19	40	9	40	0	0	0	0
	point50	50	921	40	19	40	9	40	0	0	0	0
	point51	51	921	40	19	40	9	40	0	0	0	0
	point52	52										
Roadway6	point58	58	921	40	19	40	9	40	0	0	0	0
	point57	57	921	40	19	40	9	40	0	0	0	0
	point56	56	921	40	19	40	9	40	0	0	0	0
	point55	55	921	40	19	40	9	40	0	0	0	0
	point54	54	921	40	19	40	9	40	0	0	0	0
	point53	53										
Roadway7	point59	59	1191	40	24	40	12	40	0	0	0	0

	point60	60										
Roadway8	point62	62	1191	40	24	40	12	40	0	0	0	0
	point61	61										

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INPUT: RECEIVERS
PROJECT/CONTRACT: Gran Vista
RUN: Near Term + Project

Receiver Name	No.	#DUs	Coordinates (ground) X	Y	Z	Height above Ground	Input Sound Levels and Criteria: Existing LAeq1h	Impact Criteria LAeq1h	Impact Criteria Sub'l	NR Goal	Active in Calc.
			ft	ft	ft	ft	dBA	dBA	dB	dB	
ST1	1	1	6,809,622.5	1,513,799.1	0.00	4.92	64.20	66	10.0	8.0	Y
ST2	2	1	6,810,016.5	1,514,042.0	0.00	4.92	63.50	66	10.0	8.0	Y
ST3	3	1	6,810,064.5	1,514,464.4	0.00	4.92	60.20	66	10.0	8.0	Y
ST4	4	1	6,809,396.0	1,514,259.4	0.00	4.92	47.30	66	10.0	8.0	Y

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INPUT: BARRIERS
PROJECT/CONTRACT: Gran Vista
RUN: Near Term + Project

Barrier									Points										
Name	Type	Height		If Wall	If Berm			Add'tnl	Name	No.	Coordinates (bottom)			Height	Segment				
		Min	Max	$ per Unit Area	$ per Unit Vol.	Top Width	Run:Rise	$ per Unit Length			X	Y	Z	at Point	Seg Ht Incre-ment	Perturbs #Up	#Dn	On Struct?	Important Reflec-tions?
		ft	ft	$/sq ft	$/cu yd	ft	ft:ft	$/ft			ft	ft	ft	ft	ft				
Barrier1	W	0.00	99.99	0.00				0.00	point1	1	6,809,527.5	1,514,236.2	0.00	8.00	0.00	0	0		
									point2	2	6,809,492.0	1,514,149.5	0.00	8.00	0.00	0	0		
									point3	3	6,809,279.0	1,514,341.5	0.00	8.00					
Barrier2	W	0.00	99.99	0.00				0.00	point4	4	6,809,874.0	1,514,398.5	0.00	30.00	0.00	0	0		
									point77	77	6,809,867.0	1,514,411.8	0.00	30.00	0.00	0	0		
									point5	5	6,809,855.5	1,514,407.6	0.00	30.00	0.00	0	0		
									point6	6	6,809,825.5	1,514,498.5	0.00	30.00	0.00	0	0		
									point7	7	6,809,789.0	1,514,482.0	0.00	30.00	0.00	0	0		
									point8	8	6,809,828.0	1,514,378.9	0.00	30.00	0.00	0	0		
									point9	9	6,809,874.0	1,514,398.5	0.00	30.00					
Barrier3	W	0.00	99.99	0.00				0.00	point10	10	6,809,777.5	1,514,317.9	0.00	30.00	0.00	0	0		
									point78	78	6,809,794.5	1,514,277.6	0.00	30.00	0.00	0	0		
									point11	11	6,809,901.5	1,514,322.5	0.00	30.00	0.00	0	0		
									point12	12	6,809,887.0	1,514,359.1	0.00	30.00	0.00	0	0		
									point13	13	6,809,777.5	1,514,317.9	0.00	30.00					
Barrier4	W	0.00	99.99	0.00				0.00	point14	14	6,809,807.5	1,514,251.0	0.00	30.00	0.00	0	0		
									point79	79	6,809,825.5	1,514,215.8	0.00	30.00	0.00	0	0		
									point15	15	6,809,926.5	1,514,252.0	0.00	30.00	0.00	0	0		
									point16	16	6,809,910.5	1,514,292.2	0.00	30.00	0.00	0	0		
									point17	17	6,809,807.5	1,514,251.0	0.00	30.00					
Barrier5	W	0.00	99.99	0.00				0.00	point18	18	6,809,829.5	1,514,185.1	0.00	30.00	0.00	0	0		
									point80	80	6,809,846.5	1,514,147.4	0.00	30.00	0.00	0	0		
									point19	19	6,809,953.0	1,514,186.1	0.00	30.00	0.00	0	0		
									point20	20	6,809,937.0	1,514,225.5	0.00	30.00	0.00	0	0		
									point21	21	6,809,829.5	1,514,185.1	0.00	30.00					
Barrier6	W	0.00	99.99	0.00				0.00	point22	22	6,809,861.0	1,514,123.9	0.00	30.00	0.00	0	0		
									point81	81	6,809,869.5	1,514,083.9	0.00	30.00	0.00	0	0		
									point23	23	6,809,975.5	1,514,102.0	0.00	30.00	0.00	0	0		
									point24	24	6,809,968.0	1,514,145.0	0.00	30.00	0.00	0	0		
									point25	25	6,809,861.0	1,514,123.9	0.00	30.00					
Barrier7	W	0.00	99.99	0.00				0.00	point26	26	6,809,874.0	1,514,050.5	0.00	30.00	0.00	0	0		
									point82	82	6,809,884.0	1,514,008.4	0.00	30.00	0.00	0	0		
									point27	27	6,809,995.0	1,514,032.8	0.00	30.00	0.00	0	0		
									point28	28	6,809,988.0	1,514,075.5	0.00	30.00	0.00	0	0		
									point29	29	6,809,874.0	1,514,050.5	0.00	30.00					

Barrier8	W	0.00	99.99	0.00				0.00	point30	30	6,809,654.0	1,514,228.5	0.00	30.00	0.00	0	0		
									point31	31	6,809,741.5	1,514,194.5	0.00	30.00	0.00	0	0		
									point32	32	6,809,758.0	1,514,238.8	0.00	30.00	0.00	0	0		
									point33	33	6,809,671.0	1,514,269.2	0.00	30.00	0.00	0	0		
									point34	34	6,809,654.0	1,514,228.5	0.00	30.00					
Barrier9	W	0.00	99.99	0.00				0.00	point35	35	6,809,624.0	1,514,160.1	0.00	30.00	0.00	0	0		
									point36	36	6,809,731.5	1,514,123.8	0.00	30.00	0.00	0	0		
									point37	37	6,809,744.5	1,514,168.0	0.00	30.00	0.00	0	0		
									point38	38	6,809,637.5	1,514,205.6	0.00	30.00	0.00	0	0		
									point39	39	6,809,624.0	1,514,160.1	0.00	30.00					
Barrier10	W	0.00	99.99	0.00				0.00	point40	40	6,809,596.5	1,514,093.1	0.00	30.00	0.00	0	0		
									point41	41	6,809,701.5	1,514,051.1	0.00	30.00	0.00	0	0		
									point42	42	6,809,717.5	1,514,097.0	0.00	30.00	0.00	0	0		
									point43	43	6,809,612.5	1,514,132.0	0.00	30.00	0.00	0	0		
									point44	44	6,809,596.5	1,514,093.1	0.00	30.00					
Barrier11	W	0.00	99.99	0.00				0.00	point45	45	6,809,566.5	1,514,028.6	0.00	30.00	0.00	0	0		
									point46	46	6,809,676.0	1,513,988.5	0.00	30.00	0.00	0	0		
									point47	47	6,809,690.5	1,514,031.8	0.00	30.00	0.00	0	0		
									point48	48	6,809,584.0	1,514,068.1	0.00	30.00	0.00	0	0		
									point49	49	6,809,566.5	1,514,028.6	0.00	30.00					
Barrier12	W	0.00	99.99	0.00				0.00	point50	50	6,809,539.5	1,513,964.1	0.00	30.00	0.00	0	0		
									point51	51	6,809,646.0	1,513,921.0	0.00	30.00	0.00	0	0		
									point52	52	6,809,660.0	1,513,960.9	0.00	30.00	0.00	0	0		
									point53	53	6,809,553.5	1,514,003.4	0.00	30.00	0.00	0	0		
									point54	54	6,809,539.5	1,513,964.1	0.00	30.00					
Barrier13	W	0.00	99.99	0.00				0.00	point55	55	6,809,714.0	1,513,995.4	0.00	30.00	0.00	0	0		
									point56	56	6,809,758.0	1,513,981.6	0.00	30.00	0.00	0	0		
									point57	57	6,809,810.5	1,514,109.8	0.00	30.00	0.00	0	0		
									point58	58	6,809,771.5	1,514,125.0	0.00	30.00	0.00	0	0		
									point59	59	6,809,714.0	1,513,995.4	0.00	30.00					
Barrier14	W	0.00	99.99	0.00				0.00	point60	60	6,809,722.5	1,513,840.9	0.00	30.00	0.00	0	0		
									point61	61	6,809,716.5	1,513,956.4	0.00	30.00	0.00	0	0		
									point62	62	6,809,756.0	1,513,958.5	0.00	30.00	0.00	0	0		
									point63	63	6,809,769.0	1,513,844.2	0.00	30.00	0.00	0	0		
									point64	64	6,809,722.5	1,513,840.9	0.00	30.00					
Barrier15	W	0.00	99.99	0.00				0.00	point65	65	6,809,799.5	1,513,854.2	0.00	30.00	0.00	0	0		
									point66	66	6,809,786.5	1,513,964.2	0.00	30.00	0.00	0	0		
									point67	67	6,809,829.0	1,513,968.4	0.00	30.00	0.00	0	0		
									point68	68	6,809,846.5	1,513,859.9	0.00	30.00	0.00	0	0		
									point69	69	6,809,799.5	1,513,854.2	0.00	30.00					
Barrier16	W	0.00	99.99	0.00				0.00	point70	70	6,809,891.5	1,513,877.8	0.00	30.00	0.00	0	0		
									point71	71	6,809,883.0	1,513,928.4	0.00	30.00	0.00	0	0		
									point72	72	6,809,932.0	1,513,934.4	0.00	30.00	0.00	0	0		
									point73	73	6,809,935.5	1,513,920.5	0.00	30.00	0.00	0	0		
									point74	74	6,809,921.5	1,513,917.6	0.00	30.00	0.00	0	0		
									point75	75	6,809,931.5	1,513,880.1	0.00	30.00	0.00	0	0		
									point76	76	6,809,891.5	1,513,877.8	0.00	30.00					

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TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: Gran Vista
RUN: Near Term + Project
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
ST1	1	1	64.2	68.6	66	4.4	10	Snd Lvl	68.6	0.0	8	-8.0
ST2	2	1	63.5	69.8	66	6.3	10	Snd Lvl	69.8	0.0	8	-8.0
ST3	3	1	60.2	67.2	66	7.0	10	Snd Lvl	67.2	0.0	8	-8.0
ST4	4	1	47.3	51.7	66	4.4	10	----	51.7	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	4	0.0	0.0	0.0
All Impacted	3	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

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INPUT: ROADWAYS
PROJECT/CONTRACT: Gran Vista
RUN: Horizon

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with the approval of FHWA

Roadway Name	Width	Points Name	No.	Coordinates (pavement) X	Y	Z	Flow Control Control Device	Speed Constraint	Percent Vehicles Affected	Segment Pvmt Type	On Struct?
	ft			ft	ft	ft		mph	%		
Mission West	35.0	point1	1	6,809,942.5	1,513,504.1	0.00				Average	
		point2	2	6,809,884.0	1,513,538.4	0.00				Average	
		point3	3	6,809,766.5	1,513,623.8	0.00				Average	
		point4	4	6,809,644.0	1,513,727.1	0.00				Average	
		point5	5	6,809,520.0	1,513,842.2	0.00				Average	
		point6	6	6,809,443.0	1,513,908.5	0.00				Average	
		point7	7	6,809,344.0	1,513,996.6	0.00				Average	
		point8	8	6,809,256.0	1,514,071.6	0.00				Average	
		point9	9	6,809,153.0	1,514,165.4	0.00				Average	
		point10	10	6,809,112.5	1,514,204.1	0.00				Average	
		point11	11	6,809,007.5	1,514,293.1	0.00				Average	
		point12	12	6,808,960.5	1,514,316.9	0.00					
Mission East	35.0	point13	13	6,808,953.0	1,514,294.1	0.00				Average	
		point14	14	6,808,996.0	1,514,268.8	0.00				Average	
		point15	15	6,809,054.5	1,514,213.2	0.00				Average	
		point16	16	6,809,087.5	1,514,185.1	0.00				Average	
		point17	17	6,809,168.0	1,514,111.6	0.00				Average	
		point18	18	6,809,247.5	1,514,036.6	0.00				Average	
		point19	19	6,809,335.5	1,513,955.8	0.00				Average	
		point20	20	6,809,454.0	1,513,846.0	0.00				Average	
		point21	21	6,809,556.0	1,513,755.4	0.00				Average	
		point22	22	6,809,646.0	1,513,672.0	0.00				Average	
		point23	23	6,809,734.5	1,513,596.1	0.00				Average	
		point24	24	6,809,928.5	1,513,450.4	0.00					
Las Posas North	40.0	point36	36	6,810,059.5	1,513,488.5	0.00				Average	

		point35	35	6,810,117.0	1,513,692.0	0.00				Average	
		point34	34	6,810,132.5	1,513,874.2	0.00				Average	
		point33	33	6,810,127.5	1,513,962.0	0.00				Average	
		point32	32	6,810,118.5	1,514,057.0	0.00				Average	
		point31	31	6,810,074.5	1,514,231.1	0.00				Average	
		point30	30	6,810,015.0	1,514,384.4	0.00				Average	
		point29	29	6,809,941.0	1,514,567.1	0.00				Average	
		point28	28	6,809,910.5	1,514,712.5	0.00				Average	
		point27	27	6,809,889.5	1,514,898.2	0.00				Average	
		point26	26	6,809,870.5	1,515,139.8	0.00				Average	
		point25	25	6,809,868.0	1,515,213.2	0.00					
Las Posas South	40.0	point48	48	6,809,811.0	1,515,209.5	0.00				Average	
		point47	47	6,809,823.0	1,514,958.5	0.00				Average	
		point46	46	6,809,847.0	1,514,713.8	0.00				Average	
		point45	45	6,809,881.5	1,514,547.5	0.00				Average	
		point44	44	6,809,921.0	1,514,450.5	0.00				Average	
		point43	43	6,809,993.5	1,514,273.4	0.00				Average	
		point42	42	6,810,046.0	1,514,124.4	0.00				Average	
		point41	41	6,810,070.0	1,513,990.0	0.00				Average	
		point40	40	6,810,071.0	1,513,878.8	0.00				Average	
		point39	39	6,810,064.0	1,513,722.1	0.00				Average	
		point38	38	6,810,034.5	1,513,597.0	0.00				Average	
		point37	37	6,810,008.0	1,513,505.1	0.00					
Roadway5	35.0	point49	49	6,810,912.5	1,513,110.2	0.00				Average	
		point50	50	6,810,575.5	1,513,229.6	0.00				Average	
		point51	51	6,810,349.0	1,513,312.6	0.00				Average	
		point52	52	6,810,082.0	1,513,426.1	0.00					
Roadway6	35.0	point58	58	6,810,071.0	1,513,379.0	0.00				Average	
		point57	57	6,810,276.5	1,513,294.0	0.00				Average	
		point56	56	6,810,455.5	1,513,227.5	0.00				Average	
		point55	55	6,810,608.5	1,513,177.6	0.00				Average	
		point54	54	6,810,786.0	1,513,109.2	0.00				Average	
		point53	53	6,810,968.0	1,513,046.2	0.00					
Roadway7	40.0	point59	59	6,809,817.0	1,512,914.1	0.00				Average	
		point60	60	6,810,024.0	1,513,397.9	0.00					
Roadway8	40.0	point62	62	6,809,967.5	1,513,429.8	0.00				Average	
		point61	61	6,809,755.5	1,512,933.4	0.00					

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30 June 2022
TNM 2.5

INPUT: TRAFFIC FOR LAeq1h Volumes
PROJECT/CONTRACT: Gran Vista
RUN: Horizon

Roadway Name	Points Name	No.	Segment Autos V veh/hr	Autos S mph	MTrucks V veh/hr	MTrucks S mph	HTrucks V veh/hr	HTrucks S mph	Buses V veh/hr	Buses S mph	Motorcycles V veh/hr	Motorcycles S mph
Mission West	point1	1	1081	40	22	40	11	40	0	0	0	0
	point2	2	1081	40	22	40	11	40	0	0	0	0
	point3	3	1081	40	22	40	11	40	0	0	0	0
	point4	4	1081	40	22	40	11	40	0	0	0	0
	point5	5	1081	40	22	40	11	40	0	0	0	0
	point6	6	1081	40	22	40	11	40	0	0	0	0
	point7	7	1081	40	22	40	11	40	0	0	0	0
	point8	8	1081	40	22	40	11	40	0	0	0	0
	point9	9	1081	40	22	40	11	40	0	0	0	0
	point10	10	1081	40	22	40	11	40	0	0	0	0
	point11	11	1081	40	22	40	11	40	0	0	0	0
	point12	12										
Mission East	point13	13	1081	40	22	40	11	40	0	0	0	0
	point14	14	1081	40	22	40	11	40	0	0	0	0
	point15	15	1081	40	22	40	11	40	0	0	0	0
	point16	16	1081	40	22	40	11	40	0	0	0	0
	point17	17	1081	40	22	40	11	40	0	0	0	0
	point18	18	1081	40	22	40	11	40	0	0	0	0
	point19	19	1081	40	22	40	11	40	0	0	0	0
	point20	20	1081	40	22	40	11	40	0	0	0	0
	point21	21	1081	40	22	40	11	40	0	0	0	0
	point22	22	1081	40	22	40	11	40	0	0	0	0
	point23	23	1081	40	22	40	11	40	0	0	0	0

	point24	24										
Las Posas North	point36	36	1139	45	23	45	11	45	0	0	0	0
	point35	35	1139	45	23	45	11	45	0	0	0	0
	point34	34	1139	45	23	45	11	45	0	0	0	0
	point33	33	1139	45	23	45	11	45	0	0	0	0
	point32	32	1139	45	23	45	11	45	0	0	0	0
	point31	31	1139	45	23	45	11	45	0	0	0	0
	point30	30	1139	45	23	45	11	45	0	0	0	0
	point29	29	1139	45	23	45	11	45	0	0	0	0
	point28	28	1139	45	23	45	11	45	0	0	0	0
	point27	27	1139	45	23	45	11	45	0	0	0	0
	point26	26	1139	45	23	45	11	45	0	0	0	0
	point25	25										
Las Posas South	point48	48	1139	45	23	45	11	45	0	0	0	0
	point47	47	1139	45	23	45	11	45	0	0	0	0
	point46	46	1139	45	23	45	11	45	0	0	0	0
	point45	45	1139	45	23	45	11	45	0	0	0	0
	point44	44	1139	45	23	45	11	45	0	0	0	0
	point43	43	1139	45	23	45	11	45	0	0	0	0
	point42	42	1139	45	23	45	11	45	0	0	0	0
	point41	41	1139	45	23	45	11	45	0	0	0	0
	point40	40	1139	45	23	45	11	45	0	0	0	0
	point39	39	1139	45	23	45	11	45	0	0	0	0
	point38	38	1139	45	23	45	11	45	0	0	0	0
	point37	37										
Roadway5	point49	49	1134	40	23	40	11	40	0	0	0	0
	point50	50	1134	40	23	40	11	40	0	0	0	0
	point51	51	1134	40	23	40	11	40	0	0	0	0
	point52	52										
Roadway6	point58	58	1134	40	23	40	11	40	0	0	0	0
	point57	57	1134	40	23	40	11	40	0	0	0	0
	point56	56	1134	40	23	40	11	40	0	0	0	0
	point55	55	1134	40	23	40	11	40	0	0	0	0
	point54	54	1134	40	23	40	11	40	0	0	0	0
	point53	53										
Roadway7	point59	59	1542	40	31	40	15	40	0	0	0	0

	point60	60										
Roadway8	point62	62	1542	40	31	40	15	40	0	0	0	0
	point61	61										

Dudek 30 June 2022
CB TNM 2.5

INPUT: RECEIVERS
PROJECT/CONTRACT: Gran Vista
RUN: Horizon

Receiver Name	No.	#DUs	Coordinates (ground) X	Y	Z	Height above Ground	Input Sound Levels and Criteria Existing LAeq1h	Impact Criteria LAeq1h	Impact Criteria Sub'l	NR Goal	Active in Calc.
			ft	ft	ft	ft	dBA	dBA	dB	dB	
ST1	1	1	6,809,622.5	1,513,799.1	0.00	4.92	64.20	66	10.0	8.0	Y
ST2	2	1	6,810,016.5	1,514,042.0	0.00	4.92	63.50	66	10.0	8.0	Y
ST3	3	1	6,810,064.5	1,514,464.4	0.00	4.92	60.20	66	10.0	8.0	Y
ST4	4	1	6,809,396.0	1,514,259.4	0.00	4.92	47.30	66	10.0	8.0	Y

Dudek 30 June 2022
CB TNM 2.5

INPUT: BARRIERS
PROJECT/CONTRACT: Gran Vista
RUN: Horizon

Barrier									Points										
Name	Type	Height		If Wall	If Berm			Add'tnl	Name	No.	Coordinates (bottom)			Height	Segment				
		Min	Max	$ per	$ per	Top	Run:Rise	$ per			X	Y	Z	at	Seg Ht	Perturbs		On	Important
				Unit	Unit	Width		Unit						Point	Incre-	#Up	#Dn	Struct?	Reflec-
				Area	Vol.			Length							ment				tions?
		ft	ft	$/sq ft	$/cu yd	ft	ft:ft	$/ft			ft	ft	ft	ft	ft				
Barrier1	W	0.00	99.99	0.00				0.00	point1	1	6,809,527.5	1,514,236.2	0.00	8.00	0.00	0	0		
									point2	2	6,809,492.0	1,514,149.5	0.00	8.00	0.00	0	0		
									point3	3	6,809,279.0	1,514,341.5	0.00	8.00					

Dudek
CB
30 June 2022
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: Gran Vista
RUN: Horizon
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
ST1	1	1	64.2	69.4	66	5.2	10	Snd Lvl	69.4	0.0	8	-8.0
ST2	2	1	63.5	70.2	66	6.7	10	Snd Lvl	70.2	0.0	8	-8.0
ST3	3	1	60.2	67.7	66	7.5	10	Snd Lvl	67.7	0.0	8	-8.0
ST4	4	1	47.3	53.9	66	6.6	10	----	53.9	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	4	0.0	0.0	0.0
All Impacted	3	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

Dudek 8 December 2022
CB TNM 2.5

INPUT: ROADWAYS
PROJECT/CONTRACT: Gran Vista
RUN: Horizon + Project

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with the approval of FHWA

Roadway Name	Width	Points Name	No.	Coordinates (pavement) X	Y	Z	Flow Control Control Device	Speed Constraint	Percent Vehicles Affected	Segment Pvmt Type	On Struct?
	ft			ft	ft	ft		mph	%		
Mission West	35.0	point1	1	6,809,942.5	1,513,504.1	-10.00				Average	
		point2	2	6,809,884.0	1,513,538.4	-10.00				Average	
		point3	3	6,809,766.5	1,513,623.8	-10.00				Average	
		point4	4	6,809,644.0	1,513,727.1	-10.00				Average	
		point5	5	6,809,520.0	1,513,842.2	-10.00				Average	
		point6	6	6,809,443.0	1,513,908.5	-10.00				Average	
		point7	7	6,809,344.0	1,513,996.6	-10.00				Average	
		point8	8	6,809,256.0	1,514,071.6	-10.00				Average	
		point9	9	6,809,153.0	1,514,165.4	-10.00				Average	
		point10	10	6,809,112.5	1,514,204.1	-10.00				Average	
		point11	11	6,809,007.5	1,514,293.1	-10.00				Average	
		point12	12	6,808,960.5	1,514,316.9	-10.00					
Mission East	35.0	point13	13	6,808,953.0	1,514,294.1	-10.00				Average	
		point14	14	6,808,996.0	1,514,268.8	-10.00				Average	
		point15	15	6,809,054.5	1,514,213.2	-10.00				Average	
		point16	16	6,809,087.5	1,514,185.1	-10.00				Average	
		point17	17	6,809,168.0	1,514,111.6	-10.00				Average	
		point18	18	6,809,247.5	1,514,036.6	-10.00				Average	
		point19	19	6,809,335.5	1,513,955.8	-10.00				Average	
		point20	20	6,809,454.0	1,513,846.0	-10.00				Average	
		point21	21	6,809,556.0	1,513,755.4	-10.00				Average	
		point22	22	6,809,646.0	1,513,672.0	-10.00				Average	
		point23	23	6,809,734.5	1,513,596.1	-10.00				Average	
		point24	24	6,809,928.5	1,513,450.4	-10.00					
Las Posas North	40.0	point36	36	6,810,059.5	1,513,488.5	0.00				Average	

		point35	35	6,810,117.0	1,513,692.0	0.00				Average	
		point34	34	6,810,132.5	1,513,874.2	0.00				Average	
		point33	33	6,810,127.5	1,513,962.0	0.00				Average	
		point32	32	6,810,118.5	1,514,057.0	0.00				Average	
		point31	31	6,810,074.5	1,514,231.1	0.00				Average	
		point30	30	6,810,015.0	1,514,384.4	0.00				Average	
		point29	29	6,809,941.0	1,514,567.1	0.00				Average	
		point28	28	6,809,910.5	1,514,712.5	0.00				Average	
		point27	27	6,809,889.5	1,514,898.2	0.00				Average	
		point26	26	6,809,870.5	1,515,139.8	0.00				Average	
		point25	25	6,809,868.0	1,515,213.2	0.00					
Las Posas South	40.0	point48	48	6,809,811.0	1,515,209.5	0.00				Average	
		point47	47	6,809,823.0	1,514,958.5	0.00				Average	
		point46	46	6,809,847.0	1,514,713.8	0.00				Average	
		point45	45	6,809,881.5	1,514,547.5	0.00				Average	
		point44	44	6,809,921.0	1,514,450.5	0.00				Average	
		point43	43	6,809,993.5	1,514,273.4	0.00				Average	
		point42	42	6,810,046.0	1,514,124.4	0.00				Average	
		point41	41	6,810,070.0	1,513,990.0	0.00				Average	
		point40	40	6,810,071.0	1,513,878.8	0.00				Average	
		point39	39	6,810,064.0	1,513,722.1	0.00				Average	
		point38	38	6,810,034.5	1,513,597.0	0.00				Average	
		point37	37	6,810,008.0	1,513,505.1	0.00					
Roadway5	35.0	point49	49	6,810,912.5	1,513,110.2	0.00				Average	
		point50	50	6,810,575.5	1,513,229.6	0.00				Average	
		point51	51	6,810,349.0	1,513,312.6	0.00				Average	
		point52	52	6,810,082.0	1,513,426.1	0.00					
Roadway6	35.0	point58	58	6,810,071.0	1,513,379.0	0.00				Average	
		point57	57	6,810,276.5	1,513,294.0	0.00				Average	
		point56	56	6,810,455.5	1,513,227.5	0.00				Average	
		point55	55	6,810,608.5	1,513,177.6	0.00				Average	
		point54	54	6,810,786.0	1,513,109.2	0.00				Average	
		point53	53	6,810,968.0	1,513,046.2	0.00					
Roadway7	40.0	point59	59	6,809,817.0	1,512,914.1	0.00				Average	
		point60	60	6,810,024.0	1,513,397.9	0.00					
Roadway8	40.0	point62	62	6,809,967.5	1,513,429.8	0.00				Average	
		point61	61	6,809,755.5	1,512,933.4	0.00					

Dudek **8 December 2022**
CB **TNM 2.5**

INPUT: TRAFFIC FOR LAeq1h Volumes
PROJECT/CONTRACT: **Gran Vista**
RUN: **Horizon + Project**

Roadway	Points		Segment									
Name	Name	No.	Autos		MTrucks		HTrucks		Buses		Motorcycles	
			V	S	V	S	V	S	V	S	V	S
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph
Mission West	point1	1	1090	40	22	40	11	40	0	0	0	0
	point2	2	1090	40	22	40	11	40	0	0	0	0
	point3	3	1090	40	22	40	11	40	0	0	0	0
	point4	4	1090	40	22	40	11	40	0	0	0	0
	point5	5	1090	40	22	40	11	40	0	0	0	0
	point6	6	1090	40	22	40	11	40	0	0	0	0
	point7	7	1090	40	22	40	11	40	0	0	0	0
	point8	8	1090	40	22	40	11	40	0	0	0	0
	point9	9	1090	40	22	40	11	40	0	0	0	0
	point10	10	1090	40	22	40	11	40	0	0	0	0
	point11	11	1090	40	22	40	11	40	0	0	0	0
	point12	12										
Mission East	point13	13	1090	40	22	40	11	40	0	0	0	0
	point14	14	1090	40	22	40	11	40	0	0	0	0
	point15	15	1090	40	22	40	11	40	0	0	0	0
	point16	16	1090	40	22	40	11	40	0	0	0	0
	point17	17	1090	40	22	40	11	40	0	0	0	0
	point18	18	1090	40	22	40	11	40	0	0	0	0
	point19	19	1090	40	22	40	11	40	0	0	0	0
	point20	20	1090	40	22	40	11	40	0	0	0	0
	point21	21	1090	40	22	40	11	40	0	0	0	0
	point22	22	1090	40	22	40	11	40	0	0	0	0
	point23	23	1090	40	22	40	11	40	0	0	0	0

	point24	24										
Las Posas North	point36	36	1172	45	24	45	12	45	0	0	0	0
	point35	35	1172	45	24	45	12	45	0	0	0	0
	point34	34	1172	45	24	45	12	45	0	0	0	0
	point33	33	1172	45	24	45	12	45	0	0	0	0
	point32	32	1172	45	24	45	12	45	0	0	0	0
	point31	31	1172	45	24	45	12	45	0	0	0	0
	point30	30	1172	45	24	45	12	45	0	0	0	0
	point29	29	1172	45	24	45	12	45	0	0	0	0
	point28	28	1172	45	24	45	12	45	0	0	0	0
	point27	27	1172	45	24	45	12	45	0	0	0	0
	point26	26	1172	45	24	45	12	45	0	0	0	0
	point25	25										
Las Posas South	point48	48	1172	45	24	45	12	45	0	0	0	0
	point47	47	1172	45	24	45	12	45	0	0	0	0
	point46	46	1172	45	24	45	12	45	0	0	0	0
	point45	45	1172	45	24	45	12	45	0	0	0	0
	point44	44	1172	45	24	45	12	45	0	0	0	0
	point43	43	1172	45	24	45	12	45	0	0	0	0
	point42	42	1172	45	24	45	12	45	0	0	0	0
	point41	41	1172	45	24	45	12	45	0	0	0	0
	point40	40	1172	45	24	45	12	45	0	0	0	0
	point39	39	1172	45	24	45	12	45	0	0	0	0
	point38	38	1172	45	24	45	12	45	0	0	0	0
	point37	37										
Roadway5	point49	49	1148	40	23	40	11	40	0	0	0	0
	point50	50	1148	40	23	40	11	40	0	0	0	0
	point51	51	1148	40	23	40	11	40	0	0	0	0
	point52	52										
Roadway6	point58	58	1148	40	23	40	11	40	0	0	0	0
	point57	57	1148	40	23	40	11	40	0	0	0	0
	point56	56	1148	40	23	40	11	40	0	0	0	0
	point55	55	1148	40	23	40	11	40	0	0	0	0
	point54	54	1148	40	23	40	11	40	0	0	0	0
	point53	53										
Roadway7	point59	59	1560	40	32	40	16	40	0	0	0	0

	point60	60										
Roadway8	point62	62	1560	40	32	40	16	40	0	0	0	0
	point61	61										

Dudek 8 December 2022
CB TNM 2.5

INPUT: RECEIVERS
PROJECT/CONTRACT: Gran Vista
RUN: Horizon + Project

Receiver Name	No.	#DUs	Coordinates (ground) X	Y	Z	Height above Ground	Input Sound Levels and Criteria: Existing LAeq1h	Impact Criteria LAeq1h	Impact Criteria Sub'l	NR Goal	Active in Calc.
			ft	ft	ft	ft	dBA	dBA	dB	dB	
ST1	1	1	6,809,622.5	1,513,799.1	0.00	4.92	64.20	66	10.0	8.0	Y
ST2	2	1	6,810,016.5	1,514,042.0	0.00	4.92	63.50	66	10.0	8.0	Y
ST3	3	1	6,810,064.5	1,514,464.4	0.00	4.92	60.20	66	10.0	8.0	Y
ST4	4	1	6,809,396.0	1,514,259.4	0.00	4.92	47.30	66	10.0	8.0	Y
M1-1-1	18	1	6,809,552.0	1,513,954.1	0.00	4.92	0.00	66	10.0	8.0	Y
M1-1-2	19	1	6,809,552.0	1,513,954.1	0.00	14.92	0.00	66	10.0	8.0	Y
M1-1-3	20	1	6,809,552.0	1,513,954.1	0.00	24.92	0.00	66	10.0	8.0	Y
M1-2-1	21	1	6,809,615.5	1,513,930.4	0.00	4.92	0.00	66	10.0	8.0	Y
M1-2-2	22	1	6,809,615.5	1,513,930.4	0.00	14.92	0.00	66	10.0	8.0	Y
M1-2-3	23	1	6,809,615.5	1,513,930.4	0.00	24.92	0.00	66	10.0	8.0	Y
M2-1-1	24	1	6,809,714.5	1,513,935.5	0.00	4.92	0.00	66	10.0	8.0	Y
M2-1-2	25	1	6,809,714.5	1,513,935.5	0.00	14.92	0.00	66	10.0	8.0	Y
M2-1-3	26	1	6,809,714.5	1,513,935.5	0.00	24.92	0.00	66	10.0	8.0	Y
M2-2-1	27	1	6,809,717.0	1,513,861.1	0.00	4.92	0.00	66	10.0	8.0	Y
M2-2-2	28	1	6,809,717.0	1,513,861.1	0.00	14.92	0.00	66	10.0	8.0	Y
M2-2-3	29	1	6,809,717.0	1,513,861.1	0.00	24.92	0.00	66	10.0	8.0	Y
M3-1-1	30	1	6,809,832.0	1,513,958.4	0.00	4.92	0.00	66	10.0	8.0	Y
M3-1-2	31	1	6,809,832.0	1,513,958.4	0.00	14.92	0.00	66	10.0	8.0	Y
M3-1-3	32	1	6,809,832.0	1,513,958.4	0.00	24.92	0.00	66	10.0	8.0	Y
M3-2-1	33	1	6,809,846.5	1,513,884.8	0.00	4.92	0.00	66	10.0	8.0	Y
M3-2-2	34	1	6,809,846.5	1,513,884.8	0.00	14.92	0.00	66	10.0	8.0	Y
M3-2-3	35	1	6,809,846.5	1,513,884.8	0.00	24.92	0.00	66	10.0	8.0	Y

M4-1-1	36	1	6,809,927.5	1,513,905.0	0.00	4.92	0.00	66	10.0	8.0	Y
M4-1-2	37	1	6,809,927.5	1,513,905.0	0.00	14.92	0.00	66	10.0	8.0	Y
M4-1-3	38	1	6,809,927.5	1,513,905.0	0.00	24.92	0.00	66	10.0	8.0	Y
M5-1-1	39	1	6,809,908.0	1,514,011.6	0.00	4.92	0.00	66	10.0	8.0	Y
M5-1-2	40	1	6,809,908.0	1,514,011.6	0.00	14.92	0.00	66	10.0	8.0	Y
M5-1-3	41	1	6,809,908.0	1,514,011.6	0.00	24.92	0.00	66	10.0	8.0	Y
M5-2-1	42	1	6,809,969.5	1,514,025.2	0.00	4.92	0.00	66	10.0	8.0	Y
M5-2-2	43	1	6,809,969.5	1,514,025.2	0.00	14.92	0.00	66	10.0	8.0	Y
M5-2-3	44	1	6,809,969.5	1,514,025.2	0.00	24.92	0.00	66	10.0	8.0	Y
M6-1-1	45	1	6,809,834.5	1,514,485.4	0.00	4.92	0.00	66	10.0	8.0	Y
M6-1-2	46	1	6,809,834.5	1,514,485.4	0.00	14.92	0.00	66	10.0	8.0	Y
M6-1-3	47	1	6,809,834.5	1,514,485.4	0.00	24.92	0.00	66	10.0	8.0	Y
M6-2-1	48	1	6,809,855.0	1,514,422.0	0.00	4.92	0.00	66	10.0	8.0	Y
M6-2-2	49	1	6,809,855.0	1,514,422.0	0.00	14.92	0.00	66	10.0	8.0	Y
M6-2-3	50	1	6,809,855.0	1,514,422.0	0.00	24.92	0.00	66	10.0	8.0	Y
OS-1 - Dog Park	51	1	6,809,765.5	1,514,552.8	5.00	4.92	0.00	66	10.0	8.0	Y
OS-2 - Turf Area	52	1	6,809,583.0	1,513,916.0	0.00	4.92	0.00	66	10.0	8.0	Y

Dudek **8 December 2022**
CB **TNM 2.5**

INPUT: BARRIERS
PROJECT/CONTRACT: **Gran Vista**
RUN: **Horizon + Project**

Barrier									**Points**										
Name	**Type**	**Height**		**If Wall**	**If Berm**			**Add'tnl**	**Name**	**No.**	**Coordinates (bottom)**			**Height**	**Segment**				
		Min	**Max**	**$ per**	**$ per**	**Top**	**Run:Rise**	**$ per**			**X**	**Y**	**Z**	**at**	**Seg Ht Perturbs**			**On**	**Important**
				Unit	**Unit**	**Width**		**Unit**						**Point**	**Incre-**	**#Up**	**#Dn**	**Struct?**	**Reflec-**
				Area	**Vol.**			**Length**							**ment**				**tions?**
		ft	ft	$/sq ft	$/cu yd	ft	ft:ft	$/ft			ft	ft	ft	ft	ft				
Barrier1	W	0.00	99.99	0.00				0.00	point1	1	6,809,527.5	1,514,236.2	0.00	8.00	0.00	0	0		
									point2	2	6,809,492.0	1,514,149.5	0.00	8.00	0.00	0	0		
									point3	3	6,809,279.0	1,514,341.5	0.00	8.00					
Barrier2	W	0.00	99.99	0.00				0.00	point4	4	6,809,874.0	1,514,398.5	0.00	30.00	0.00	0	0		
									point77	77	6,809,867.0	1,514,411.8	0.00	30.00	0.00	0	0		
									point5	5	6,809,855.5	1,514,407.6	0.00	30.00	0.00	0	0		
									point6	6	6,809,825.5	1,514,498.5	0.00	30.00	0.00	0	0		
									point7	7	6,809,789.0	1,514,482.0	0.00	30.00	0.00	0	0		
									point8	8	6,809,828.0	1,514,378.9	0.00	30.00	0.00	0	0		
									point9	9	6,809,874.0	1,514,398.5	0.00	30.00					
Barrier3	W	0.00	99.99	0.00				0.00	point10	10	6,809,777.5	1,514,317.9	0.00	30.00	0.00	0	0		
									point78	78	6,809,794.5	1,514,277.6	0.00	30.00	0.00	0	0		
									point11	11	6,809,901.5	1,514,322.5	0.00	30.00	0.00	0	0		
									point12	12	6,809,887.0	1,514,359.1	0.00	30.00	0.00	0	0		
									point13	13	6,809,777.5	1,514,317.9	0.00	30.00					
Barrier4	W	0.00	99.99	0.00				0.00	point14	14	6,809,807.5	1,514,251.0	0.00	30.00	0.00	0	0		
									point79	79	6,809,825.5	1,514,215.8	0.00	30.00	0.00	0	0		
									point15	15	6,809,926.5	1,514,252.0	0.00	30.00	0.00	0	0		
									point16	16	6,809,910.5	1,514,292.2	0.00	30.00	0.00	0	0		
									point17	17	6,809,807.5	1,514,251.0	0.00	30.00					
Barrier5	W	0.00	99.99	0.00				0.00	point18	18	6,809,829.5	1,514,185.1	0.00	30.00	0.00	0	0		
									point80	80	6,809,846.5	1,514,147.4	0.00	30.00	0.00	0	0		
									point19	19	6,809,953.0	1,514,186.1	0.00	30.00	0.00	0	0		
									point20	20	6,809,937.0	1,514,225.5	0.00	30.00	0.00	0	0		
									point21	21	6,809,829.5	1,514,185.1	0.00	30.00					
Barrier6	W	0.00	99.99	0.00				0.00	point22	22	6,809,861.0	1,514,123.9	0.00	30.00	0.00	0	0		
									point81	81	6,809,869.5	1,514,083.9	0.00	30.00	0.00	0	0		
									point23	23	6,809,975.5	1,514,102.0	0.00	30.00	0.00	0	0		
									point24	24	6,809,968.0	1,514,145.0	0.00	30.00	0.00	0	0		
									point25	25	6,809,861.0	1,514,123.9	0.00	30.00					
Barrier7	W	0.00	99.99	0.00				0.00	point26	26	6,809,874.0	1,514,050.5	0.00	30.00	0.00	0	0		
									point82	82	6,809,884.0	1,514,008.4	0.00	30.00	0.00	0	0		
									point27	27	6,809,995.0	1,514,032.8	0.00	30.00	0.00	0	0		
									point28	28	6,809,988.0	1,514,075.5	0.00	30.00	0.00	0	0		
									point29	29	6,809,874.0	1,514,050.5	0.00	30.00					

Barrier8	W	0.00	99.99	0.00				0.00	point30	30	6,809,654.0	1,514,228.5	0.00	30.00	0.00	0	0		
									point31	31	6,809,741.5	1,514,194.5	0.00	30.00	0.00	0	0		
									point32	32	6,809,758.0	1,514,238.8	0.00	30.00	0.00	0	0		
									point33	33	6,809,671.0	1,514,269.2	0.00	30.00	0.00	0	0		
									point34	34	6,809,654.0	1,514,228.5	0.00	30.00					
Barrier9	W	0.00	99.99	0.00				0.00	point35	35	6,809,624.0	1,514,160.1	0.00	30.00	0.00	0	0		
									point36	36	6,809,731.5	1,514,123.8	0.00	30.00	0.00	0	0		
									point37	37	6,809,744.5	1,514,168.0	0.00	30.00	0.00	0	0		
									point38	38	6,809,637.5	1,514,205.6	0.00	30.00	0.00	0	0		
									point39	39	6,809,624.0	1,514,160.1	0.00	30.00					
Barrier10	W	0.00	99.99	0.00				0.00	point40	40	6,809,596.5	1,514,093.1	0.00	30.00	0.00	0	0		
									point41	41	6,809,701.5	1,514,051.1	0.00	30.00	0.00	0	0		
									point42	42	6,809,717.5	1,514,097.0	0.00	30.00	0.00	0	0		
									point43	43	6,809,612.5	1,514,132.0	0.00	30.00	0.00	0	0		
									point44	44	6,809,596.5	1,514,093.1	0.00	30.00					
Barrier11	W	0.00	99.99	0.00				0.00	point45	45	6,809,566.5	1,514,028.6	0.00	30.00	0.00	0	0		
									point46	46	6,809,676.0	1,513,988.5	0.00	30.00	0.00	0	0		
									point47	47	6,809,690.5	1,514,031.8	0.00	30.00	0.00	0	0		
									point48	48	6,809,584.0	1,514,068.1	0.00	30.00	0.00	0	0		
									point49	49	6,809,566.5	1,514,028.6	0.00	30.00					
Barrier12	W	0.00	99.99	0.00				0.00	point50	50	6,809,539.5	1,513,964.1	0.00	30.00	0.00	0	0		
									point51	51	6,809,646.0	1,513,921.0	0.00	30.00	0.00	0	0		
									point52	52	6,809,660.0	1,513,960.9	0.00	30.00	0.00	0	0		
									point53	53	6,809,553.5	1,514,003.4	0.00	30.00	0.00	0	0		
									point54	54	6,809,539.5	1,513,964.1	0.00	30.00					
Barrier13	W	0.00	99.99	0.00				0.00	point55	55	6,809,714.0	1,513,995.4	0.00	30.00	0.00	0	0		
									point56	56	6,809,758.0	1,513,981.6	0.00	30.00	0.00	0	0		
									point57	57	6,809,810.5	1,514,109.8	0.00	30.00	0.00	0	0		
									point58	58	6,809,771.5	1,514,125.0	0.00	30.00	0.00	0	0		
									point59	59	6,809,714.0	1,513,995.4	0.00	30.00					
Barrier14	W	0.00	99.99	0.00				0.00	point60	60	6,809,722.5	1,513,840.9	0.00	30.00	0.00	0	0		
									point61	61	6,809,716.5	1,513,956.4	0.00	30.00	0.00	0	0		
									point62	62	6,809,756.0	1,513,958.5	0.00	30.00	0.00	0	0		
									point63	63	6,809,769.0	1,513,844.2	0.00	30.00	0.00	0	0		
									point64	64	6,809,722.5	1,513,840.9	0.00	30.00					
Barrier15	W	0.00	99.99	0.00				0.00	point65	65	6,809,799.5	1,513,854.2	0.00	30.00	0.00	0	0		
									point66	66	6,809,786.5	1,513,964.2	0.00	30.00	0.00	0	0		
									point67	67	6,809,829.0	1,513,968.4	0.00	30.00	0.00	0	0		
									point68	68	6,809,846.5	1,513,859.9	0.00	30.00	0.00	0	0		
									point69	69	6,809,799.5	1,513,854.2	0.00	30.00					
Barrier16	W	0.00	99.99	0.00				0.00	point70	70	6,809,891.5	1,513,877.8	0.00	30.00	0.00	0	0		
									point71	71	6,809,883.0	1,513,928.4	0.00	30.00	0.00	0	0		
									point72	72	6,809,932.0	1,513,934.4	0.00	30.00	0.00	0	0		
									point73	73	6,809,935.5	1,513,920.5	0.00	30.00	0.00	0	0		
									point74	74	6,809,921.5	1,513,917.6	0.00	30.00	0.00	0	0		
									point75	75	6,809,931.5	1,513,880.1	0.00	30.00	0.00	0	0		
									point76	76	6,809,891.5	1,513,877.8	0.00	30.00					

Dudek
CB
8 December 2022
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: Gran Vista
RUN: Horizon + Project
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

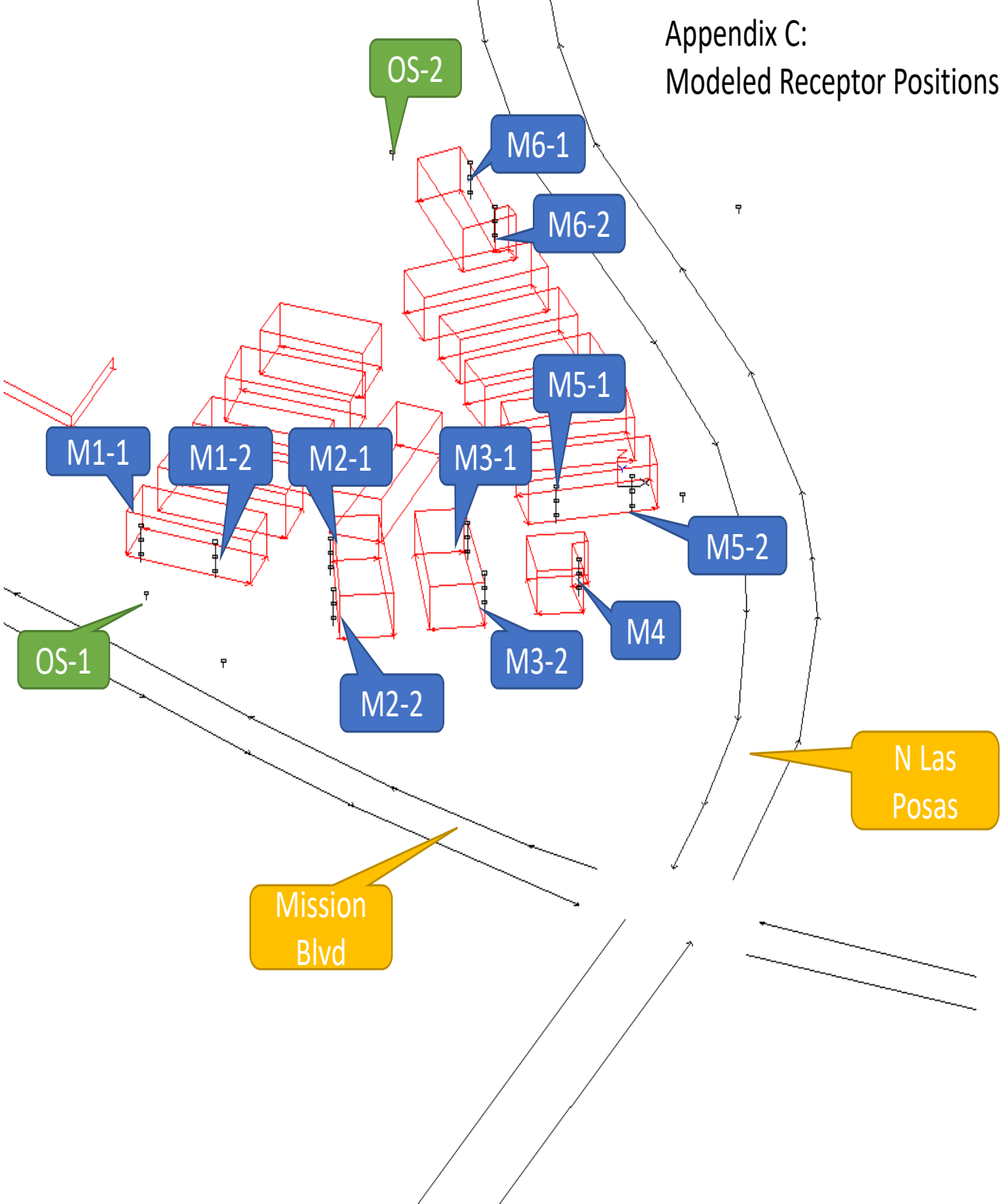
Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
ST1	1	1	64.2	69.6	66	5.4	10	Snd Lvl	69.6	0.0	8	-8.0
ST2	2	1	63.5	70.4	66	6.9	10	Snd Lvl	70.4	0.0	8	-8.0
ST3	3	1	60.2	67.9	66	7.7	10	Snd Lvl	67.9	0.0	8	-8.0
ST4	4	1	47.3	52.0	66	4.7	10	----	52.0	0.0	8	-8.0
M1-1-1	18	1	0.0	64.8	66	64.8	10	----	64.8	0.0	8	-8.0
M1-1-2	19	1	0.0	65.2	66	65.2	10	----	65.2	0.0	8	-8.0
M1-1-3	20	1	0.0	65.3	66	65.3	10	----	65.3	0.0	8	-8.0
M1-2-1	21	1	0.0	63.7	66	63.7	10	----	63.7	0.0	8	-8.0
M1-2-2	22	1	0.0	64.1	66	64.1	10	----	64.1	0.0	8	-8.0
M1-2-3	23	1	0.0	64.4	66	64.4	10	----	64.4	0.0	8	-8.0
M2-1-1	24	1	0.0	57.6	66	57.6	10	----	57.6	0.0	8	-8.0
M2-1-2	25	1	0.0	59.6	66	59.6	10	----	59.6	0.0	8	-8.0
M2-1-3	26	1	0.0	59.8	66	59.8	10	----	59.8	0.0	8	-8.0
M2-2-1	27	1	0.0	62.3	66	62.3	10	----	62.3	0.0	8	-8.0
M2-2-2	28	1	0.0	63.0	66	63.0	10	----	63.0	0.0	8	-8.0
M2-2-3	29	1	0.0	63.2	66	63.2	10	----	63.2	0.0	8	-8.0
M3-1-1	30	1	0.0	55.6	66	55.6	10	----	55.6	0.0	8	-8.0
M3-1-2	31	1	0.0	58.9	66	58.9	10	----	58.9	0.0	8	-8.0
M3-1-3	32	1	0.0	59.1	66	59.1	10	----	59.1	0.0	8	-8.0
M3-2-1	33	1	0.0	57.5	66	57.5	10	----	57.5	0.0	8	-8.0
M3-2-2	34	1	0.0	60.3	66	60.3	10	----	60.3	0.0	8	-8.0
M3-2-3	35	1	0.0	60.5	66	60.5	10	----	60.5	0.0	8	-8.0
M4-1-1	36	1	0.0	63.7	66	63.7	10	----	63.7	0.0	8	-8.0
M4-1-2	37	1	0.0	64.7	66	64.7	10	----	64.7	0.0	8	-8.0

M4-1-3	38	1	0.0	64.9	66	64.9	10	----	64.9	0.0	8	-8.0
M5-1-1	39	1	0.0	61.0	66	61.0	10	----	61.0	0.0	8	-8.0
M5-1-2	40	1	0.0	62.2	66	62.2	10	----	62.2	0.0	8	-8.0
M5-1-3	41	1	0.0	62.4	66	62.4	10	----	62.4	0.0	8	-8.0
M5-2-1	42	1	0.0	64.6	66	64.6	10	----	64.6	0.0	8	-8.0
M5-2-2	43	1	0.0	65.0	66	65.0	10	----	65.0	0.0	8	-8.0
M5-2-3	44	1	0.0	65.0	66	65.0	10	----	65.0	0.0	8	-8.0
M6-1-1	45	1	0.0	68.3	66	68.3	10	Snd Lvl	68.3	0.0	8	-8.0
M6-1-2	46	1	0.0	68.5	66	68.5	10	Snd Lvl	68.5	0.0	8	-8.0
M6-1-3	47	1	0.0	68.3	66	68.3	10	Snd Lvl	68.3	0.0	8	-8.0
M6-2-1	48	1	0.0	67.6	66	67.6	10	Snd Lvl	67.6	0.0	8	-8.0
M6-2-2	49	1	0.0	67.8	66	67.8	10	Snd Lvl	67.8	0.0	8	-8.0
M6-2-3	50	1	0.0	67.6	66	67.6	10	Snd Lvl	67.6	0.0	8	-8.0
OS-1 - Dog Park	51	1	0.0	65.4	66	65.4	10	----	65.4	0.0	8	-8.0
OS-2 - Turf Area	52	1	0.0	65.2	66	65.2	10	----	65.2	0.0	8	-8.0

Dwelling Units	**# DUs**	**Noise Reduction**		
		Min	**Avg**	**Max**
		dB	**dB**	**dB**
All Selected	39	0.0	0.0	0.0
All Impacted	9	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

Appendix C:
Modeled Receptor Positions



Appendix D

Transmission Loss Prediction

Source: Owens Corning. 2004. Noise Control Design Guide. December. https://www2.owenscorning.com/quietzonepro/pdfs/NoiseControlDesignGuide.pdf

Environmental Noise Control

Keeping Outside Noises Out

The reason for measuring the sound transmission loss and sound absorption coefficients of building materials or assemblies is to provide a means of predicting the expected noise level within a space. The noise in a given space or room may come from a noise source located in that space or from a noise source in an adjacent space. Previous discussions under Sound Transmission Loss and Sound Absorption have explained how the data can be used when designing interior spaces. This section will deal with noise sources generated outside of a building.

Determining the Influence of Outside Sources

The following equation can be used to predict the noise level in a building interior when the room is exposed to an outside noise source such as roadway traffic.

$$L_{p(int)} = L_{p(ext)} - TL + 10 \log S/A + ADJ$$

Where:
- $L_{p(int)}$ = predicted average sound pressure level in the building interior at a particular frequency, dB.
- $L_{p\ (ext)}$ = measured or predicted average sound pressure level at the building exterior for a particular frequency band, dB.
- TL = the sound transmission loss of the exterior wall or roof at a particular frequency band, dB.
- S = total exposed exterior surface area of the room of interest, sq.ft.
- A = total sabins of absorption in the room of interest at a particular frequency band.

The term ADJ is an adjustment factor which takes into consideration certain characteristics of the sound source. In general, for aircraft traverses or for sufficiently long lines of vehicle traffic, the sound field incident on the building façade is a reasonable approximation to the reverberant field condition in which the TL values were measured. For this case, the term ADJ=3 dB, which adjusts the exterior noise level for the effects of the building façade when constructed.

The term ADJ is equal to 3 dB only when the sound field incident on the façade approximates a reverberant field condition. For those instances when this is not true, the term ADJ takes a more general form. Thus, ADJ=3 dB +G. "G" (in dB) is an air adjustment for the geometrical arrangement of the noise source relative to the building façade. The sound transmission loss of a building component is dependent on the angle of incidence of the sound wave striking the component. Since TL is determined with random incidence sound, adjustments must be made for the situations where the sound is incident from fixed angels, such as from a stationary source. Table 3 shows the value of "G" that should be used for different angles of incidence, with the angle being taken relative to the perpendicular of the building façade.

Table 3:

Adjustment "G" to allow for Primary Angles of Sound Incidence

Angle of Incidence, deg.	Adjustment (G), dB
0-30	-3
30-60	-1
Random	0
60-80	+2

Design Considerations

For the purpose of screening proposed façade constructions, a simplified equation for predicting interior noise levels can be used. In place of transmission loss (TL) values, the STC value of a construction can be used. In addition, other noise level descriptors such as "A"-weighted dB levels, day-night average level (Ldn, or community noise equivalent level (CNEL) may be used for the exterior noise levels (LP(ext)) in the

Equation for screening proposed façade constructions

$$L_{(int)} = L_{(ext)} - STC + 10 \log S/A + ADJ$$

Where:
- $L_{(int)}$ = approximate interior noise level in the same unit as used for $L_{(ext)}$.
- $L_{(ext)}$ = approximate exterior noise level in dB, dBA, Ldn or CNEL.
- STC = sound transmission class of the exterior façade construction
- ADJ = 3+G+F

Where:
- G = values given in Table 3.
- F = adjustment for frequency spectrum characteristics of the noise source, see Table 4.

Table 4:

Adjustment "F" to allow for the spectrum shape of common outdoor noise sources.

Noise Source	Adjustment (-dB
Jet Aircraft (less than 500 ft. from observer	0
Trains wheel-rail noise	2
Road traffic (neighbhr trucks)	4
Jet Aircraft (at 3000 ft or more from observer	5
Road Traffic (more than 10% trucks)	6
Diesel-electric locomotives	6

The factor 10 log S/A can be approximated using Table 5 to determine the value "A"

This expression for determining interior noise levels is only an approximation and should be used only as a screening tool for design considerations. Engineering calculations for compliance with code requirements may necessitate the services of an acoustical consultant.

Table 5:

Multiplicative factors for estimating room absorption from the floor area; these factors are multiplied by the floor area to obtain the estimated total absorptions in the room.

	Type of office furnishings			
	Hard: sound reflective walls, floor and ceiling, no drapes	Standard: reflective walls, acoustical ceiling, hard floor	Soft: acoustical ceiling, carpet or drapes	Very Soft: acoustical ceiling, carpet or drapes and wall furniture
Factor for multiplying floor area to obtain normal absorption	0.3	0.8	0.9	1.0

Interior Space Studied: **Living Room**

Exterior-to-Interior Scenario: **Closed Window(s) and Door(s)**

Calculation per Owens Corning NCDG (pg. 16):

68.5	= *exterior* noise level (dBA CNEL)
35	= approximate *net STC* of assembly
3	= *incidence adj.* ("G+3") per OC NCDG Table 3
4	= *source adj.* ("F") per OC NCDG Table 4
-1	= *absorption adj.* per OC NCDG Table 5
39.3	= *interior* noise level (dBA CNEL)

Room *dimensions:* length 15, width 10

Room *absorption conditions:* (hard, standard, soft, very soft?) 0.8

Calculation of net STC:

	qty	width	height	square feet	description
material or element #1				33	exterior wall assembly
material or element #2	1	3	5	15	vinyl window (dual pane)
material or element #3	2	3	7	42	entry door glazing (dual pane)
material or element #4				0	opening
total surface		10	9	90	arbitrary total surface area

TL Data Source		Octave Band Center Frequency (OBCF, Hz) 125	250	500	1000	2000	4000
NRC-CNRC IC-IR-761 (p. 25: G16_WS90(406)_MFB90_2G16)	exterior wall assembly	16	40	41	48	43	52
2 x 5/8" GWB, 2"x4" wood, 24" o.c., fiber batt fill, 1 x 5/8" GWB	material #1 τ	0.025119	0.0001	7.94E-05	1.58E-05	5.01E-05	6.31E-06
available TL data for comparable assembly:	vinyl window (dual pane)	23	23	27	35	47	36
Viracon 5/8" overall - 1/8" glass + 3/8" airspace + 1/8" glass	material #2 τ	0.005012	0.005012	0.001995	0.000316	2E-05	0.000251
available TL data for comparable assembly:	entry door glazing (dual pane)	23	23	27	35	47	36
Viracon 5/8" overall - 1/8" glass + 3/8" airspace + 1/8" glass	material #3 τ	0.005012	0.005012	0.001995	0.000316	2E-05	0.000251
	opening	0	0	0	0	0	0
	material #4 τ	1	1	1	1	1	1
	composite TL	19	25	29	37	45	38
enter desired STC value 35	prospective STC curve	19	28	35	38	39	39
sum of negative differentials -11	differentials	0	-3	-6	-1	6	-1

Interior Space Studied: **Living Room**

Exterior-to-Interior Scenario: **Open Window**

Calculation per Owens Corning NCDG (pg. 16):

68.5	= *exterior* noise level (dBA CNEL)
14	= approximate *net STC* of assembly
3	= *incidence adj.* ("G+3") per OC NCDG Table 3
4	= *source adj.* ("F") per OC NCDG Table 4
-1	= *absorption adj.* per OC NCDG Table 5
60.3	= *interior* noise level (dBA CNEL)

Room *dimensions:* length 15, width 10

Room *absorption conditions:* (hard, standard, soft, very soft?) 0.8

Calculation of net STC:

	qty	width	height	square feet	description
material or element #1				33	exterior wall assembly
material or element #2	1	3	4	12	vinyl window (dual pane)
material or element #3	2	3	7	42	entry door glazing (dual pane)
material or element #4	1	3	1	3	opening
total surface		10	9	90	arbitrary total surface area

TL Data Source		Octave Band Center Frequency (OBCF, Hz) 125	250	500	1000	2000	4000
NRC-CNRC IC-IR-761 (p. 25: G16_WS90(406)_MFB90_2G16)	exterior wall assembly	16	40	41	48	43	52
2 x 5/8" GWB, 2"x4" wood, 24" o.c., fiber batt fill, 1 x 5/8" GWB	material #1 τ	0.025119	0.0001	7.94E-05	1.58E-05	5.01E-05	6.31E-06
available TL data for comparable assembly:	vinyl window (dual pane)	23	23	27	35	47	36
Viracon 5/8" overall - 1/8" glass + 3/8" airspace + 1/8" glass	material #2 τ	0.005012	0.005012	0.001995	0.000316	2E-05	0.000251
available TL data for comparable assembly:	entry door glazing (dual pane)	23	23	27	35	47	36
Viracon 5/8" overall - 1/8" glass + 3/8" airspace + 1/8" glass	material #3 τ	0.005012	0.005012	0.001995	0.000316	2E-05	0.000251
	opening	0	0	0	0	0	0
	material #4 τ	1	1	1	1	1	1
	composite TL	13	14	15	15	15	15
enter desired STC value 14	prospective STC curve	-2	7	14	17	18	18
sum of negative differentials -9	differentials	15	7	1	-2	-3	-3

Interior Space Studied: **Living Room**

Exterior-to-Interior Scenario: **Open Door**

Calculation per Owens Corning NCDG (pg. 16):

68.5	= *exterior* noise level (dBA CNEL)
6	= approximate *net STC* of assembly
3	= *incidence adj.* ("G+3") per OC NCDG Table 3
4	= *source adj.* ("F") per OC NCDG Table 4
-1	= *absorption adj.* per OC NCDG Table 5
68.3	= *interior* noise level (dBA CNEL)

Room *dimensions:* length 15, width 10

Room *absorption conditions:* (hard, standard, soft, very soft?) 0.8

Calculation of net STC:

	qty	width	height	square feet	description
material or element #1				33	exterior wall assembly
material or element #2	1	3	5	15	vinyl window (dual pane)
material or element #3	1	3	7	21	entry door glazing (dual pane)
material or element #4	1	3	7	21	opening
total surface		10	9	90	arbitrary total surface area

TL Data Source		Octave Band Center Frequency (OBCF, Hz) 125	250	500	1000	2000	4000
NRC-CNRC IC-IR-761 (p. 25: G16_WS90(406)_MFB90_2G16)	exterior wall assembly	16	40	41	48	43	52
2 x 5/8" GWB, 2"x4" wood, 24" o.c., fiber batt fill, 1 x 5/8" GWB	material #1 τ	0.025119	0.0001	7.94E-05	1.58E-05	5.01E-05	6.31E-06
available TL data for comparable assembly:	vinyl window (dual pane)	23	23	27	35	47	36
Viracon 5/8" overall - 1/8" glass + 3/8" airspace + 1/8" glass	material #2 τ	0.005012	0.005012	0.001995	0.000316	2E-05	0.000251
available TL data for comparable assembly:	entry door glazing (dual pane)	23	23	27	35	47	36
Viracon 5/8" overall - 1/8" glass + 3/8" airspace + 1/8" glass	material #3 τ	0.005012	0.005012	0.001995	0.000316	2E-05	0.000251
	opening	0	0	0	0	0	0
	material #4 τ	1	1	1	1	1	1
	composite TL	6	6	6	6	6	6
enter desired STC value 6	prospective STC curve	-10	-1	6	9	10	10
sum of negative differentials -10	differentials	16	7	0	-3	-4	-4

Interior Space Studied: **Living Room**

Exterior-to-Interior Scenario: **Closed Window(s) and Door(s)**

Calculation per Owens Corning NCDG (pg. 16):

68.5	= *exterior* noise level (dBA CNEL)
35	= approximate *net STC* of assembly
3	= *incidence adj.* ("G+3") per OC NCDG Table 3
4	= *source adj.* ("F") per OC NCDG Table 4
-1	= *absorption adj.* per OC NCDG Table 5
39.3	= *interior* noise level (dBA CNEL)

Room *dimensions:* length 15, width 10

Room *absorption conditions:* (hard, standard, soft, very soft?) 0.8

Calculation of net STC:

	qty	width	height	square feet	description
material or element #1				33	exterior wall assembly
material or element #2	1	3	5	15	vinyl window (dual pane)
material or element #3	2	3	7	42	entry door glazing (dual pane)
material or element #4				0	opening
total surface		10	9	90	arbitrary total surface area

	Octave Band Center Frequency (OBCF, Hz)					
TL Data Source	125	250	500	1000	2000	4000
NRC-CNRC IC-IR-761 (p. 25: G16_WS90(406)_MFB90_2G16) 2 x 5/8" GWB, 2"x4" wood, 24" o.c., fiber batt fill, 1 x 5/8" GWB	exterior wall assembly	16	40	41	48	43	52
	material #1 τ	0.02512	0.0001	7.9E-05	1.6E-05	5E-05	6.3E-06
available TL data for comparable assembly: Viracon 5/8" overall - 1/8" glass + 3/8" airspace + 1/8" glass	vinyl window (dual pane)	23	23	27	35	47	36
	material #2 τ	0.00501	0.00501	0.002	0.00032	2E-05	0.00025
available TL data for comparable assembly: Viracon 5/8" overall - 1/8" glass + 3/8" airspace + 1/8" glass	entry door glazing (dual pane)	23	23	27	35	47	36
	material #3 τ	0.00501	0.00501	0.002	0.00032	2E-05	0.00025
	opening	0	0	0	0	0	0
	material #4 τ	1	1	1	1	1	1
	composite TL	19	25	29	37	45	38
enter desired STC value 35	prospective STC curve	19	28	35	38	39	39
sum of negative differentials -11	differentials	0	-3	-6	-1	6	-1

Interior Space Studied: **Living Room**

Exterior-to-Interior Scenario: **Open Window**

Calculation per Owens Corning NCDG (pg. 16):

68.5	= *exterior* noise level (dBA CNEL)
13	= approximate *net STC* of assembly
3	= *incidence adj.* ("G+3") per OC NCDG Table 3
4	= *source adj.* ("F") per OC NCDG Table 4
-1	= *absorption adj.* per OC NCDG Table 5
61.3	= *interior* noise level (dBA CNEL)

Room *dimensions:* length 15, width 10

Room *absorption conditions:* (hard, standard, soft, very soft?) 0.8

Calculation of net STC:

	qty	width	height	square feet	description
material or element #1				33	exterior wall assembly
material or element #2	1	3	4	12	vinyl window (dual pane)
material or element #3	2	3	7	42	entry door glazing (dual pane)
material or element #4	1	3	1	3	opening
total surface		10	9	90	arbitrary total surface area

	Octave Band Center Frequency (OBCF, Hz)					
TL Data Source	125	250	500	1000	2000	4000
NRC-CNRC IC-IR-761 (p. 25: G16_WS90(406)_MFB90_2G16) 2 x 5/8" GWB, 2"x4" wood, 24" o.c., fiber batt fill, 1 x 5/8" GWB	exterior wall assembly	16	40	41	48	43	52
	material #1 τ	0.02512	0.0001	7.9E-05	1.6E-05	5E-05	6.3E-06
available TL data for comparable assembly: Viracon 5/8" overall - 1/8" glass + 3/8" airspace + 1/8" glass	vinyl window (dual pane)	23	23	27	35	47	36
	material #2 τ	0.00501	0.00501	0.002	0.00032	2E-05	0.00025
available TL data for comparable assembly: Viracon 5/8" overall - 1/8" glass + 3/8" airspace + 1/8" glass	entry door glazing (dual pane)	23	23	27	35	47	36
	material #3 τ	0.00501	0.00501	0.002	0.00032	2E-05	0.00025
	opening	0	0	0	0	0	0
	material #4 τ	1	1	1	1	1	1
	composite TL	13	14	15	15	15	15
enter desired STC value 13	prospective STC curve	-3	6	13	16	17	17
sum of negative differentials -6	differentials	16	8	2	-1	-2	-2

Interior Space Studied: **Living Room**

Exterior-to-Interior Scenario: **Open Door**

Calculation per Owens Corning NCDG (pg. 16):

68.5	= *exterior* noise level (dBA CNEL)
6	= approximate *net STC* of assembly
3	= *incidence adj.* ("G+3") per OC NCDG Table 3
4	= *source adj.* ("F") per OC NCDG Table 4
-1	= *absorption adj.* per OC NCDG Table 5
68.3	= *interior* noise level (dBA CNEL)

Room *dimensions:* length 15, width 10

Room *absorption conditions:* (hard, standard, soft, very soft?) 0.8

Calculation of net STC:

	qty	width	height	square feet	description
material or element #1				33	exterior wall assembly
material or element #2	1	3	5	15	vinyl window (dual pane)
material or element #3	1	3	7	21	entry door glazing (dual pane)
material or element #4	1	3	7	21	opening
total surface		10	9	90	arbitrary total surface area

	Octave Band Center Frequency (OBCF, Hz)					
TL Data Source	125	250	500	1000	2000	4000
NRC-CNRC IC-IR-761 (p. 25: G16_WS90(406)_MFB90_2G16) 2 x 5/8" GWB, 2"x4" wood, 24" o.c., fiber batt fill, 1 x 5/8" GWB	exterior wall assembly	16	40	41	48	43	52
	material #1 τ	0.02512	0.0001	7.9E-05	1.6E-05	5E-05	6.3E-06
available TL data for comparable assembly: Viracon 5/8" overall - 1/8" glass + 3/8" airspace + 1/8" glass	vinyl window (dual pane)	23	23	27	35	47	36
	material #2 τ	0.00501	0.00501	0.002	0.00032	2E-05	0.00025
available TL data for comparable assembly: Viracon 5/8" overall - 1/8" glass + 3/8" airspace + 1/8" glass	entry door glazing (dual pane)	23	23	27	35	47	36
	material #3 τ	0.00501	0.00501	0.002	0.00032	2E-05	0.00025
	opening	0	0	0	0	0	0
	material #4 τ	1	1	1	1	1	1
	composite TL	6	6	6	6	6	6
enter desired STC value 6	prospective STC curve	-10	-1	6	9	10	10
sum of negative differentials -10	differentials	16	7	0	-3	-4	-4

Interior Space Studied:				*Exterior-to-Interior Scenario:*	*Calculation per Owens Corning NCDG (pg. 16):*
Bedroom				**Closed Window(s) and Door(s)**	**68.5** = *exterior* noise level (dBA CNEL)
					38 = approximate *net STC* of assembly
	Room *dimensions:*			Room *absorption conditions:*	**3** = *incidence adj.* ("G+3") per OC NCDG Table 3
	length	width		(hard, standard, soft, very soft?)	**4** = *source adj.* ("F") per OC NCDG Table 4
	10	10		0.8	**1** = *absorption adj.* per OC NCDG Table 5
					38.0 = *interior* noise level (dBA CNEL)

Calculation of net STC:

	qty	width	height	square feet	description
material or element #1				75	exterior wall assembly
material or element #2	1	3	5	15	vinyl window (dual pane)
material or element #3				0	entry door glazing (dual pane)
material or element #4				0	opening
total surface		10	9	90	arbitrary total surface area

TL Data Source		Octave Band Center Frequency (OBCF, Hz)					
		125	250	500	1000	2000	4000
NRC-CNRC IC-IR-761 (p. 25: G16_WS90(406)_MFB90_2G16)	exterior wall assembly	16	40	41	48	43	52
2 x 5/8" GWB, 2"x4" wood, 24" o.c., fiber batt fill, 1 x 5/8" GWB	material #1 τ	0.02512	0.0001	7.9E-05	1.6E-05	5E-05	6.3E-06
available TL data for comparable assembly:	vinyl window (dual pane)	23	23	27	35	47	36
Viracon 5/8" overall - 1/8" glass + 3/8" airspace + 1/8" glass	material #2 τ	0.00501	0.00501	0.002	0.00032	2E-05	0.00025
available TL data for comparable assembly:	entry door glazing (dual pane)	23	23	27	35	47	36
Viracon 5/8" overall - 1/8" glass + 3/8" airspace + 1/8" glass	material #3 τ	0.00501	0.00501	0.002	0.00032	2E-05	0.00025
	opening	0	0	0	0	0	0
	material #4 τ	1	1	1	1	1	1
	composite TL	17	30	34	42	43	43
enter desired STC value: 38	prospective STC curve	22	31	38	41	42	42
sum of negative differentials: -10	differentials	-5	-1	-4	1	1	1

Interior Space Studied:				*Exterior-to-Interior Scenario:*	*Calculation per Owens Corning NCDG (pg. 16):*
Bedroom				**Open Window**	**68.5** = *exterior* noise level (dBA CNEL)
					15 = approximate *net STC* of assembly
	Room *dimensions:*			Room *absorption conditions:*	**3** = *incidence adj.* ("G+3") per OC NCDG Table 3
	length	width		(hard, standard, soft, very soft?)	**4** = *source adj.* ("F") per OC NCDG Table 4
	10	10		0.8	**1** = *absorption adj.* per OC NCDG Table 5
					61.0 = *interior* noise level (dBA CNEL)

Calculation of net STC:

	qty	width	height	square feet	description
material or element #1				75	exterior wall assembly
material or element #2	1	3	4	12	vinyl window (dual pane)
material or element #3				0	entry door glazing (dual pane)
material or element #4	1	3	1	3	opening
total surface		10	9	90	arbitrary total surface area

TL Data Source		Octave Band Center Frequency (OBCF, Hz)					
		125	250	500	1000	2000	4000
NRC-CNRC IC-IR-761 (p. 25: G16_WS90(406)_MFB90_2G16)	exterior wall assembly	16	40	41	48	43	52
2 x 5/8" GWB, 2"x4" wood, 24" o.c., fiber batt fill, 1 x 5/8" GWB	material #1 τ	0.02512	0.0001	7.9E-05	1.6E-05	5E-05	6.3E-06
available TL data for comparable assembly:	vinyl window (dual pane)	23	23	27	35	47	36
Viracon 5/8" overall - 1/8" glass + 3/8" airspace + 1/8" glass	material #2 τ	0.00501	0.00501	0.002	0.00032	2E-05	0.00025
available TL data for comparable assembly:	entry door glazing (dual pane)	23	23	27	35	47	36
Viracon 5/8" overall - 1/8" glass + 3/8" airspace + 1/8" glass	material #3 τ	0.00501	0.00501	0.002	0.00032	2E-05	0.00025
	opening	0	0	0	0	0	0
	material #4 τ	1	1	1	1	1	1
	composite TL	13	15	15	15	15	15
enter desired STC value: 15	prospective STC curve	-1	8	15	18	19	19
sum of negative differentials: -12	differentials	14	7	0	-3	-4	-4

Appendix E

Residential HVAC Noise Prediction



SOURCE: Dudek 2021

DUDEK

0 148 296 Feet

Appendix E

Residential HVAC Noise Prediction

Gran Vista Project

Appendix J
Fire Response Analysis

DUDEK
MAIN OFFICE
605 THIRD STREET
ENCINITAS, CALIFORNIA 92024
T 800.450.1818 F 760.632.0164

FIRE RESPONSE TECHNICAL MEMORANDUM

To:	
From:	Dudek Fire Protection Planning Team, Michael Huff, Principal
Subject:	Gran Vista Los Posas Project Fire and Medical Response Analysis
Date:	June 23, 2022
cc:	N/A
Attachment(s):	1. San Marcos Fire Department Fire Station 1 Modeled Response Time 2. San Marcos Fire Department Fire Station 2 Modeled Response Time

The following technical memorandum provides a summary of Dudek's fire service response analysis for the San Marcos Gran Vista Los Posas Project (Project) in San Marcos, California. This letter provides a preliminary summary of the existing San Marcos Fire Department's (SMFD) nearby resources, their modeled travel time responses into the Project. The goal is to determine whether the Project can be served within the SMFD's internal response time standards.

1 Assignment

Dudek's assignment was to:

- Conduct evaluation of existing, nearby SMFD fire station travel times to the project site; and
- Analyze generated information to determine if any of the Project site cannot be reached within the City's response time goal; and
- Evaluate the Project's emergency call generation volume and analyze the potential impact on SMFD.

2 Project Description

The proposed Project is the development of a vacant approximately 7.6-acre site located in the undeveloped northwest corner of the intersection of Las Posas Road and W. Mission Road in the City of San Marcos, California. There is a CVS store just southeast of the site, of which the parking lot overlaps the Project site. The Project site is located on the 7.5-minute San Marcos quadrangle map on Sections 3 and 10, in Township 12 South, Range 3 West of the San Bernardino Base and Meridian. It comprises Tax Assessor parcel numbers – APN 219-121-15-00 and 219-121-16-00. The site is General Plan designated C-Commercial (City of San Marcos 2012).

The Project involves the construction of a residential development. The residential units would include 122 townhome units, 244 garage spaces, 21 guest parking spaces, and 19,400 square feet of open space areas.

The Project is located within the jurisdiction of the SMFD. The fire department provides structural fire protection and advanced life support-level emergency medical services within the City limits; unincorporated territory adjacent to the city's northern boundary (Project Area); discontinuous, unincorporated areas between the City of San Marcos and the City of Escondido; and the community of Lake San Marcos. The fire department operates two primary Fire Stations (Stations 1 and 2) that would respond to an incident at the proposed Project site, with first-due response likely from Station 1 given its closer location and greater coverage in a faster timeframe. Station 2 would respond as necessary. Table 1 presents a summary of the location, equipment, and staffing levels for the two SMFD stations responding to the site.

Table 1
SMFD Responding Fire Stations Summary

Fire Station	Location	Equipment	Staffing
Station 1	180 W. Mission Road San Marcos, California 92069	Paramedic Engine Co. Paramedic Truck Co. Wildland Fire Engine Paramedic Ambulance Battalion Chief Vehicle	On duty: 9
Station 2	1250 S. Rancho Santa Fe Rd San Marcos, California 92069	Paramedic Engine Co. Paramedic Ambulance	On-duty: 5

3 Methods

3.1 Travel Time Response Modeling

Dudek conducted a GIS-based travel time coverage modeling effort in order to determine if the project meets the SMFD's response goal. The SMFD indicates "the average initial total response standard in the City of San Marcos is to arrive within seven minutes for 90% of the emergency calls received, and within 10 minutes for 90% of the non-emergency calls received[1]."

Travel time is one part of the overall response time and is based largely on the distance from the fire station to the project. The analysis that follows evaluates travel time and assumes the dispatch and turnout times as a constant i.e., 2 minutes and 30 seconds, total.

[1] 2021 Call volume, response standard, and fire station statistics provided by Jason Nailon, SMFD Fire Marshal, via e-mail communication. 2021

3.2 GIS Response Travel Time Modeling

Following compilation of all necessary data layers received from project applicant and acquired via publicly available sources, Dudek verified that all data layers were in the correct State Plane Zone coordinate system with units in feet. A network data set was then created utilizing ESRI's Network Analyst extension in the Arc Catalog module. The data set was created by merging the existing centerline street layer with the proposed Gran Vista Los Posas Project centerline street data, provided by project applicants, and assigning parameters to the created data set. Several parameters are available during the creation of a network data set and include elevation constraints, U-turn capabilities, curb approach direction and travel impedance.

Due to the emergency nature of the response scenarios modeled in this analysis, U-turns were permitted on every road. Curb approach determines on which side of the street the vehicle needs to approach and includes three options, left, right, or either. The 'either' option was selected for all roads in this analysis based on the emergency nature of the response situations. Finally, travel impedance was utilized to include the effect of speed limits on response travel time. A custom impedance value was created for each road segment and was a function of road segment distance (miles) divided by speed (mph). This value was utilized in Network Analyst calculations for both modeling types and reflected the time necessary for a vehicle to cover the distance of the road segment. Speed was set at 35 mph, consistent with National Fire Protection Association (NFPA) 1142 Table C.11(b) and the Insurance Services Office (ISO) travel time formula (T=0.65 +1.7D).

Once the network data set parameters were finalized, the route analysis was run using the Network Analyst extension in ArcGIS 10.2.2. This function determines the best route between a minimum of two points based on the parameters chosen. The analysis includes response from SMFD Fire Stations 1 and 2, which are the closest stations to the Project. A route analysis procedure was then run using Network Analyst with each respective fire station as the starting point, and a remote location within the Project as the destination. The maps depicting each Station travel time coverage area are presented in Attachments 1 and 2.

3.3 Modeling Results

As indicated in Table 2 and Attachments 1 and 2, response to the project site from the closest existing SMFD fire station (Station 1) would arrive at the Project's primary entrance off W. Mission Road within 3 minutes, 23seconds travel time (5minutes 53 seconds total response time). The most remote units within the Project arereached within 3 minutes 36 seconds travel time, or 6 minutes 06 seconds total response time. This analysis indicates that the entire Project is within the SMFD's internal response timeframes with up to 54 seconds of additional time available. This analysis also indicates that Station 2 is not close enough to meet the 7 minute response time, but does arrive within 5 minutes 33 seconds (8 minutes 03 seconds total response time).

Table 2
SMFD Fire Station Response Time to Project

Call Response Times	Estimated Percent of San Marcos Restaurant Row Project Achievable			
	Fire Station 1		*Fire Station 2*	
	Travel Time	*Total Response Time*	*Travel Time*	*Total Response Time*
Less than 7 minutes	100%	100%	100%	0%

3.4 Response Time Capability Assessment

The Project includes a substantial number of new residential structures. Service level requirements could, in the absence of fire facilities and resources improvements, cause a decline in the SMFD response times and capabilities for existing residents. However, it is clear that from a response time perspective, the project does comply with the City's total response time standard.

4 Call Volume Analysis

4.1 Estimated Calls and Demand for Service from the Project

The SMFD estimates approximately 11,486 total annual calls (Nailon, J. 2021) and a City population of approximately 95,000 (SMFD 2021). The per capita call volume is roughly .12 for the City of San Marcos. The Project plans for 122 new dwelling units. As a conservative approach, this analysis assumes a per dwelling unit population of 3 persons per unit.

A population of 366 persons would generate approximately 44 calls per year, most of which are expected to be medical-related calls, consistent with typical emergency call statistics.

The closest SMFD fire stations, Stations 1 and 2 currently responds to roughly 16 to 18 calls per day (up to 6,570 calls per year) in their primary service areas. These are busy fire stations and adding calls can cumulatively create an impact and result in longer response times or stacked calls requiring assistance from more distant fire stations. It is anticipated that the Project's contributions, along with other projects' contributions to fire service and availability fees through property taxes and/or other avenues provide funding needed to augment service capabilities such that an impact is not experienced. Despite the current busy call load, an addition of 44 calls per year, or 1 call every 8 days, is not expected to significantly impact service level requirements given the measures that can be implemented by SMFD with provided ongoing funding from new development.

5 Discussion and findings

5.1 Emergency Response

As presented, Station 1 is well-within the City's time response goal for first-in fire engine and medic ambulance to the entire Project site.

5.2 Call Volume/Load

The Project would generate emergency calls, primarily medical, proportionally with its population. At build out, there may be as many as 44 calls per year generated by the on-site population. The addition of one call per 8 days or to a station that is currently running approximately 17 to 18 calls per day is not considered a significant increase. Based on the information provided by SMFD, the Project's additional call volume should not cause a significant stress on the response capabilities. However, SMFD would make the final determination, based on specific fire station call volumes (which were not provided for this analysis), whether the station would incur delayed response times or an increase in call volume that could not be absorbed.

6 Recommendations

The following Recommendation is provided based on the preceding analysis:

It is recommended that SMFD provide emergency response to the proposed Project from Station 1. Factors supporting this recommendation are the absorbable number of calls that would be anticipated as the Project is built and the response time that is within range of local and national standards.

Please feel free to contact me if you have any questions or need any additional information. I look forward to continuing to work with you on this project's fire safety considerations.

Attachment 1

Travel Time Response to Project from Existing San Marcos Fire Station 1



SOURCE: SANGIS 2020, 2021; GMP 2021

DUDEK

0 100 200 Feet

FIGURE 1

San Marcos Fire Station #1 - Drive Times

Gran Vista, Las Posas Project

Attachment 2

Travel Time Response to Project from Existing San Marcos Fire Station 2



SOURCE: SANGIS 2020, 2021; GMP 2021

DUDEK

0 100 200 Feet

FIGURE 2

San Marcos Fire Station #2 - Drive Times

Gran Vista, Las Posas Project

Appendix K-1

Vehicle Miles Traveled Analysis

TO: Jonathan Quezada, MPA, EIT; City of San Marcos

FROM: Jonathan Sanchez, PE, TE, PTOE; CR Associates
Joseph Perez, EIT; CR Associates

DATE: February 24, 2023

RE: Gran Vista Multi-Family – Vehicle Miles Traveled (VMT) Analysis Technical Memorandum

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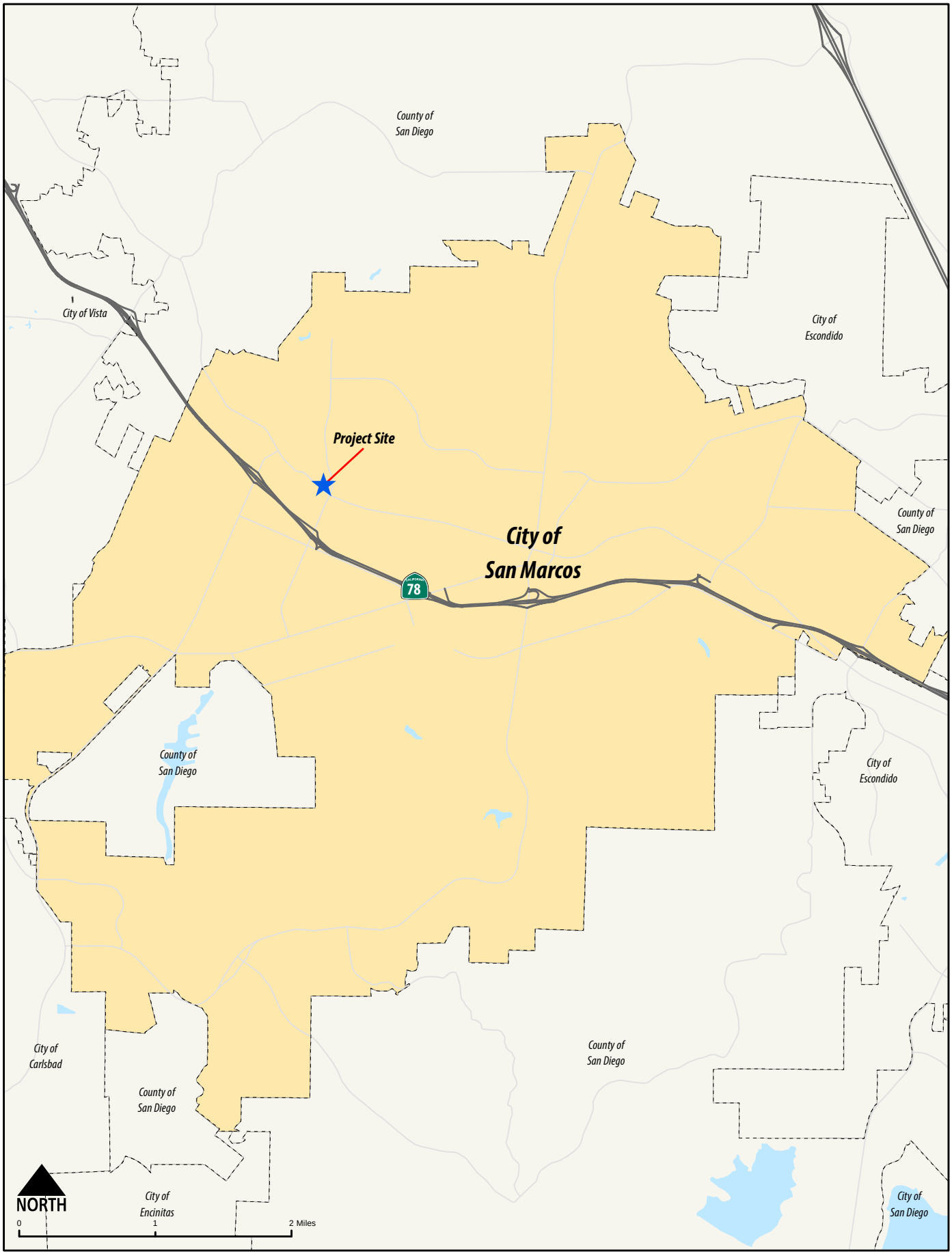
This technical memorandum documents the results of the SB-743 compliant transportation impact analysis conducted for the proposed Gran Vista Multi-Family project (the "Proposed Project"). The analysis is based on the recently revised (January 2019) State California Environmental Quality Act (CEQA) Guidelines and the City of San Marcos Transportation Impact Analysis (TIA) Guidelines dated November 16, 2020.

Project Description

The Proposed Project seeks to construct 120 multi-family dwelling units on a vacant property approximately 250 feet northwest of the West Mission Road and North Las Posas Road intersection in the City of San Marcos. The property is bordered by North Las Posas Road on the northeast side, West Mission Road on the southwest side, single family dwelling units on the northwest side, and a CVS pharmacy to the south. Per the City's General Plan, the site is designated as a Commercial (C) land use.

The Proposed Project will share two existing driveways with the adjacent CVS pharmacy with one located off North Las Posas Road and the other off West Mission Road. The access off North Las Posas Road is via a signalized intersection at North Las Posas Road / Palm Road (Driveway 1), and the access off West Mission Road is via a side-street (the CVS driveway) stop controlled intersection that does not allow left-turn out movement (Driveway 2). The assumed opening year of the Proposed Project is 2024.

Figure 1 displays the Proposed Project regional location, while **Figure 2** displays the project site plan.



Gran Vista Multi-Family
VMT Analysis

C+R

Figure 1
Project Regional Location

Three-Story Townhomes
- For-sale attached townhomes provide an efficient use of land and a more financially attainable housing solution that is compatible with adjacent single family uses
- Located near SPRINTER light rail line (nearest stop is 0.4 miles) to support transit use, promote walkabilty, and potentially reduce VMT and emissions
- Withing walking dictance of retail, parks, schools and other everyday services
- Implements Policy LU-2.1 of the 2020 Climate Action Plan to "Promote compact development patterns that reduce air pollution and automobile dependence and facilitate walking, bicycling, and transit use".

Las Posas Road Frontage/Paseos
- Varied building orientation breaks up massing and provides for an eclectic and interesting street scene
- Paseo access and landscaped pedestrian pathways provide connectivity to existing sidewalks to promote walkability
- Shade trees and landscaping soften the street scene and provide pedestrian comfort

Typical Tot Lot/Excercise Station
- Tot lots with play equipment (three areas shown in red) provided throughout site area are located adjacent to barbecues and other amenities to encourage family and community gathering
- Outdoor excercise equipment (three areas shown in blue) provides an exercise loop through the community to encourage and support fitness

Community Garden
- Raised planter beds with decompsed granite pathways encourage healthy eating and wellness
- Enhanced with a potting table and storage benches

Dog Park
- Off-leash dog area for residents to excercise and enjoy pets
- Fenced with tublar steel fencing to provide an "open" appearance
- Artificial turf surface for durability and easy maitenance
- Dog clean-up station, double gated entry, and other amenities

Primary Community Entry
- Maintains existing site access at signalized intersection
- Provides front doors facing entry for a welcoming street scene
- Enhanced paving and landscaping to be designed by landscape architect



Project Summary

Gross Area: 7.6 Acres

Total Units: 120 Homes
- 30 - Plan 2532: 1,213 Sq.Ft., 2 Bed, side-by-side garage
- 45 - Plan 1633: 1,505 Sq.Ft., 3 Bed, tandem garage
- 45 - Plan 1636: 1,802 Sq.Ft., 3 Bed, side-by-side garage

Total Open Space:
- 17,550 Sq.Ft. of Private Open Space
- 44,548 Sq.Ft. of Open space with grades of 10% or more
- 92,645 Sq.Ft. of Common Recretaion Area
- 154,743 Sq.Ft. Total

Parking
- 240 Garage Spaces (Includes 45 Tandem)
- 20 Guest Spaces (Includes 2 ADA Spaces and 2 EV Spaces)
- 37 Existing Spaces (Existing on-site spaces adjacent to CVS)
- 297 Total Spaces (including existing spaces)

Notes:
1. APNs 219-121-15 & 16
2. Existing General Plan Designation: Commercial (C)
3. Proposed General Plan Designation: Specific Plan Area (SPA)
4. Existing Zoning Designation: Commercial (C)
5. Proposed Zoning Designation: Specific Plan Area (SPA)
6. Total building square footage: 185,205 SF
7. Required common open space: 24,431 SF
8. Required private open space: 6,000 SF

Central Recreation Area
- Centrally located near the primary entry to provide a focal point for the community
- Amenities include lawn game area with artificial turf, barbecue counter with bar, seating, and more
- Located adjacent to a tot lot to promote family and social gathering
- Underground vaults provide storm water treatment

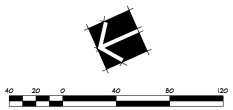
Children's Play Area
- Larger play area with multi-age play equipment
- Located adjacent to barbecue counter and seating area to promote family and social gathering

Secondary Community Entry
- Maintains existing site access with left/right in and right-out only turning movements
- Enhanced by adjacent open space areas, special paving and landscaping

Turf Play Area
- Open artificial turf play area
- Can be used for badminton, pick-up soccer, Frisbee and other informal games
- Underground vaults provide storm water treatment

Neighborhood Edge
- Buildings oriented to minimize windows
- Landscape planting designed to provide additional screening to maximize privacy of existing single-family homes

ILLUSTRATIVE SITE PLAN



PREPARED BY:

gmp
3176 Lionshead Ave, Suite 102
Carlsbad, CA 92010
gmplandarch.com
T 858 558 8977
LANDSCAPE ARCHITECTURE & PLANNING

MeritageHomes
Setting the standard for energy-efficient homes

MLC Holdings, Inc.

SITE DEVELOPMENT PLAN FOR
GRAN VISTA
LAS POSAS RD.
City of San Marcos, California

SHEET
P-1

Project Trip Generation

Per the City's TIAG, trip generation rates were derived from the SANDAG's (not so) Brief Guide to Vehicular Traffic Generation Rates for the San Diego Region (April 2002). **Table 1** displays the projected daily, as well as AM and PM peak hour, project trip generation.

Table 1 - Project Trip Generation

Land Use	Units	Trip Rate	ADT	AM Peak Hour					PM Peak Hour				
				%	Trips	Split	In	Out	%	Trips	Split	In	Out
Multi-Family (6-20 DU/acre)	120 DU	8/DU	960	8	77	2:8	15	62	10	96	7:3	67	29

Source: SANDAG (not so) Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region, April 2002)

Notes:
ADT = Average Daily Traffic
DU = Dwelling Unit

As shown in Table 1, the Proposed Project is anticipated to generate 960 daily trips, including 77 trips (15-in/62-out) during the AM peak hour and 96 (67-in/29-out) trips during the PM peak hour.

Analysis Methodology

On September 27, 2013, Governor Edmund G. Brown, Jr. signed SB-743 into law, starting a process that fundamentally changes the way transportation impact analysis is conducted under CEQA. Related revisions to the State's CEQA Guidelines include elimination of auto delay, level of service (LOS), and similar measurements of vehicular roadway capacity and traffic congestion as the basis for determining significant impacts, and replacement with Vehicle Miles Traveled (VMT) as the preferred CEQA transportation metric.

In December 2018, the California Resources Agency certified and adopted revised CEQA Guidelines, including the new section 15064.3. Under Section 15064.3, vehicle miles traveled (VMT), which includes the amount and distance of automobile traffic attributable to a project, is identified as the "most appropriate measure of transportation impacts." As of July 1, 2020, all CEQA lead agencies must analyze a project's transportation impacts using VMT. On November 16, 2020, the City of San Marcos adopted its Transportation Impact Analysis Guidelines.

Screening Thresholds

Many agencies use these screening thresholds to quickly identify when a project should be expected to cause a less-than-significant impact without conducting a detailed study. The City of San Marcos TIA Guidelines suggest that a detailed transportation VMT analysis applies to all land development projects, except those that meet at least one of the screening criteria. Relevant screening criteria for the Proposed Project is described below:

- *Presumption of Less Than Significant Impact for Affordable Residential Development* – Residential projects with 100 percent deed restricted affordable housing can be presumed to have a less-than-significant transportation impact and would not require a detailed VMT analysis. If a project contains less than 100 percent affordable housing, the portion that is

affordable should be screened out of requiring a detailed VMT analysis. Projects can only be screened out if they are located in parts of the city that have been identified by SANDAG and the City as Smart Growth Opportunity Areas. For mixed-use projects, this screening criteria should be applied to the residential component separately to determine if that portion of the project screens out of a detailed VMT analysis.

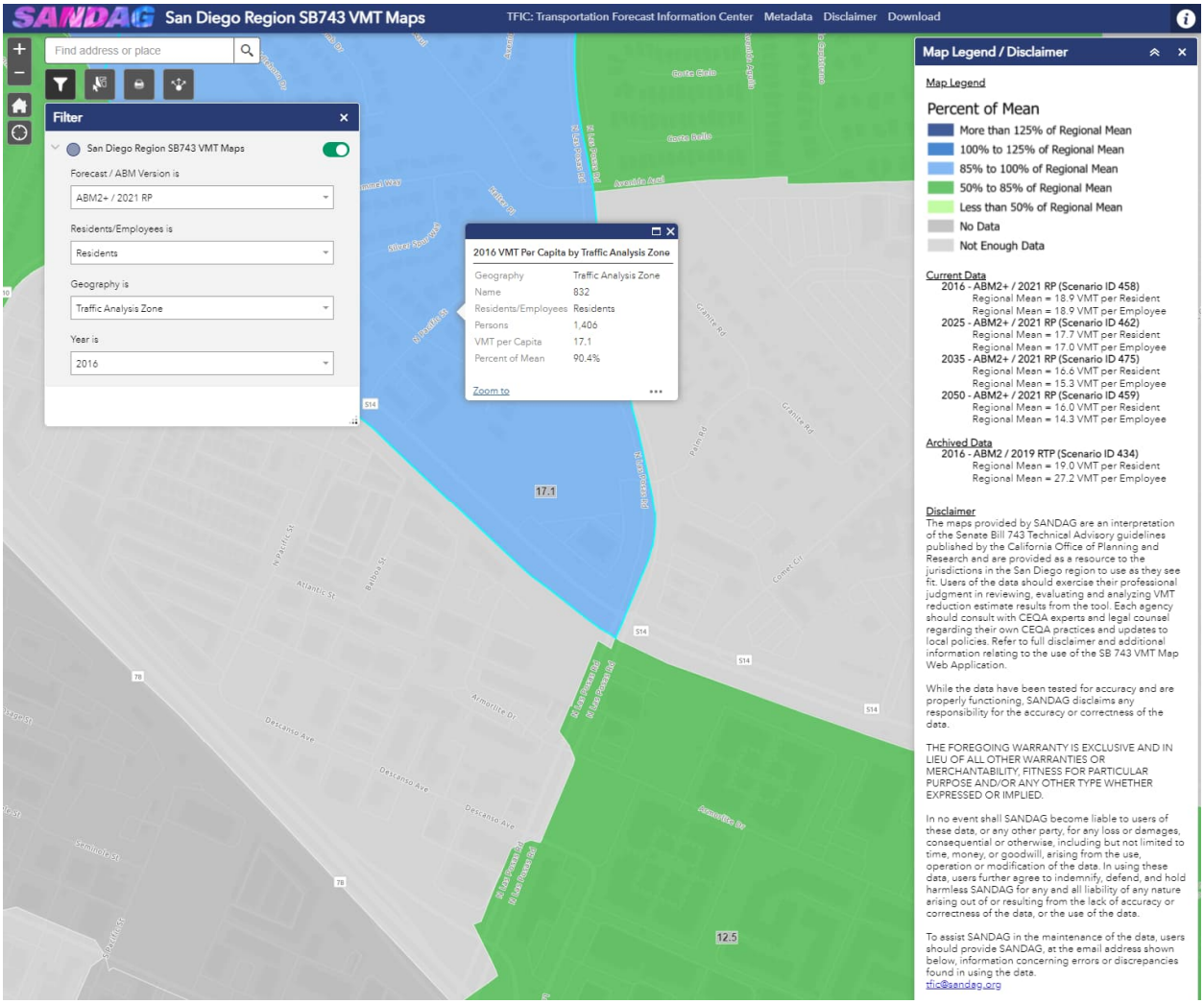
- *Local-Serving Retail* - Retail projects that have 50,000 square feet gross floor area or less can be presumed to have a less than-significant transportation impact and would not require a detailed VMT analysis. For a mixed-use project, this screening criteria should be applied to the retail/commercial component separately to determine if that portion of the project screens out of a detailed VMT analysis.
- *Map-Based Screening for Residential and Office Projects* – Residential and employment projects that are proposed in areas that generate VMT below adopted City thresholds can be presumed to have a less-than-significant transportation impact and would not require a detailed VMT analysis. This determination must be made using SANDAG's online residential and employment VMT maps for existing year or model baseline year VMT (whichever is available at the time analysis is being conducted), which show census tracts in the city where the VMT is below the regional average. The following types of projects could be screened out using this approach:
    - Residential projects proposed in census tracts with residential VMT per capita below the City's threshold of exceeding 85 percent of the SANDAG regional average.

  In order to utilize this screening approach, the project must incorporate similar land use characteristics to other projects in the census tract. For mixed-use projects, this screening criteria should be applied to the residential and employment components separately to determine if any portions of the project screen out of a detailed VMT analysis.

Based upon the screening criteria presented above, the Proposed Project would not be screened out from completing a detailed VMT analysis for the following reasons:

- *Screening Threshold for Small Projects* – The Proposed Project generates more than 110 daily trips.
- *Map-Based Screening for Residential and Office Projects* – The Proposed Project is located in an area that generates VMT per capita above the adopted City threshold as displayed in Figure 3.
- *Presumption of Less Than Significant Impact for Affordable Residential Development* - The Proposed Project consists of 120 multi-family dwelling units which does not provide for any affordable housing.
- *Presumption of Less Than Significant Impact Near Transit Stations* - Although the Proposed Project is within a high-quality transit area, it is inconsistent with the City's current general plan.

Figure 3 - Project Location within SANDAG VMT Map



VMT Analysis

Analysis Metrics

Consistent with the City's TIAG, the residential portion of the Proposed Project shall be analyzed by the following VMT metric:

- VMT/Capita which includes, for all San Diego County residents, all vehicle-based resident travel grouped and summed to the home location of the individual. It includes all resident vehicle travel: home-based and non-home-based. The VMT for each individual is then summed for all individuals residing in a particular census tract and divided by the population of that census tract to arrive at Resident VMT/Capita. A significant impact will occur if the project generates VMT per resident greater than 85 percent of the regional average.

The regional average VMT was determined using the SANDAG Series 14 ABM2+/2021 RP Year 2016 Base model. **Table 2** summarizes the VMT analysis results.

Table 2 - VMT Impact Analysis - Residential

Metric	VMT per Resident
Regional Average	18.90[1]
Significant Impact Threshold (85%)	16.07[2]
Proposed Project	17.10[1]
Significant Impact	Yes

Source: CR Associates (2022)

Notes:
[1] Source = SANDAG Series 14 ABM2+/2021 RP Year 2016 Base Model
[2] Regional Average x 85%

As shown in Table 2, the Proposed Project is anticipated to generate a VMT per resident of 17.10 miles, which exceeds the significance threshold of 16.07 miles. Therefore, the Proposed Project would have a significant VMT impact and mitigation measures are required to reduce the VMT per resident.

VMT Mitigation

The proposed project's VMT per Capita is not anticipated to fall under the significance threshold as the project site is located in a suburban area that includes single-family homes with higher automobile ownership as compared to the region. While the proposed project is located on an infill site and is consistent with Climate Action Plan and SANDAG's Regional Plan, impacts related to VMT per Capita would not be reduced to 85% of the regional average. **It is important to note that this impact is primarily a result of the geographic location of the proposed project in a suburban neighborhood, as trip characteristics of the surrounding residential land uses are used as a surrogate to estimate proposed project trip characteristics, regardless of the inherent differences between the land uses**.

Nonetheless, the Proposed Project would have a significant VMT impact and mitigation measures are required to reduce the VMT per resident. The Proposed Project's total VMT per Capita is 17.1 miles. To mitigate the Proposed Project's VMT to less than significant levels, mitigation measures would need to reduce the total VMT per Capita by 6.02% from 17.1 miles to 16.07 miles.

To reduce the average VMT per Capita, it is recommended that the Proposed Project implement a Transportation Demand Management (TDM) Program. A TDM program would facilitate increased opportunities for walking and bicycling, as well as provide the resources, means and incentives for ridesharing and carpooling. The SANDAG Mobility Management Guidebook/VMT Reduction Tool was taken into consideration initially, however, this tool does not provide strategies that are applicable to project. Therefore, the methods and strategies contained in the California Air Pollution Control Officers Association (CAPCOA) Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity (CAPCOA Report).

Based on discussions with the project applicant, the Proposed project will implement the following mitigation measure:

1. Provide subsidized transit passes (10%) for 100% of all residents (CAPCOA T-9: Implement Subsidized or Discounted Transit Program = **0.10% VMT reduction**).

See **Attachment A** for details on the VMT reduction calculations and excerpts from the CAPCOA Report.

Additionally, the CAPCOA Report provides for mitigation measures that are considered non-quantifiable for the Proposed Project due to the implementation requirements or measure description in relation to Proposed Project's land use (i.e., a residential project rather than an employment project). The Proposed Project will implement the following non-quantifiable VMT reduction strategies to encourage alternative modes of transportation:

2. Creation and distribution of a "new resident" information packet addressing alternative modes of transportation (CAPCOA T-7: Implement Commute Trip Reduction Marketing).
3. Provide on-site bike parking (CAPCOA T-10: Provide End-of-Trip Bicycle Facilities).

See Attachment A for full list of VMT mitigation measures taken into consideration and determination of feasibility for the Proposed Project.

The CAPCOA Report notes that when determining the overall VMT reduction associated with a project, the VMT reduction for each individual strategy should be dampened, that is adjusted to reflect the fact that some of the strategies may be redundant or applicable to the same populations. The CAPCOA report provides the following dampening formula:

Overall % VMT Reduction = 1 – (1 - First Strategy) * (1 - Second Strategy) * (1 – Third Strategy) ...

The Proposed Project would have the following overall VMT reduction:

Overall VMT Reduction = 1 - (1 - 0.001)

Overall VMT Reduction = 0.10%

Table 3 summarizes the Proposed Project's trip reductions and mitigation results.

Table 3 - Proposed Project VMT Mitigation

VMT / Resident[1]	Threshold VMT / Resident[2]	Mitigation Measures (% Reduction)	VMT / Resident Reduction	Net VMT / Resident[3]	M?
17.1	16.07	CAPCOA T-9 (.10%)	-0.10%	17.08	No

Source: CR Associates (2022)

Notes:

[1] SANDAG Series 14 ABM2+/2021 RP Year 2016 Base Model (Figure 3)

[2] Regional Average x 85%

[3] [Net VMT per Resident] = [VMT per Resident] X [VMT per Resident Reduction]

M? = Mitigated?

Based on the VMT reduction results, implementation of the TDM Program is anticipated to reduce the VMT per capita generated by 0.10 percent. Thus, with implementation of the TDM Program, the Proposed Project is anticipated to generate 17.08 VMT per Capita (17.1 VMT per Capita * (1 - 0.001)). The resulting 17.08 miles per resident exceeds the 16.07 miles threshold. Therefore, since the mitigation measures would not reduce the VMT per resident to less than significant levels, the impact is only partially mitigated, and the Proposed Project is considered to have a significant and partially mitigated impact.

Attachment A - VMT Mitigation Reduction Calculations and Full List of VMT Mitigation Measures Taken into Consideration

VMT Reduction	=	Subsidy Amount / Average Transit Fare	Elasticity (Transit boardings with respect to transit fare)	% residents eligible	% VMT generated from residents	Transit Mode Share (Table T-9.1)	% of Trips otherwise made by vehicle	Conversion Factor
-0.102%	=	10%	-0.43	100%	100%	4.74%	50%	1

GHG Reduction Formula

$$A = \frac{C}{B} \times G \times D \times E \times F \times H \times I$$

GHG Calculation Variables

If subsidies or discounts target employees, the GHG reduction from this measure may be limited to work-related employee trips only (i.e., home-to- work) and work-to-other, where at least one trip end is work). If residents are targeted, the GHG reductions extend to all trips.

ID	Variable	Value	Unit	Source
Output				
A	Percent reduction in GHG emissions from employee/resident vehicles accessing the site	0–5.5	%	calculated
User Inputs				
B	Average transit fare without subsidy	[ ]	$	user input
C	Subsidy amount	[ ]	$	user input
D	Percent of employees/residents eligible for subsidy	0–100	%	user input
E	Percent of project-generated VMT from employees/residents	0–100	%	user input
Constants, Assumptions, and Available Defaults				
F	Transit mode share of all trips or work trips	Table T-3.1 or Table T-9.1	%	FHWA 2017
G	Elasticity of transit boardings with respect to transit fare price	-0.43	unitless	Taylor et al. 2008
H	Percent of transit trips that would otherwise be made in a vehicle	50	%	Handy & Boarnet 2013
I	Conversion factor of vehicle trips to VMT	1.0	unitless	assumption

Table T-9.1. Average Transit Mode Share of Work Trips by California Core-Based Statistical Area

Core-Based Statistical Area	Transit Mode Share of Work Trips
Los Angeles-Long Beach-Anaheim	5.39%
Riverside-San Bernardino-Ontario	1.12%
Sacramento-Roseville-Arden-Arcade	5.44%
San Diego-Carlsbad	4.74%
San Francisco-Oakland-Hayward	25.60%
San Jose-Sunnyvale-Santa Clara	6.11%

Source: Federal Highway Administration. 2017. National Household Travel Survey – 2017 Table Designer. WRKTRANS by HH_CBSA. Available: https://nhts.ornl.gov/. Accessed: January 2021.

VMT Reduction Mitigation Measures

Mitigation Measure (from CAPCOA Report)	Feasibility
TDM-T-7-Implement Commute Trip Reduction Marketing	Yes - However, not quantifiable for the Proposed Project due to the implementation requirements or measure description in relation to Proposed Project's land use (i.e., a residential project rather than an employment project).
TDM-T-8-Provide Ridesharing Program	No - Not financially feasible for project to host and implement a ridesharing program.
TDM-T-9-Implement Subsidized or Discounted Transit Program	Yes - Providing 10% subsidized transit passes.
TDM-T-10-Provide End-of-Trip Bicycle Facilities	Yes - However, not quantifiable for the Proposed Project due to the implementation requirements or measure description in relation to Proposed Project's land use (i.e., a residential project rather than an employment project).
TDM-T-14-Provide Electric Vehicle Charging Infrastructure	No - Although project is providing EV ready infrastructure as well as several EV charging ready visitor guest parking, these only meet the City's minimum requirements. Additionally, EV charging infrastructure only reduces gas emissions and does not reduce VMT.
TDM-T-15-Limit Residential Parking Supply	No - Not feasible to reduce parking for this residential project.
TDM-T-18-Provide Pedestrian Network Improvement	No - Although the project is providing pedestrian improvements within project site and project frontage, it is not financially feasible to provide pedestrian network improvements beyond the project site.
TDM-T-21-A-Implement Conventional Carshare Program	No - Not financially feasible for project to implement a carshare program.
TDM-T-21-B-Implement Electric Carshare Program	No - Not financially feasible for project to implement an electric carshare program.
TDM-T-22-A-Implement Pedal (Non-Electric) Bikeshare Program	No - Not financially feasible for project to implement a pedal bikeshare program.
TDM-T-22-B-Implement Electric Bikeshare Program	No - Not financially feasible for project to implement an electric bikeshare program.
TDM-T-22-C-Implement Scootershare Program	No - Not financially feasible for project to implement a scootershare program.

Appendix K-2

Local Transportation Analysis Report

GRAN VISTA MULTI-FAMILY

FINAL
Local Transportation Analysis

FEBRUARY 2023

Prepared For

MLC Holdings, Inc
2603 Camino Ramon, Suite 140
San Ramon, CA 94583

Prepared By

CR Associates
3900 Fifth Avenue, Suite 310
San Diego, CA 92103

Executive Summary

Project Description and Setting

The Proposed Project seeks to construct 120 multi-family dwelling units on a vacant property approximately 250 feet northwest of the West Mission Road and North Las Posas Road intersection in the City of San Marcos. The property is bordered by North Las Posas Road on the northeast side, West Mission Road on the southwest side, single family dwelling units on the northwest side, and a CVS pharmacy to the south. Per the City's General Plan, the site is designated as a Commercial (C) land use.

The Proposed Project will share two existing driveways with the adjacent CVS pharmacy with one located off North Las Posas Road and the other off West Mission Road. The access off North Las Posas Road is via a signalized intersection at North Las Posas Road / Palm Road (Driveway 1), and the access off West Mission Road is via a side-street (the CVS driveway) stop controlled intersection that does not allow left-turn out movement (Driveway 2). The assumed opening year of the Proposed Project is 2024.

Per the City's Transportation Impact Analysis Guidelines (TIAG), trip generation rates were derived from the SANDAG's (not so) Brief Guide to Vehicular Traffic Generation Rates for the San Diego Region (April 2002).

The Proposed Project is anticipated to generate 960 daily trips, including 77 trips (15-in/62-out) during the AM peak hour and 96 (67-in/29-out) trips during the PM peak hour.

The following four (4) roadway segments and three (3) intersections were included for analysis:

Roadway Segments

- North Las Posas Road, between Palm Road and West Mission Road
- North Las Posas Road, between West Mission Road and Armorlite Drive
- West Mission Road, between Pacific Street and North Las Posas Road
- West Mission Road, between North Las Posas Road and Palomar College Driveway

Intersections

1. North Las Posas Road & Project Driveway #1/Palm Road (Signal)
2. West Mission Road & Project Driveway #2 (Side-Street Stop-Controlled)
3. North Las Posas Road & West Mission Road (Signal)

The level of service (LOS) analysis conducted as a part of this study was used to evaluate the effects of the Proposed Project on the circulation network. Per the City of San Marcos Transportation Impact Analysis Guidelines (TIAG), the City of San Marcos strives to maintain intersection and roadway segment operations based on LOS standards outlined in the General Plan Mobility Element. Improvements should be identified for any study facilities that do not meet City LOS standards to increase performance to acceptable or pre-project conditions.

LOS Deficiencies and Improvement Requirements

Determination of the Need for Off-Site Improvements to Accommodate Project Traffic – Near-Term Year 2024 with Project Conditions

Roadway Segment Analysis
No improvements required.

Intersection Analysis
No improvements required.

Determination of the Need for Off-Site Improvements to Accommodate Project Traffic – Horizon Year 2050 with Project Conditions

Roadway Segment Analysis
No improvements required.

Intersection Analysis
No improvements required.

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Appendix L - Queueing Analysis Worksheets

1.0 Introduction

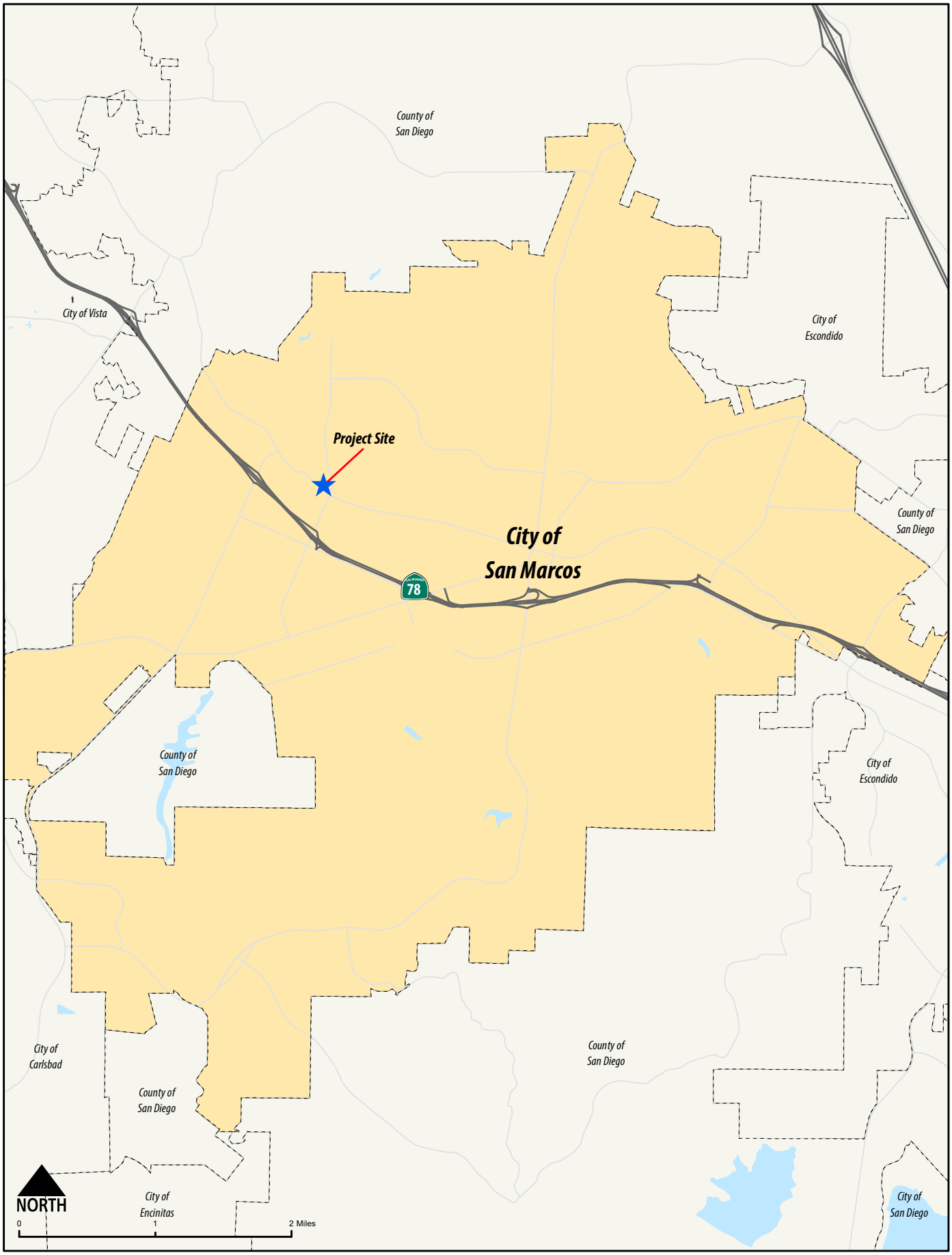
The purpose of this Local Transportation Analysis is to identify and document the effects on the circulation network associated with the Gran Vista Multi-Family project (the "Proposed Project"), and to recommend improvements, as necessary.

1.1 Project Description

The Proposed Project seeks to construct 120 multi-family dwelling units on a vacant property approximately 250 feet northwest of the West Mission Road and North Las Posas Road intersection in in the City of San Marcos. The property is bordered by North Las Posas Road on the northeast side, West Mission Road on the southwest side, single family dwelling units on the northwest side, and a CVS pharmacy to the south. Per the City's General Plan, the site is designated as a Commercial (C) land use.

The Proposed Project will share two existing driveways with the adjacent CVS pharmacy with one located off North Las Posas Road and the other off West Mission Road. The access off North Las Posas Road is via a signalized intersection at North Las Posas Road / Palm Road (Driveway 1), and the access off West Mission Road is via a side-street (the CVS driveway) stop controlled intersection that does not allow left-turn out movements (Driveway 2). The assumed opening year of the Proposed Project is 2024. **Figure 1.1** displays the Proposed Project's regional location. **Figure 1.2** displays the site plan for the Proposed Project.

The LOS analysis conducted as a part of this study was used to evaluate the effects of the Proposed Project on the circulation network. Per the City's TIAG, the City of San Marcos strives to maintain intersection and roadway segment operations based on LOS standards outlined in the General Plan Mobility Element. Improvements should be identified for any study facilities that do not meet City LOS standards to increase performance to acceptable or pre-project conditions.



Gran Vista Multi-Family
Local Transportation Analysis

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Figure 1.1
Project Regional Location

Three-Story Townhomes

- For-sale attached townhomes provide an efficient use of land and a more financially attainable housing solution that is compatible with adjacent single family uses
- Located near SPRINTER light rail line (nearest stop is 0.4 miles) to support transit use, promote walkabilty, and potentially reduce VMT and emissions
- Withing walking dictance of retail, parks, schools and other everyday services
- Implements Policy LU-2.1 of the 2020 Climate Action Plan to "Promote compact development patterns that reduce air pollution and automobile dependence and facilitate walking, bicycling, and transit use".

Las Posas Road Frontage/Paseos

- Varied building orientation breaks up massing and provides for an eclectic and interesting street scene
- Paseo access and landscaped pedestrian pathways provide connectivity to existing sidewalks to promote walkability
- Shade trees and landscaping soften the street scene and provide pedestrian comfort

Typical Tot Lot/Excercise Station

- Tot lots with play equipment (three areas shown in red) provided throughout site area are located adjacent to barbecues and other amenities to encourage family and community gathering
- Outdoor excercise equipment (three areas shown in blue) provides an exercise loop through the community to encourage and support fitness

Community Garden

- Raised planter beds with decompsed granite pathways encourage healthy eating and wellness
- Enhanced with a potting table and storage benches

Dog Park

- Off-leash dog area for residents to excercise and enjoy pets
- Fenced with tublar steel fencing to provide an "open" appearance
- Artificial turf surface for durability and easy maitenance
- Dog clean-up station, double gated entry, and other amenities

Primary Community Entry

- Maintains existing site access at signalized intersection
- Provides front doors facing entry for a welcoming street scene
- Enhanced paving and landscaping to be designed by landscape architect



Project Summary

Gross Area: 7.6 Acres

Total Units: 120 Homes
- 30 - Plan 2532: 1,213 Sq.Ft., 2 Bed, side-by-side garage
- 45 - Plan 1633: 1,505 Sq.Ft., 3 Bed, tandem garage
- 45 - Plan 1636: 1,802 Sq.Ft., 3 Bed, side-by-side garage

Total Open Space:
- 17,550 Sq.Ft. of Private Open Space
- 44,548 Sq.Ft. of Open space with grades of 10% or more
- 92,645 Sq.Ft. of Common Recretaion Area
- 154,743 Sq.Ft. Total

Parking
- 240 Garage Spaces (Includes 45 Tandem)
- 20 Guest Spaces (Includes 2 ADA Spaces and 2 EV Spaces)
- 37 Existing Spaces (Existing on-site spaces adjacent to CVS)
- 297 Total Spaces (including existing spaces)

Notes:
1. APNs 219-121-15 & 16
2. Existing General Plan Designation: Commercial (C)
3. Proposed General Plan Designation: Specific Plan Area (SPA)
4. Existing Zoning Designation: Commercial (C)
5. Proposed Zoning Designation: Specific Plan Area (SPA)
6. Total building square footage: 185,205 SF
7. Required common open space: 24,431 SF
8. Required private open space: 6,000 SF

Central Recreation Area

- Centrally located near the primary entry to provide a focal point for the community
- Amenities include lawn game area with artificial turf, barbecue counter with bar, seating, and more
- Located adjacent to a tot lot to promote family and social gathering
- Underground vaults provide storm water treatment

Children's Play Area

- Larger play area with multi-age play equipment
- Located adjacent to barbecue counter and seating area to promote family and social gathering

Secondary Community Entry

- Maintains existing site access with left/right in and right-out only turning movements
- Enhanced by adjacent open space areas, special paving and landscaping

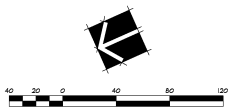
Turf Play Area

- Open artificial turf play area
- Can be used for badminton, pick-up soccer, Frisbee and other informal games
- Underground vaults provide storm water treatment

Neighborhood Edge

- Buildings oriented to minimize windows
- Landscape planting designed to provide additional screening to maximize privacy of existing single-family homes

ILLUSTRATIVE SITE PLAN



PREPARED BY:

gmp
3176 Lionshead Ave, Suite 102
Carlsbad, CA 92010
gmplandarch.com
T 858 558 8977
LANDSCAPE ARCHITECTURE & PLANNING

MeritageHomes
Setting the standard for energy-efficient homes

MLC Holdings, Inc.

SITE DEVELOPMENT PLAN FOR
GRAN VISTA
LAS POSAS RD.
City of San Marcos, California

SHEET
P-1

1.2 Report Organization

Following this introductory chapter, this report is organized into the following chapters:

2. Analysis Methodology – This chapter reviews the methods utilized to evaluate any potential General Plan inconsistencies associated with the implementation of the Proposed Project, as required by the City of San Marcos Transportation Impact Analysis Guidelines (TIAG).
3. Project Traffic - This chapter describes the Proposed Project's land uses and associated trip generation. Additional information such as trip distribution patterns and project trip assignment are also included in this chapter, which is used to determine the project study area.
4. Active Transportation – This chapter describes and evaluates the existing active transportation facilities network at the project frontage and provides improvement recommendations as appropriate.
5. Existing Conditions – This chapter describes and evaluates the existing transportation network. Vehicular operations within the study area are evaluated. LOS analysis results are also provided for existing vehicular traffic conditions.
6. Near-Term Year 2024 Conditions – This chapter describes near-term developments anticipated to generate additional study area trips and establishes a near-term baseline against which traffic generated by the Proposed Project can be compared to at the project opening day, assumed to be Year 2024. LOS analysis results are also provided for Near-Term Year 2024 Base and Near-Term Year 2024 Base with Project vehicular traffic conditions.
7. Horizon Year 2050 Conditions – This chapter describes projected long-range conditions of the transportation network within the study area. Horizon Year 2050 scenario analysis is required per the City's TIAG. LOS analysis results are also provided for Horizon Year 2050 and Horizon Year 2050 with Project vehicular traffic conditions.
8. LOS Deficiencies and Improvement Requirements - This chapter identifies any substandard facilities and provides improvement requirements to improve substandard facilities to acceptable LOS or pre-project conditions.
9. Site Access & Circulation – This chapter addresses access to the Proposed Project site and discusses the functionality of the Proposed Project's internal circulation.
10. Parking – This chapter describes the parking requirements for the project as well as the proposed parking spaces to be provided by the project.
11. Sight Distance – This chapter includes a sight distance analysis at the two project driveways and provides recommendations to improve line-of-sight conditions, as appropriate.

2.0 Analysis Methodology

This study was performed in accordance with the standards and requirements in the City of San Marcos TIAG (November 2020). All analysis assumptions were documented within a scoping agreement memorandum, provided in **Appendix A**, and approved by the City of San Marcos. The following sections describe the analysis methods per the City's TIAG to evaluate the traffic effect as a result of the Proposed Project in relation to LOS.

2.1 Level of Service (LOS) Definition

Level of Service (LOS) is a quantitative measure describing operational conditions within a traffic stream, and the motorist's and/or passengers' perception of operations. A LOS definition generally describes these conditions in terms of such factors as delay, speed, travel time, freedom to maneuver, interruptions in traffic flow, queuing, comfort, and convenience. **Table 2.1** describes generalized definitions of the various LOS categories (A through F) as applied to roadway operations.

Table 2.1 - LOS Definitions

LOS Category	Definition of Operation
A	This LOS represents a completely free-flow condition, where the operation of vehicles is virtually unaffected by the presence of other vehicles and only constrained by the geometric features of the highway and by driver preferences.
B	This LOS represents a relatively free-flow condition, although the presence of other vehicles becomes noticeable. Average travel speeds are the same as in LOS A, but drivers have slightly less freedom to maneuver.
C	At this LOS, the influence of traffic density on operations becomes marked. The ability to maneuver within the traffic stream is clearly affected by other vehicles.
D	At this LOS, the ability to maneuver is notably restricted due to traffic congestion, and only minor disruptions can be absorbed without extensive queues forming and the service deteriorating.
E	This LOS represents operations at or near capacity. LOS E is an unstable level, with vehicles operating with minimum spacing for maintaining uniform flow. At LOS E, disruptions cannot be dissipated readily thus causing deterioration down to LOS F.
F	At this LOS, forced or breakdown of traffic flow occurs, although operations appear to be at capacity, queues form behind these breakdowns. Operations within queues are highly unstable, with vehicles experiencing brief periods of movement followed by stoppages.

Source: Highway Capacity Manual 6th Edition

2.2 Roadway Segment LOS Standards and Thresholds

Roadway segment LOS standards and thresholds provide the basis for analysis of arterial roadway segment performance. The analysis of roadway segment LOS is based on the functional classification of the roadway, the maximum capacity, roadway geometrics, and existing or forecast Average Daily Traffic (ADT) volumes. **Table 2.2** displays roadway segment capacity standards found in the City's TIAG. The actual capacity of a roadway facility varies according to its physical attributes.

Table 2.2 - Roadway Segment Daily Capacity and LOS Standards

Street Classification	LOS/ADT Thresholds				
	A	B	C	D	E
Expressway (6-lane)	< 30,000	< 42,000	< 60,000	**< 70,000**	< 80,000
Prime Arterial (6-lane)	< 25,000	< 35,000	< 50,000	**< 55,000**	< 60,000
Major Arterial (6-lane, divided)	< 20,000	< 28,000	< 40,000	**< 45,000**	< 50,000
Major Arterial (4-lane, divided)	< 15,000	< 21,000	< 30,000	**< 35,000**	< 40,000
Major Arterial (3-lane, one-way)	< 12,500	< 16,500	< 22,500	**< 25,000**	< 27,500
Major Arterial (2-lane, one-way)	<10,000	<13,000	<17,500	**<20,000**	<22,500
Secondary Arterial / Collector (4-lane w/ center lane)	< 10,000	< 14,000	< 20,000	**< 25,000**	< 30,000
Collector (4-lane w/o center lane)	< 5,000	< 7,000	< 10,000	**< 13,000**	< 15,000
Collector (2-lane w/ continuous left-turn lane)	< 5,000	< 7,000	< 10,000	**< 13,000**	< 15,000
Collector (2-lane no fronting property)	< 4,000	< 5,500	< 7,500	**< 9,000**	< 10,000
Collector (2-lane w/ commercial fronting)	< 2,500	< 3,500	< 5,000	**< 6,500**	< 8,000
Collector (2-lane w/ multi-family)	< 2,500	< 3,500	< 5,000	**< 6,500**	< 8,000
Collector (3-lane, one-way)	< 11,000	< 14,000	< 19,000	**< 22,500**	< 26,000
Collector (2-lane, one-way)	< 7,500	< 9,500	< 12,500	**< 15,000**	< 17,500
Collector (1-lane, one-way)	< 2,500	< 3,500	< 5,000	**< 6,500**	< 7,500
Sub-Collector (2-lane single family)	-	-	**< 2,200**	-	-

Source: City of San Marcos Transportation Impact Analysis Guidelines (November 2020)

Note:
Bold number indicates the ADT thresholds for acceptable LOS.

These standards are generally used as long-range planning guidelines to determine the functional classification of roadways. The actual capacity of a roadway varies according to its physical attributes. Typically, the performance and LOS of a roadway segment is heavily influenced by the ability of its intersections to accommodate peak hour traffic volumes. For the purposes of this traffic analysis, LOS D or better is considered acceptable for circulation element roadway segments.

2.3 Peak Hour Intersection LOS Standards and Thresholds

This section presents the methodologies used to perform peak hour intersection capacity analyses at signalized and unsignalized intersections within the study area. The following assumptions were utilized in conducting all intersection LOS analyses:

- Peak Hour Factor (PHF) – Field-collected PHF for Existing and Near-Term Year 2024 Base Conditions. A PHF of 0.95 was assumed for Horizon Year 2050 analysis.
- Lane Utilization Factor – HCM 6th Edition defaults were used for all scenarios.
- Conflicting Pedestrians/Bicycles – Existing pedestrian and bicycle counts are utilized for all scenarios.
- Signal Timing – Based on existing signal timing plans (as of March 2022), provided in **Appendix B**.

2.3.1 Signalized Intersections

The analysis of signalized intersections utilized the operational analysis procedure as outlined in the Highway Capacity Manual (HCM) 6th Edition signalized (Chapter 19) intersection analysis methodology. This method defines LOS in terms of delay, or more specifically, average stopped delay per vehicle. Delay is a measure of driver and/or passenger discomfort, frustration, fuel consumption and lost travel time. This technique uses 1,900 vehicles per hour per lane (VPHPL) as the maximum saturation volume of an intersection. This saturation volume is adjusted to account for lane width, on-street parking, pedestrians, traffic composition (i.e., percentage trucks) and shared lane movements (i.e., through and right-turn movements originating from the same lane). The LOS criteria used for the analysis of signalized intersections are described in **Table 2.3**, identifying the thresholds of control delays and the associated LOS. The computerized analysis of intersection operations was performed utilizing the Synchro Version 11 traffic analysis software by Trafficware Ltd.

Table 2.3 - Signalized Intersection LOS Operational Analysis Method

Average Stopped Delay Per Vehicle (Seconds)	LOS Characteristics
<10	LOS A describes operations with very low delay. This occurs when progression is extremely favorable, and most vehicles do not stop at all. Short cycle lengths may also contribute to low delay.
>10– 20	LOS B describes operations with generally good progression and/or short cycle lengths. More vehicles stop than for LOS A, causing higher levels of average delay.
>20 – 35	LOS C describes operations with higher delays, which may result from fair progression and/or longer cycle lengths. Individual cycle failures may begin to appear at this level. The number of vehicles stopping is significant at this level, although many still pass through the intersection without stopping.
>35– 55	LOS D describes operations with high delay, resulting from some combination of unfavorable progression, long cycle lengths, or high volumes. The influence of congestion becomes more noticeable, and individual cycle failures are noticeable.
>55 – 80	LOS E is considered the limit of acceptable delay. Individual cycle failures are frequent occurrences.
>80	LOS F describes a condition of excessively high delay, considered unacceptable to most drivers. This condition often occurs when arrival flow rates exceed the LOS D capacity of the intersection. Poor progression and long cycle lengths may also be major contributing causes to such delay.

Source: Highway Capacity Manual 6th Edition

2.3.2 Unsignalized Intersections

Unsignalized intersections were analyzed using the Highway Capacity 6th Edition side-street stop (Chapter 20) and all-way stop (Chapter 21) intersection analysis methodology. The computerized analysis of intersection operations was performed utilizing the Synchro Version 11 traffic analysis software by Trafficware Ltd.

LOS was determined as follows:

- All-way stop intersections: Reported for the entire intersection as an average value
- Side-street stop intersections: Reported for the worst-case movement

The LOS criteria used for the analysis of unsignalized intersections are described in **Table 2.4**.

Table 2.4 - LOS Criteria for Stop-Controlled Unsignalized Intersections

Average Stopped Delay Per Vehicle (Seconds)	LOS
0 – 10	A
>10 – 15	B
>15 – 25	C
>25 – 35	D
>35 – 50	E
> 50	F

Source: Highway Capacity Manual 6th Edition

2.4 Determination of Project Study Area

Per the City's TIAG, the study area was defined using the following criteria:

- Signalized and unsignalized intersections along and adjacent to the project site
- Site access driveways
- Any classified (non-residential) roadway segments that are linked to the intersections that are being studied

2.5 City of San Marcos LOS Standards

This section outlines the Mobility Element Policies that are relevant to the Proposed Project. The City of San Marcos strives to maintain intersection and roadway segment operations LOS standards based on the following policy:

- Policy M-1.4: LOS D or better for Vehicles as a prioritized mode – Generally provides facilities that have minimum vehicle congestion during peak periods. Most motorists are delayed less than 55 seconds at a signal (or less than one signalized cycle).

Based on the policy listed above, LOS D or better is considered acceptable for study roadway segments and intersections. The TIAG provides the following thresholds to determine if the Proposed Project is required provide improvements for study area facilities:

- Implementation of the Proposed Project triggers a roadway segment operating at acceptable LOS to operate at unacceptable LOS and increases the volume/capacity (V/C) ratio by more than 0.02.
- Implementation of the Proposed Project increases the V/C ratio for a study roadway segment that is already operating at unacceptable LOS by more than 0.02.
- Implementation of the Proposed Project triggers an intersection operating at acceptable LOS to operate at unacceptable LOS and increases the average delay per vehicle by more than 2.0 seconds.
- Implementation of the Proposed Project increases the average delay for a study intersection that is already operating at unacceptable LOS by more than 2.0 seconds.

Improvements should be identified to increase performance to acceptable or pre-project conditions under each scenario.

3.0 Project Traffic

This chapter describes the Proposed Project including the Proposed Project's trip generation, trip distribution patterns, and project trip assignment.

3.1 Project Trip Generation

Per the City's TIAG, trip generation rates were derived from the SANDAG's (not so) Brief Guide to Vehicular Traffic Generation Rates for the San Diego Region (April 2002). **Table 3.1** displays the projected daily, as well as AM and PM peak hour, project trip generation.

Table 3.1 - Project Trip Generation

Land Use	Units	Trip Rate	ADT	AM Peak Hour					PM Peak Hour				
				%	Trips	Split	In	Out	%	Trips	Split	In	Out
Multi-Family (6-20 DU/acre)	120 DU	8/DU	960	8	77	2:8	15	62	10	96	7:3	67	29

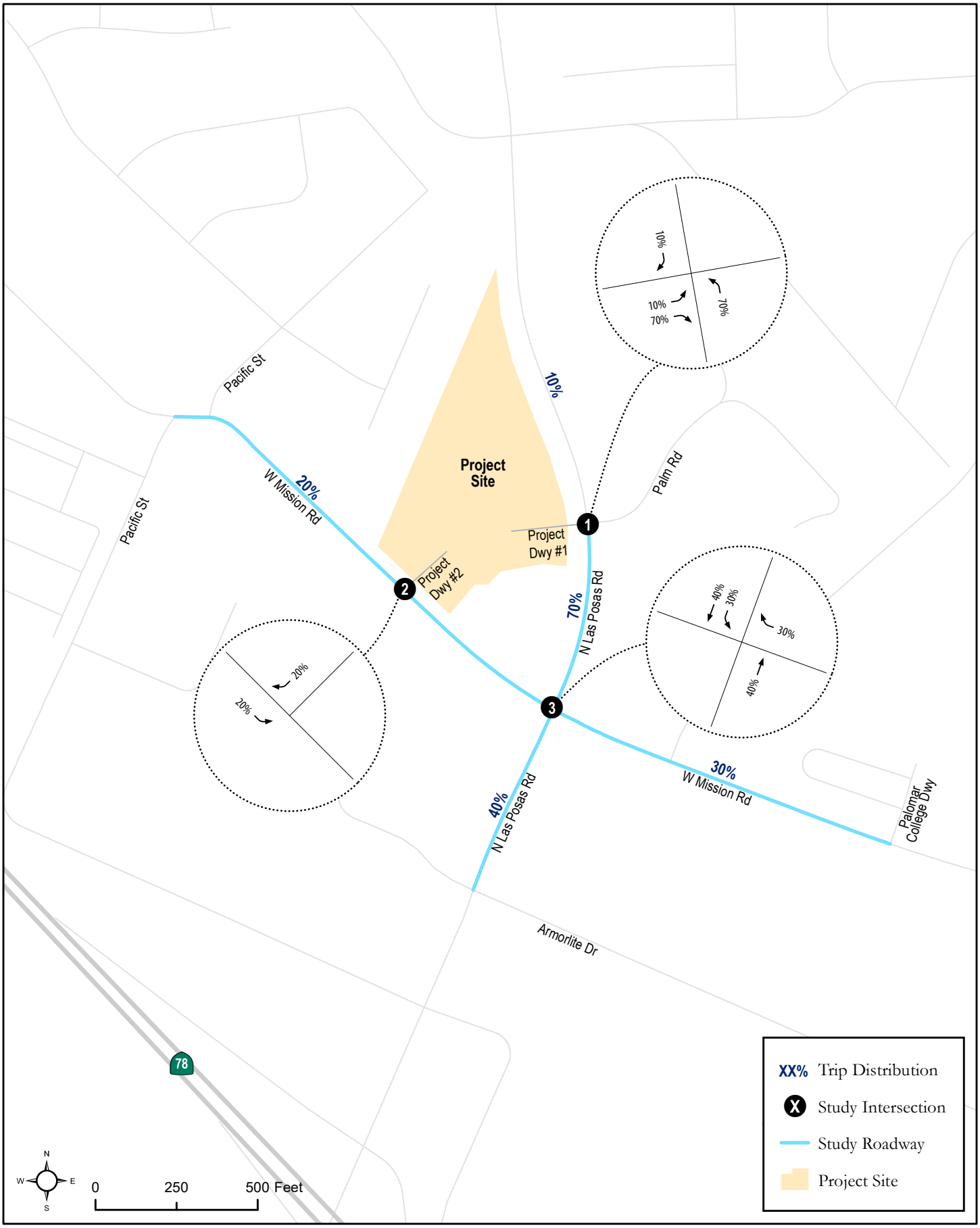
Source: SANDAG (not so) Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region, April 2002)

Notes:
ADT = Average Daily Traffic
DU = Dwelling Unit

As shown, the Proposed Project is anticipated to generate 960 daily trips, including 77 trips (15-in/62-out) during the AM peak hour and 96 (67-in/29-out) trips during the PM peak hour.

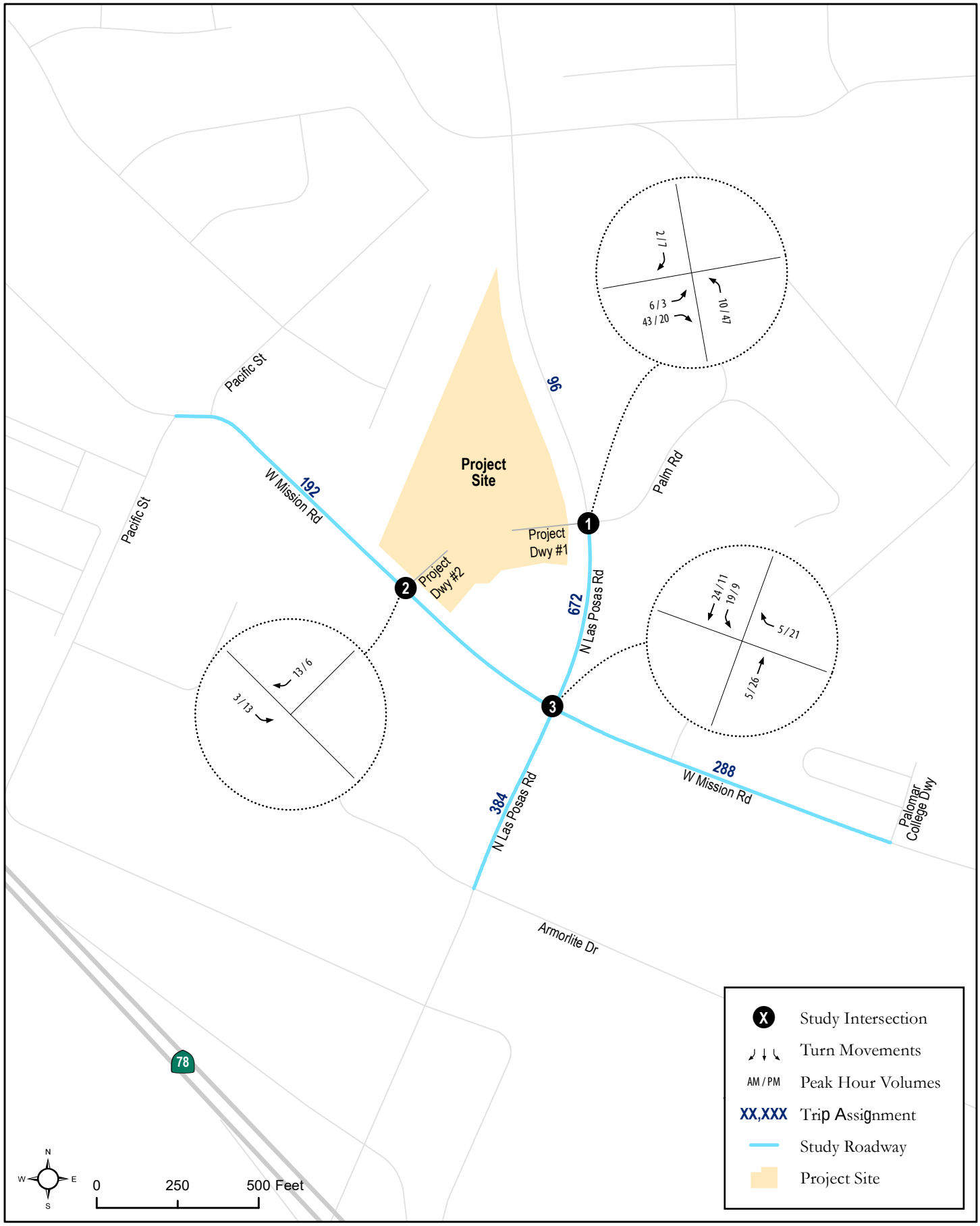
3.2 Project Trip Distribution and Assignment

The project trip distribution was manually developed based on the geographical location of the Project, as well as the characteristics of the proposed and surrounding land uses. **Figure 3.1** displays the regional trip distribution for the Proposed Project. Based upon the project trip distribution patterns, AM/PM peak hour project trips were assigned to the adjacent roadway network. **Figure 3.2** displays the Proposed Project's intersection trip assignment.



Gran Vista Multi-Family
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Figure 3.1
Project Trip Distribution



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Figure 3.2
Project Trip Assignment

3.3 Project Study Area

Based on the criteria previously outlined in Chapter 2.7, the project trip assignment shown in Figure 3.2, and preliminary project scoping with City of San Marcos, the following four (4) roadway segments and three (3) intersections were included for analysis:

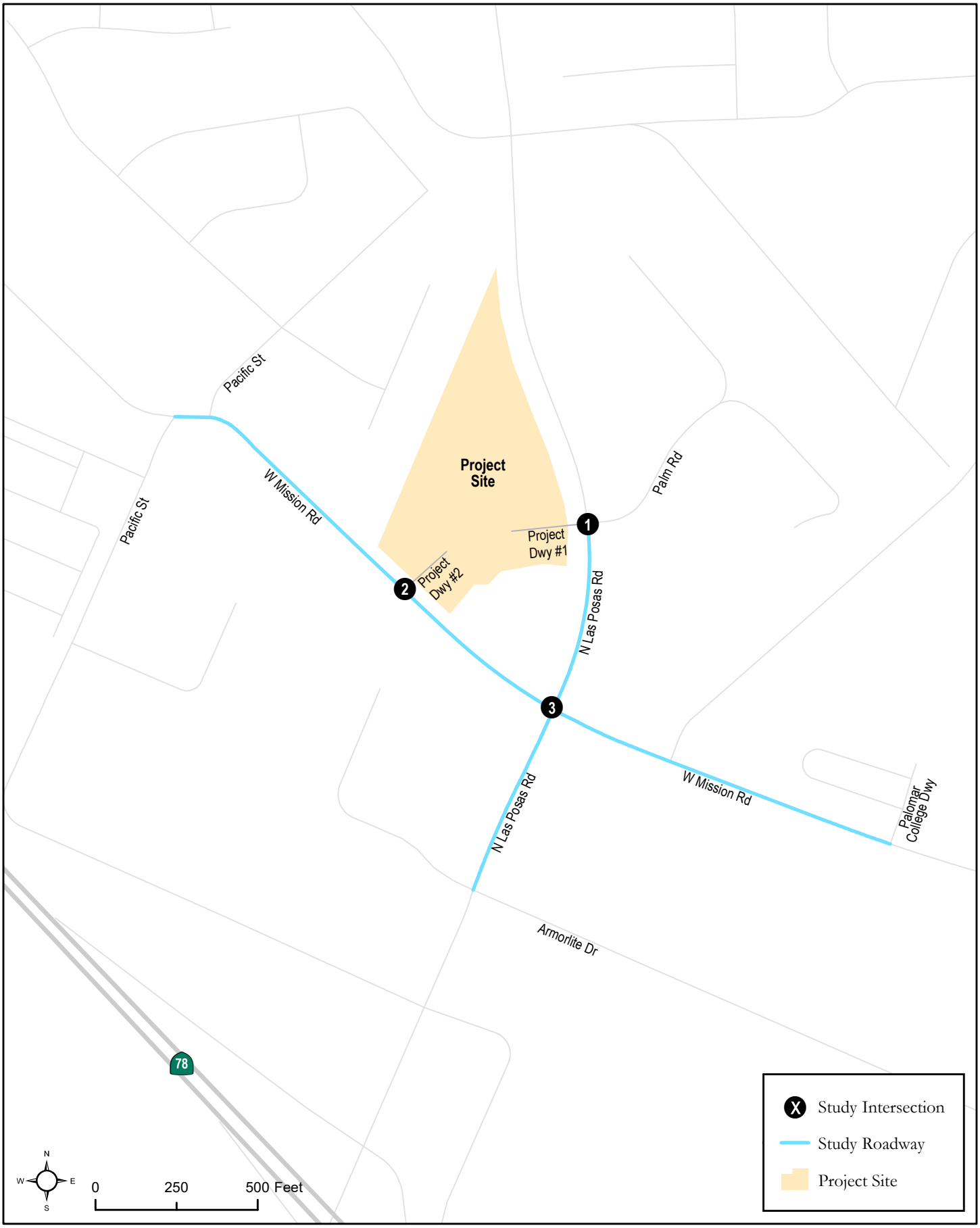
Roadway Segments

- North Las Posas Road, between Palm Road and West Mission Road
- North Las Posas Road, between West Mission Road and Armorlite Drive
- West Mission Road, between Pacific Street and North Las Posas Road
- West Mission Road, between North Las Posas Road and Palomar College Driveway

Intersections

1. North Las Posas Road & Project Driveway #1/Palm Road (Signal)
2. West Mission Road & Project Driveway #2 (Side-Street Stop-Controlled)
3. North Las Posas Road & West Mission Road (Signal)

Figure 3.3 displays the overall project study area.



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Figure 3.3
Project Study Area

4.0 Active Transportation

4.1 Active Transportation Evaluation

This section discusses the project site's active transportation modes

4.1.1 Transit Access

The project site is within one half mile of the transit lines serviced by North County Transit District (NCTD) described below:

- Bus Route 304 – This bus route is serviced along West Mission Road in the eastbound/westbound direction within the project study area. This bus route connects the Palomar College Transit Center to the Encinitas Transit Station. Operations starts at 4:53 AM and ends at 8:23 PM between Monday and Friday with 30-minute intervals. On Saturdays, operations start at 6:53 AM and ends at 9:05 PM with 60-minute intervals. This route does not operate on Sundays.
- Bus Route 305 – This bus route is serviced along West Mission Road in the eastbound/westbound direction within the project study area. This bus route connects the Vista Transit Center to the Escondido Transit Center. Operations starts at 4:37 AM and ends at 11:30 PM between Monday and Friday with 30-minute intervals. On Saturdays and Sundays, operations start at 5:34 AM and ends at 11:31 PM with 30-minute intervals.
- Bus Route 347 – This bus route is serviced along West Mission Road and North Las Posas Road within the project study area. This bus route connects the Palomar College Transit Center to the CSU San Marcos SPRINTER Station. Operations starts at 5:31 AM and ends at 7:21 PM between Monday and Friday with 30-minute intervals. On Saturdays, operations start at 7:22 AM and ends at 7:08 PM with 60-minute intervals. This route does not operate on Sundays.
- Bus Route 445 – This bus route is serviced along West Mission Road and North Las Posas Road within the project study area. This bus route connects the Palomar College Transit Center to the Carlsbad Poinsettia Station (COASTER Connection). Between Monday and Friday, operations start at 6:34 AM and ends at 10:19 AM with 30-minute intervals for the morning period. Similarly, between Monday and Friday, operates start at 3:36 PM and ends at 7:19 PM with 30-minutes intervals for the afternoon period. This route does not operate on Saturdays or Sundays.
- SPRINTER – This light rail line runs between Oceanside Transit Center and Escondido Transit Center (eastbound and westbound direction). The nearest stop to the project site is the Palomar College Transit Center. Operation starts at 4:17 AM and ends at 9:10 PM between Monday and Sunday with 30-minute intervals.

Based on the preliminary review of the Proposed Project's site plan, the Proposed Project would not conflict with existing or planned transit facilities and would not result in any impacts to transit facilities.

4.1.2 Bicycle

Under Existing conditions, Class II bicycle facilities exist along the project frontage on North Las Posas Road and West Mission Road. Additionally, a Class I multi-use path exists along the south side of West Mission Road. This Class I multi-use path is identified as the Inland Rail Trail which is a proposed 21-mile facilities that will eventually connect both the City of Oceanside and Escondido while passing through San Marcos, Vista, and unincorporated areas of the San Diego County. The Inland Rail Trail is expected to be fully constructed some time in 2024.

Per the City of San Marcos General Plan, there are no planned bicycle facilities improvements along the project frontage. Based on the preliminary review of the Proposed Project's site plan, the Proposed Project would not conflict with existing bicycle facilities and would not result in any impacts to bicyclist safety and accessibility.

4.1.3 Pedestrian

Sidewalks are proposed along the project frontage along North Las Posas Road and West Mission Road. Sidewalks are also proposed throughout the internal roadways providing direct access to the dwelling units as well as on-site amenities (dog park, community garden, and recreational stations/areas).

Based upon review of the project site plan, the following recommendations are provided:

- Curb ramps at the project driveways are recommended to be reconstructed, if needed, with detectable surface warning tactiles (yellow truncated domes) as well as meeting all ADA requirements. Additionally, it is recommended that a continental crosswalk is striped, to the satisfaction of the City Traffic Engineer, at the north leg of the intersection of North Las Posas Road and West Mission Road. For details on the determination of this recommendation (continental crosswalk at north leg of intersection of North Las Posas Road and West Mission Road) see **Appendix C**.

With implementation of the recommendation listed above, the overall pedestrian environment should be enhanced for both walkability and safety and would not result in any impacts to pedestrian facilities.

5.0 Existing Conditions

This chapter provides a qualitative description of the transportation facilities located in the Proposed Project study area. An LOS analysis of the existing operations of the local transportation network facilities is also provided for study roadway segments and intersections.

5.1 Existing Transportation Network

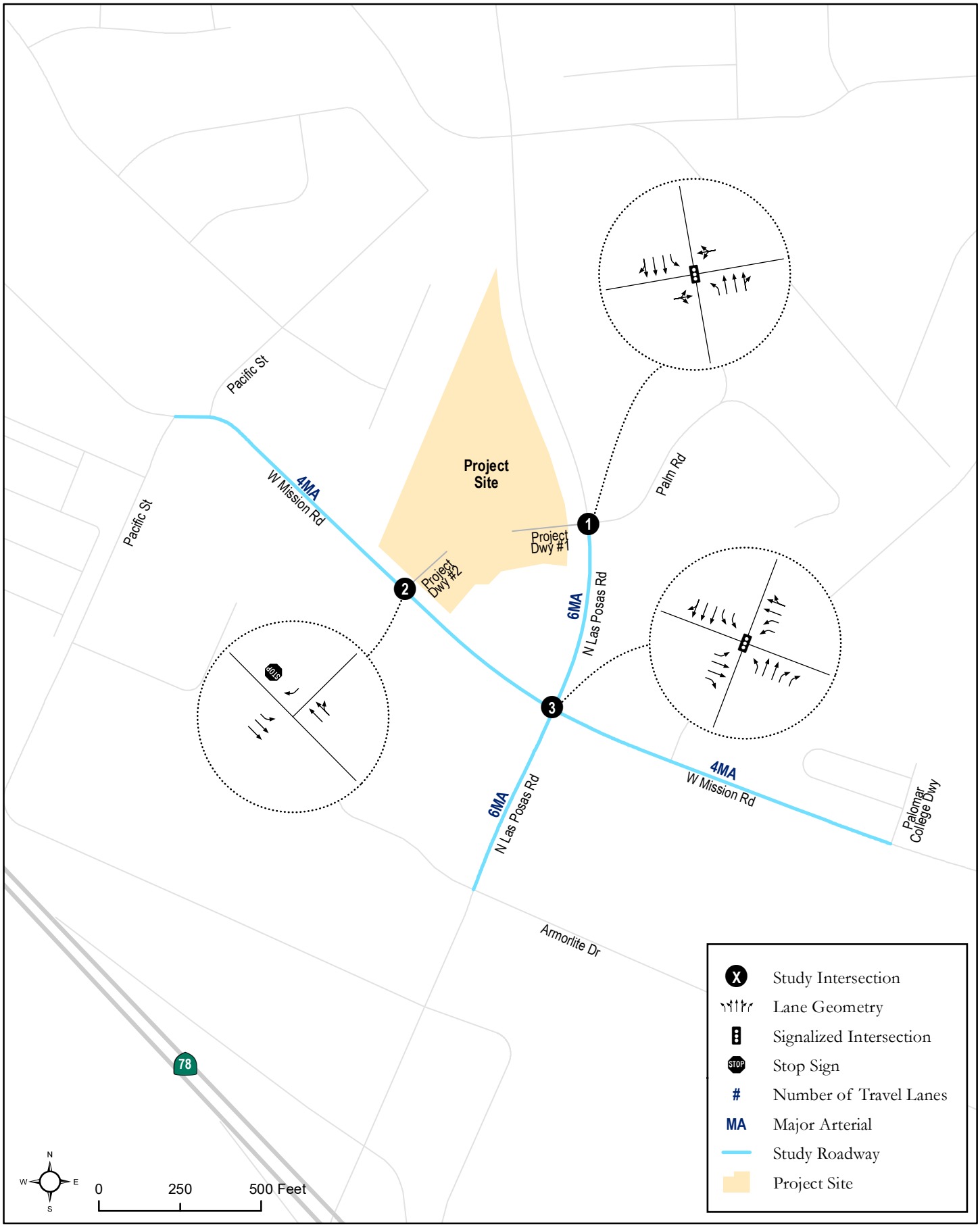
Access to the Proposed Project from the regional transportation network will be provided via California State Route 78 (SR-78) freeway, North Las Posas Road, and West Mission Road. These facilities will either provide a direct connection to Proposed Project, via project driveway, or will provide a critical link between the Proposed Project and the regional transportation network. **Table 5.1** summarizes the existing physical characteristics of roadways within the study area, while **Figure 5.1** displays the roadway classifications and study intersection geometrics under Existing Conditions.

Table 5.1 - Existing Transportation Network Characteristics

Roadway	From	To	Number of Lanes	Median Type	Sidewalk?	Bike lanes?	Transit Route	Posted Speed Limit
North Las Posas Road	North of West Mission Road		3 NB/3 SB	Raised	Both Sides	Class II	None	45 MPH
North Las Posas Road	West Mission Road	Armorlite Drive	2 NB/3 SB	Raised	Both Sides	Class II	347 445	45 MPH
West Mission Road	Pacific Street	630' West of North Las Posas Road	2 EB/2 WB	CLTL	None	Class II Class I Multi-Use (south side only)	304 305	40 MPH
West Mission Road	630' West of North Las Posas Road	North Las Posas Road	2 EB/2 WB	Raised	North Side	Class II Class I Multi-Use (south side only)	304 305	40 MPH
West Mission Road	North Las Posas Road	Palomar College Driveway	2 EB/2 WB	Striped	North Side	Class II Class I Multi-Use (south side only)	304 305 347 445	45 MPH

Source: CR Associates (2022)

Note:
CLTL = Continuous Left-Turn Lane.



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Figure 5.1
Roadway Classification and Intersection Geometrics
Existing Conditions

5.2 Existing Intersection Volumes

The study area intersections and roadway traffic counts were conducted on June 15, 2021 by Elite Traffic Dynamics, LLC. To ensure that current travel patterns reflect traffic conditions prior to the COVID-19 restrictions, a count validation was conducted. Historic counts conducted on March 3, 2020 were obtained from National Data & Surveying Services (NDS). After comparison of recently collected counts with historic counts, it was determined that historic counts were greater than recent counts. Growth rates based on difference between existing and historic were applied to counts collected in 2021 for both peak hour intersection turning movements and daily traffic, where applicable.

Traffic count worksheets and count validation calculations are provided in **Appendix D**. **Figure 5.2** displays both existing daily traffic volumes for study area roadway segments and the AM/PM peak hour turning movements for the study intersections.

5.3 Existing Traffic Conditions

LOS analyses under Existing Conditions were conducted using the methodologies described in Chapter 2. Roadway segment and intersection LOS analysis results are discussed below.

5.3.1 Roadway Segment Analysis

Table 5.2 displays roadway segments and LOS analysis results for study roadway segments under Existing conditions.

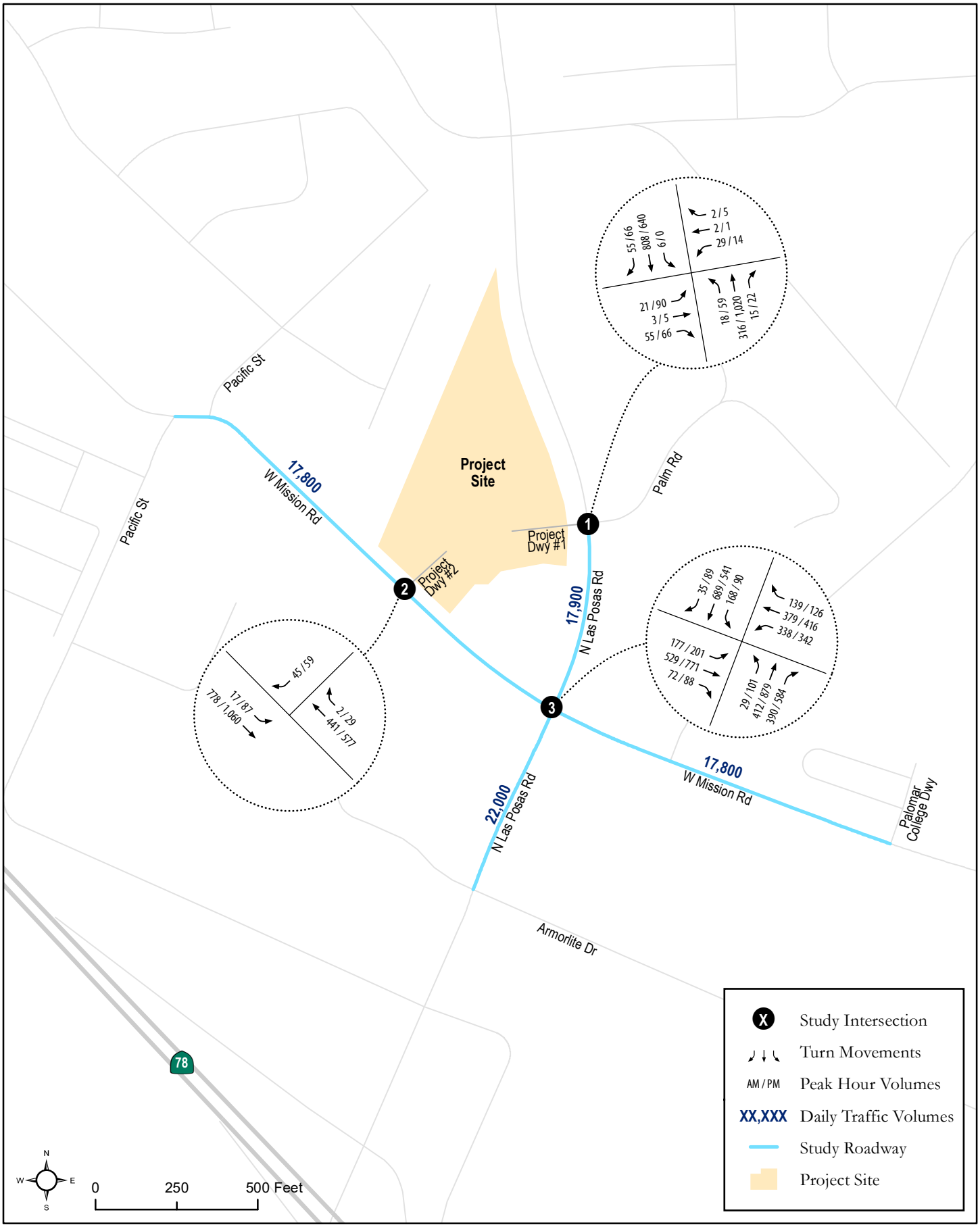
Table 5.2 - Roadway Segment LOS Results – Existing Conditions

Roadway	Segment	Function Classification	Daily Volume	LOS Threshold (LOS E)	V/C	LOS
North Las Posas Road	Palm Road to West Mission Road	6-Lane Major Arterial	17,900	50,000	0.358	A
North Las Posas Road	West Mission Road to Armorlite Drive	6-Lane Major Arterial	22,000	50,000	0.440	B
West Mission Road	Pacific Street and North Las Posas Road	4-Lane Major Arterial	17,800	40,000	0.445	B
West Mission Road	North Las Posas Road to Palomar College Driveway	4-Lane Major Arterial	17,800	40,000	0.445	B

Source: CR Associates (2022)

Note:
V/C = Volume/Capacity

As shown in Table 5.2, all study roadway segments currently operate at acceptable LOS B or better under Existing Conditions.



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Figure 5.2
Traffic Volumes
Existing Conditions

5.3.2 Intersection Analysis

Table 5.3 displays intersection LOS and average vehicle delay results for the key study area intersections under Existing Conditions. LOS calculation worksheets for Existing Conditions are provided in **Appendix E**.

Table 5.3 - Peak Hour Intersection LOS Results – Existing Conditions

#	Intersection	Control Type	AM Peak Hour		PM Peak Hour	
			Avg. Delay (sec.)	LOS	Avg. Delay (sec.)	LOS
1	North Las Posas & Project Driveway #1 / Palm Road	Signal	17.7	B	16.3	B
2	Project Driveway #2 & West Mission Road	SSSC	10.2	B	11.1	B
3	North Las Posas & West Mission Road	Signal	39.6	D	41.2	D

Source: CR Associates (2022)

Note:
SSSC = Side-Street Stop Controlled. For SSSC intersections, the delay shown is the worst delay experienced by any of the movements.

As shown in Table 5.3, all study area intersections currently operate at acceptable LOS D or better under Existing Conditions.

6.0 Near-Term Year 2024 Conditions

This section provides an analysis of Near-Term Year 2024 Base traffic conditions both with and without the Proposed Project. The scenarios analyzed in this section include:

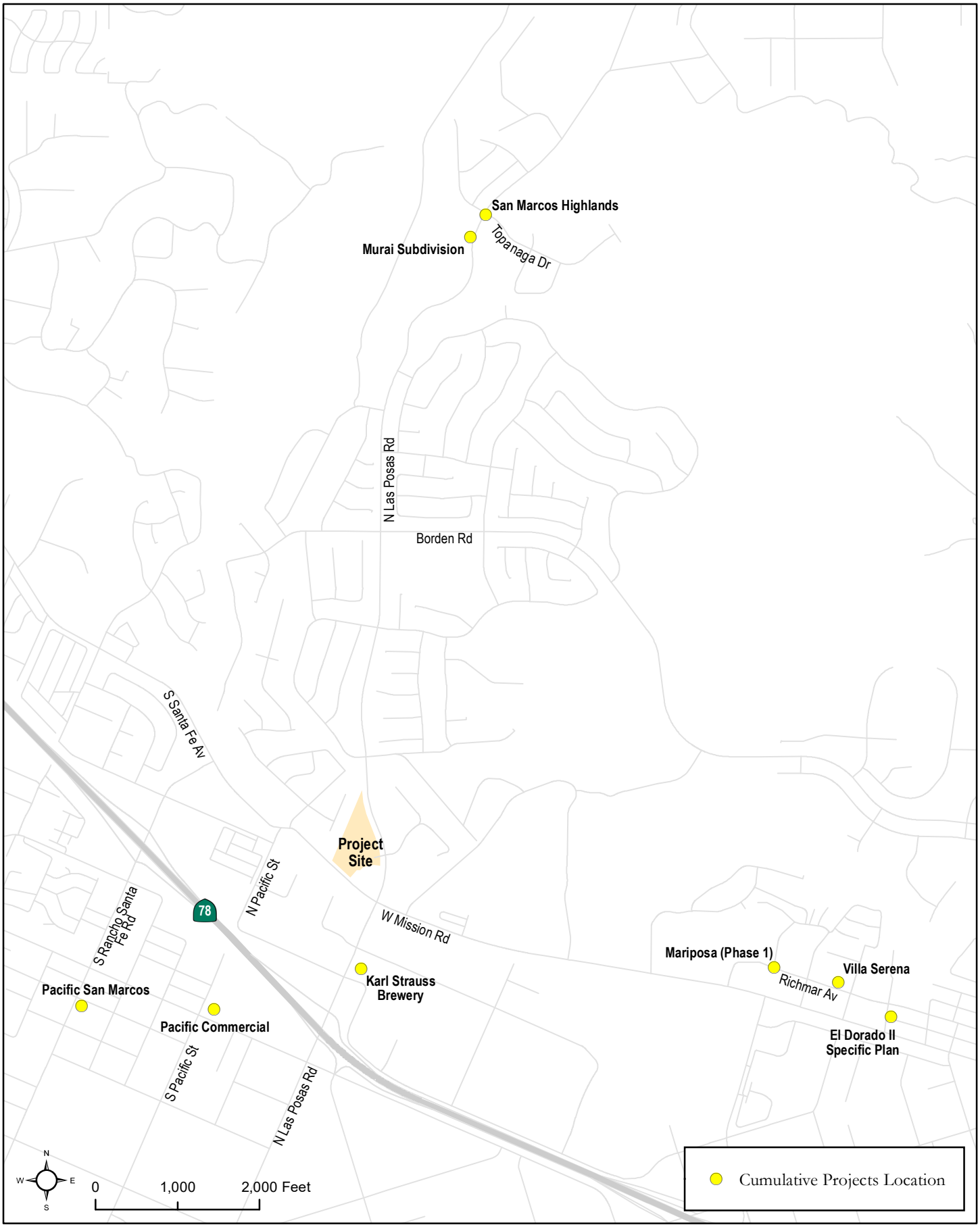
- Near-Term Year 2024 Base
- Near-Term Year 2024 Base with Project

6.1 Cumulative Project Traffic

The following eight (8) projects were identified by City of San Marcos staff as cumulative projects, since they are anticipated to contribute traffic within the project study area by the Proposed Project's opening year:

1. Pacific Commercial – This project is located at the northeast corner of the Grand Avenue and Pacific Street intersection. This project proposes to construct a 122-room hotel.
2. San Marcos Highlands – This project is located at the north end of Las Posas Road. This project proposes to construct 187 single-family residential dwelling units as well as a 21.68-acre passive park.
3. El Dorado II Specific Plan – This project is located at the southwest corner of the Richmar Avenue and Pleasant Way intersection. This project proposes to construct 72 multi-family dwelling units as well as 2,000 square feet of specialty retail.
4. Villa Serena – This project is located the northwest corner of the Richmar Avenue and Marcos Street intersection. This project proposes to construct 12 multi-family dwelling units.
5. Mariposa (Phase 1) – This project is located at the northeast corner of the Richmar Avenue and Los Olivos Drive intersection. This project proposes to develop 60 multi-family dwelling units.
6. Murai Subdivision – This project is located at the north end of Las Posas Road. This project proposes to construct 89 single-family residential dwelling units.
7. Pacifica San Marcos – This project is located at the southeast corner of the Rancho Santa Fe Road and 9th Street intersection. This project proposes to construct 31 multi-family dwelling units as well as 4,375 square feet of commercial use.
8. Karl Strauss Brewery – This project is located at the southeast corner of the North Las Posas Road and Armorlite Drive intersection. This project proposes to construct 10,528 square feet of uses that include a tasting room, commercial kitchen, and entertainment room.

The traffic generated from the project listed above was included in the Near-Term Year 2024 Base scenario. **Figure 6.1** displays the location of the cumulative projects identified above.



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Figure 6.1
Cumulative Projects Location

6.2 Cumulative Project Trip Generation

Table 6.1 displays the projected trip generation for the cumulative projects described above. Cumulative project traffic was assigned to the project study area as identified within their respective traffic studies provided by the City of San Marcos. Cumulative project traffic without completed traffic studies were assigned to the project study area utilizing the same methodology used for the Proposed project described in Chapter 3.0, consistent with the City's TIAG. Relevant excerpts from the source of information regarding the cumulative project are provided in **Appendix F**.

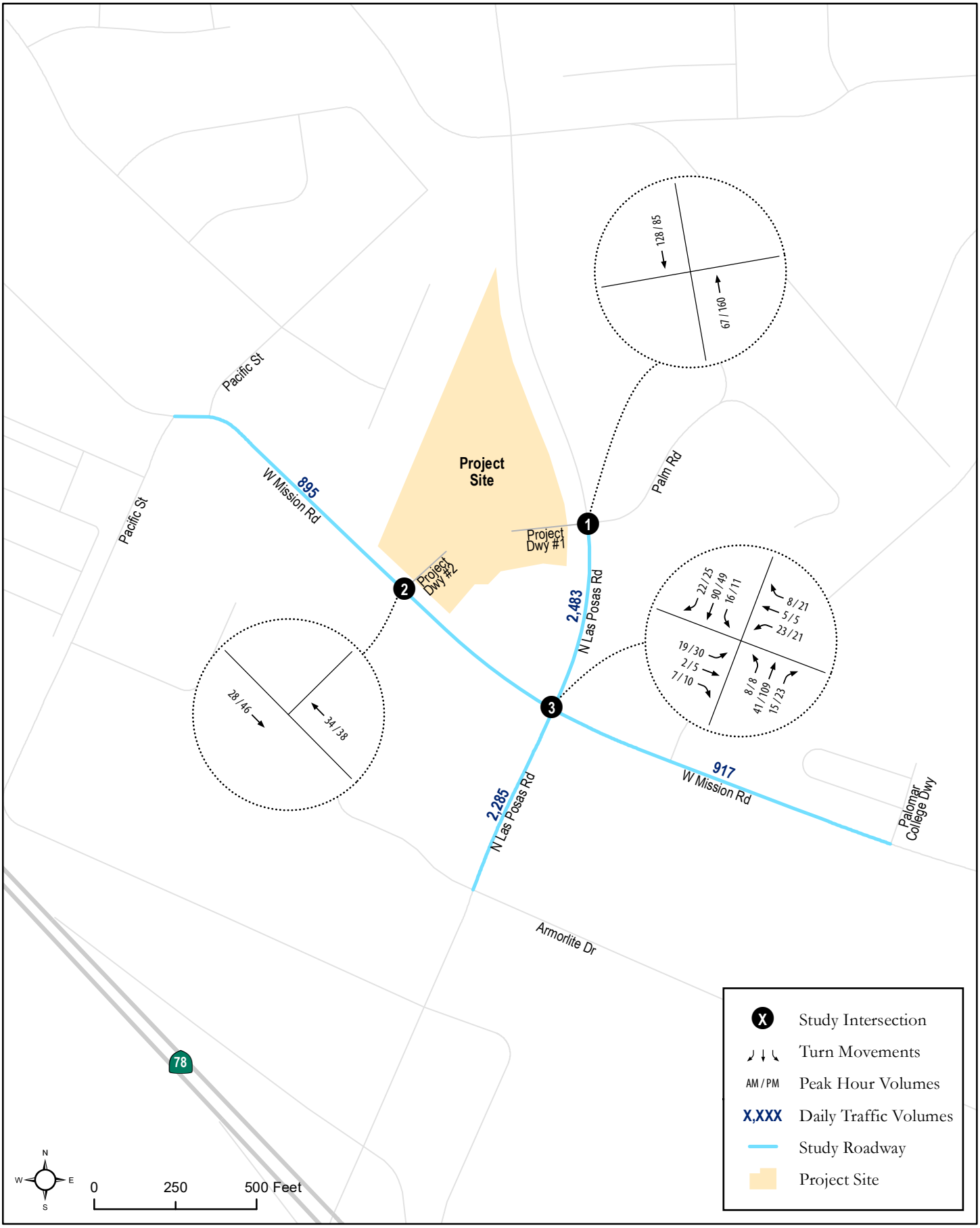
Table 6.1 - Cumulative Project Trip Generation

Cumulative Project	Land Use	Daily Trips	AM Peak Hour (In/Out)	PM Peak Hour (In/Out)
Pacific Commercial	Hotel	854	69 (28-in/41-out)	77 (46-in/31-out)
San Marcos Highlands[1]	Single Family Residential/Passive Park	1,998	165 (52-in/113-out)	199 (137-in/62-out)
El Dorado II Specific Plan	Multi-Family Residential/Specialty Retail	512	38 (9-in/29-out)	47 (31-in/16-out)
Villa Serena	Multi-Family Residential	96	8 (2-in/6-out)	10 (7-in/3-out)
Mariposa (Phase 1)	Multi-Family Residential	360	29 (6-in/23-out)	33 (23-in/10-out)
Murai Subdivision[2]	Single Family Residential	890	71 (21-in/50-out)	89 (62-in/27-out)
Pacifica San Marcos	Multi-Family Residential/Specialty Retail	361	21 (7-in/14-out)	33 (20-in/13-out)
Karl Strauss Brewery	Brewery/Restaurant	1,685	135 (68-in/67-out)	135 (81-in/54-out)
Cumulative Total		**6,756**	**536 (193-in/343-out)**	**623 (407-in/216-out)**

Source: SANDAG (not so) Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region, April 2002

Notes:
[1] Trip generation obtained from the San Marcos Highlands Traffic Impact Analysis Report prepared by RBF Consulting (February 2015)
[2] Trip generation obtained from the Murai Subdivision Traffic Impact Analysis Report prepared by STC Traffic Inc (April 2017)

As shown, the cumulative projects are anticipated to generate 6,756 daily trips, including 536 trips during the AM peak hour and 623 trips during the PM peak hour that will be dispersed throughout the San Marcos community and beyond the Proposed Project's study area. **Figure 6.2** displays the cumulative project trip assignment.



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Figure 6.2
Cumulative Project Trip Assignment

6.3 Near-Term Year 2024 Base Roadway Network and Traffic Volumes

Study area roadway and intersection geometrics under Near-Term Base conditions were assumed to be identical to the existing roadway geometrics, as shown in Figure 5.1. The Near-Term Base scenario traffic volumes were derived by adding the additional trips generated by the cumulative projects listed in Section 6.1 (Figure 6.2) to the existing traffic volumes (Figure 5.2). **Figure 6.3** displays the average daily roadway and peak hour intersection volumes for the study roadway segments and intersections under the Near-Term Base conditions.

6.4 Near-Term Year 2024 Base Traffic Conditions

LOS analyses under Near-Term Year 2024 Base Conditions were conducted using the methodologies described in Chapter 2. Roadway segment and intersection LOS analysis results are discussed below.

6.4.1 Roadway Segment Analysis

Table 6.2 displays roadway segments and LOS analysis results for study roadway segments under Near-Term Year 2024 Base conditions.

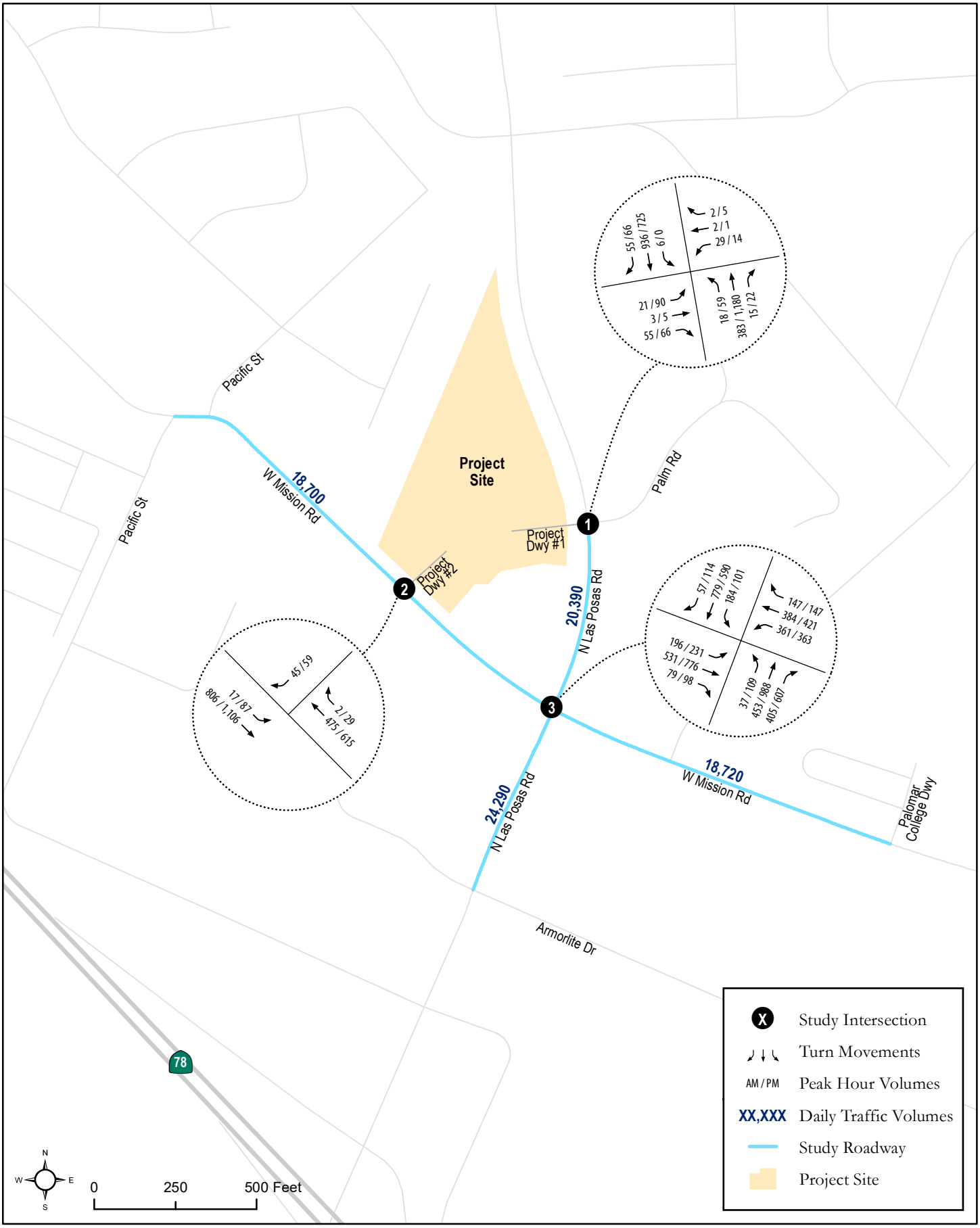
Table 6.2 - Roadway Segment LOS Results – Near-Term Year 2024 Base Conditions

Roadway	Segment	Function Classification	Daily Volume	LOS Threshold (LOS E)	V/C	LOS
North Las Posas Road	Palm Road to West Mission Road	6-Lane Major Arterial	20,390	50,000	0.408	B
North Las Posas Road	West Mission Road to Armorlite Drive	6-Lane Major Arterial	24,290	50,000	0.486	B
West Mission Road	Pacific Street and North Las Posas Road	4-Lane Major Arterial	18,700	40,000	0.468	B
West Mission Road	North Las Posas Road to Palomar College Driveway	4-Lane Major Arterial	18,720	40,000	0.468	B

Source: CR Associates (2022)

Note:
V/C = Volume/Capacity

As shown in Table 6.2, all study roadway segments are projected to operate at acceptable LOS B under Near-Term Year 2024 Base conditions.



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Figure 6.3
Traffic Volumes
Near-Term Year 2024 Base Conditions

6.4.2 Intersection Analysis

Table 6.3 displays intersection LOS and average vehicle delay results for the key study area intersections under Near-Term Year 2024 Base Conditions. LOS calculation worksheets for Near-Term Year 2024 Base Conditions are provided in **Appendix G**.

Table 6.3 - Peak Hour Intersection LOS Results – Near-Term Year 2024 Base Conditions

#	Intersection	Control Type	AM Peak Hour		PM Peak Hour	
			Avg. Delay (sec.)	LOS	Avg. Delay (sec.)	LOS
1	North Las Posas & Project Driveway #1 / Palm Road	Signal	18.2	B	16.7	B
2	Project Driveway #2 & West Mission Road	SSSC	10.4	B	11.3	B
3	North Las Posas & West Mission Road	Signal	43.3	D	44.7	D

Source: CR Associates (2022)

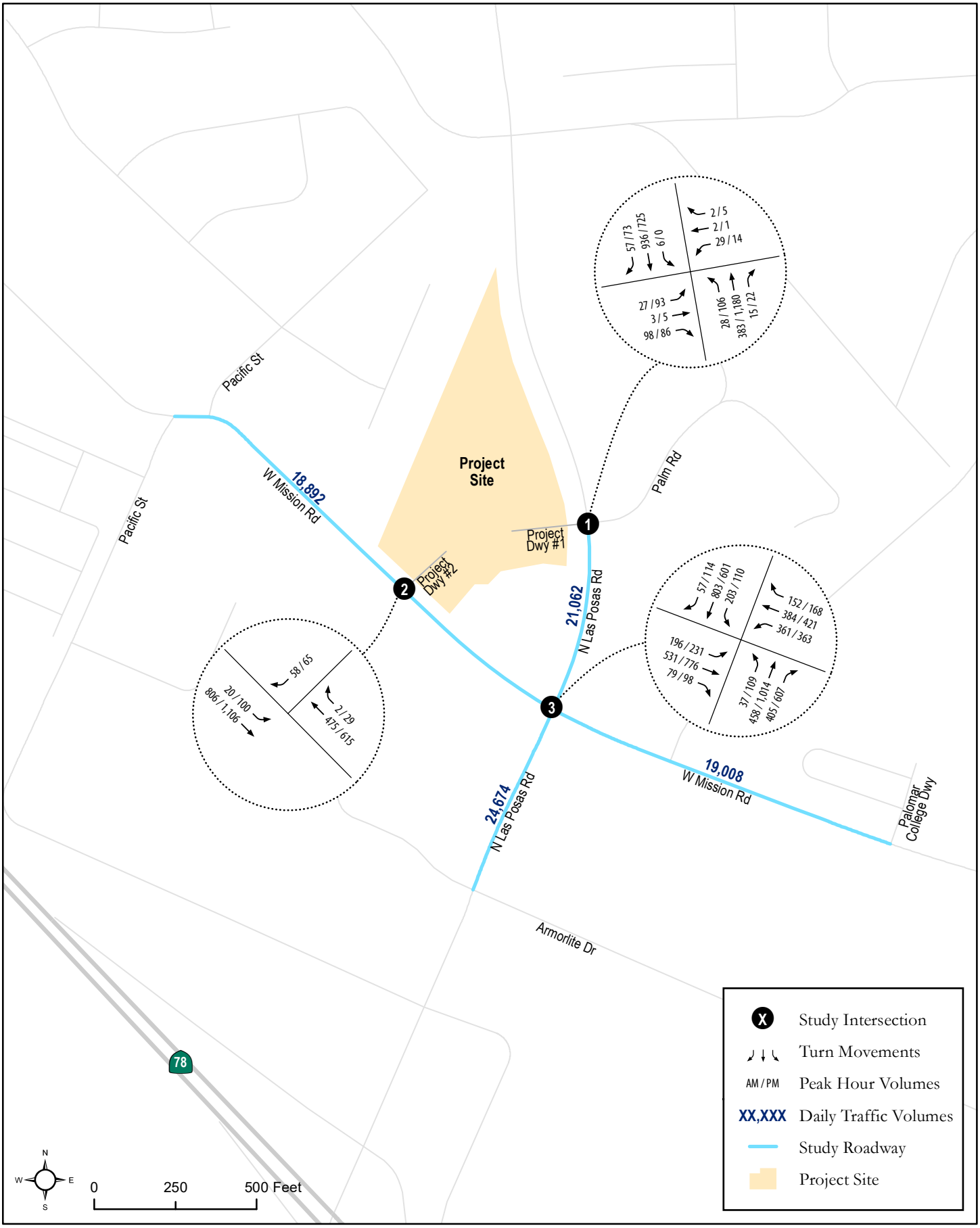
Note:
SSSC = Side-Street Stop Controlled. For SSSC intersections, the delay shown is the worst delay experienced by any of the movements.

As shown in Table 6.3, all study area intersections are projected operate at acceptable LOS D or better under Near-Term Year 2024 Base conditions.

6.5 Near-Term Year 2024 Base with Project Roadway Network and Traffic Volumes

Intersection geometrics under the Near-Term Year 2024 Base with Project conditions were assumed to be identical to the Near-Term Year 2024 Base conditions geometrics.

Peak hour intersection volumes for the Near-Term Year 2024 Base with Project conditions were derived by combining the Proposed Project trips (as previously shown in Figure 3.2) to the Near-Term Year 2024 Base traffic volumes (as previously shown in Figure 6.3). Peak hour intersection volumes for this scenario are displayed in **Figure 6.4**.



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Figure 6.4
Traffic Volumes
Near-Term Year 2024 Base with Project Conditions

6.6 Near-Term Year 2024 Base with Project Traffic Conditions

LOS analyses under Near-Term Year 2024 Base with Project conditions were conducted using the methodologies described in Chapter 2. Roadway segment and intersection LOS analysis results are discussed below.

6.6.1 Roadway Segment Analysis

Table 6.4 displays roadway segments and LOS analysis results for study roadway segments under Near-Term Year 2024 Base with Project conditions.

Table 6.4 - Roadway Segment LOS Results – Near-Term Year 2024 Base with Project Conditions

Roadway	Segment	Function Classification	Daily Volume	LOS Threshold (LOS E)	V/C	LOS	LOS w/o Project	ΔV/C	I?
North Las Posas Road	Palm Road to West Mission Road	6-Lane Major Arterial	21,062	50,000	0.421	B	B	0.013	N
North Las Posas Road	West Mission Road to Armorlite Drive	6-Lane Major Arterial	24,674	50,000	0.493	B	B	0.007	N
West Mission Road	Pacific Street and North Las Posas Road	4-Lane Major Arterial	18,892	40,000	0.472	B	B	0.004	N
West Mission Road	North Las Posas Road to Palomar College Driveway	4-Lane Major Arterial	19,008	40,000	0.475	B	B	0.007	N

Source: CR Associates (2022)

Notes:
V/C = Volume/Capacity
I? = Improvement Required?

As shown in Table 6.4, all study roadway segments are projected to operate at acceptable LOS B under Near-Term Year 2024 Base with Project conditions. Therefore, no study roadway segments are anticipated to degrade in LOS to unacceptable levels with implementation of the Proposed Project and no improvements will be required.

6.6.2 Intersection Analysis

Table 6.5 displays intersection LOS and average vehicle delay results for the key study area intersections under Near-Term Year 2024 Base with Project Conditions. LOS calculation worksheets for Near-Term Year 2024 Base with Project conditions are provided in **Appendix H**.

As shown in Table 6.5, all study area intersections are projected to operate at acceptable LOS D or better under Near-Term Year 2024 Base with Project conditions. Therefore, no study intersections are anticipated to degrade in LOS to unacceptable levels with implementation of the Proposed Project and no improvements will be required.

Table 6.5 - Peak Hour Intersection LOS Results – Near-Term Year 2024 Base with Project Conditions

#	Intersection	Control Type	AM Peak Hour		PM Peak Hour		Delay w/o Project (AM / PM)	LOS w/o Project (AM / PM)	Δ in Delay (AM / PM)	I?
			Avg. Delay (sec.)	LOS	Avg. Delay (sec.)	LOS				
1	North Las Posas & Project Driveway #1 / Palm Road	Signal	20.1	C	18.1	B	18.2 / 16.7	B / B	1.9 / 1.4	N
2	Project Driveway #2 & West Mission Road	SSSC	10.5	B	11.4	B	10.4 / 11.3	B / B	0.1 / 0.1	N
3	North Las Posas & West Mission Road	Signal	43.4	D	45.9	D	43.3 / 44.7	D / D	0.1 / 1.2	N

Source: CR Associates (2022)

Notes:
SSSC = Side-Street Stop Controlled. For SSSC intersections, the delay shown is the worst delay experienced by any of the movements.
I? = Improvement Required?

7.0 Horizon Year 2050 Conditions

This section provides an analysis of Horizon Year 2050 traffic conditions both with and without the Proposed Project. The scenarios analyzed in this section include:

- Horizon Year 2050
- Horizon Year 2050 with Project

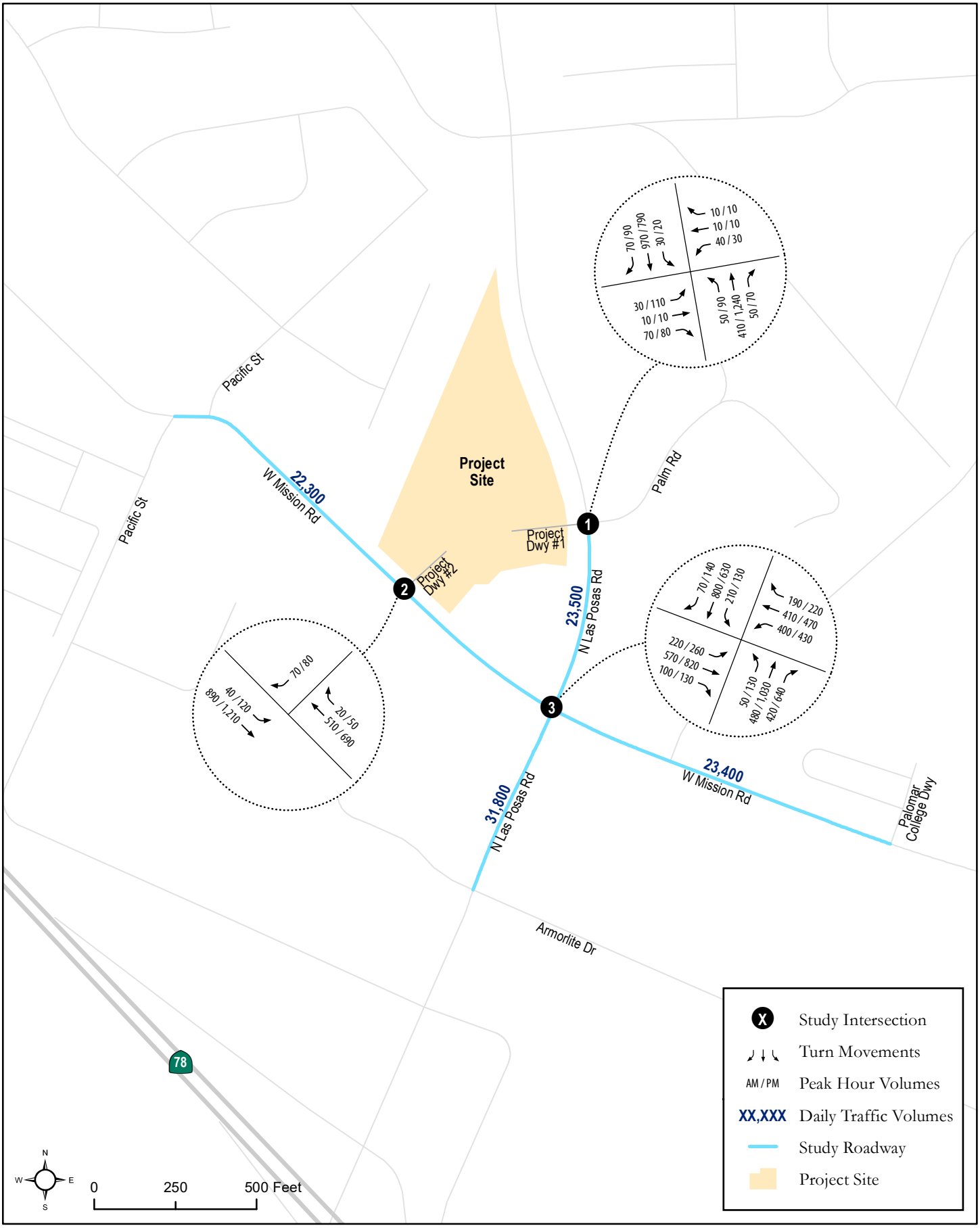
7.1 Horizon Year 2050 Roadway Network and Traffic Volumes

Intersection geometrics under Horizon Year 2050 Conditions were assumed to be identical to the Existing Conditions, as previously shown in Figure 5.1.

Horizon Year 2050 ADT forecasts were obtained from the SANDAG Series 14 ABM2+/2021 RP forecast year 2050 model (scenario ID#459). Any study roadway with Near-Term Year 2024 Base ADT found to be greater than forecasted TFIC ADT were adjusted using growth rates observed between existing and forecasted TFIC ADT for adjacent segments.

Intersection turning movement volumes were developed utilizing the roadway volumes analyzed for the roadway segment analysis. Growth was applied per approach based on existing and forecasted Horizon Year 2040 ADT, distributed based on existing travel patterns, and balanced utilizing engineering judgement.

Details on counts collected from TFIC and growth rates applied are provided in **Appendix I**. Roadway ADT and intersection peak hour volumes for this scenario are displayed in **Figure 7.1**.



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Figure 7.1
Traffic Volumes
Horizon Year 2050 Conditions

7.2 Horizon Year 2050 Traffic Conditions

LOS analyses under Horizon Year 2050 Conditions were conducted using the methodologies described in Chapter 2. Study roadway segment and intersection LOS analysis results are discussed below.

7.2.1 Roadway Segment Analysis

Table 7.1 displays roadway segments and LOS analysis results for study roadway segments under Horizon Year 2050 conditions.

Table 7.1 - Roadway Segment LOS Results – Horizon Year 2050 Conditions

Roadway	Segment	Function Classification	Daily Volume	LOS Threshold (LOS E)	V/C	LOS
North Las Posas Road	Palm Road to West Mission Road	6-Lane Major Arterial	23,500	50,000	0.470	B
North Las Posas Road	West Mission Road to Armorlite Drive	6-Lane Major Arterial	31,800	50,000	0.636	C
West Mission Road	Pacific Street and North Las Posas Road	4-Lane Major Arterial	22,300	40,000	0.558	C
West Mission Road	North Las Posas Road to Palomar College Driveway	4-Lane Major Arterial	23,400	40,000	0.585	C

Source: CR Associates (2022)

Note:
V/C = Volume/Capacity

As shown in Table 7.1, all study roadway segments are projected to operate at acceptable LOS C or better under Horizon Year 2050 conditions.

7.2.2 Intersection Analysis

Table 7.2 displays intersection LOS and average vehicle delay results for the key study area intersections under Horizon Year 2050 Conditions. LOS calculation worksheets for Horizon Year 2050 Conditions are provided in **Appendix J**.

Table 7.2 - Peak Hour Intersection LOS Results – Horizon Year 2050 Conditions

#	Intersection	Control Type	AM Peak Hour		PM Peak Hour	
			Avg. Delay (sec.)	LOS	Avg. Delay (sec.)	LOS
1	North Las Posas & Project Driveway #1 / Palm Road	Signal	22.1	C	25.0	C
2	Project Driveway #2 & West Mission Road	SSSC	10.8	B	12.2	B
3	North Las Posas & West Mission Road	Signal	46.1	D	53.0	D

Source: CR Associates (2022)

Note:
SSSC = Side-Street Stop Controlled. For SSSC intersections, the delay shown is the worst delay experienced by any of the movements.

As shown in Table 7.2, all study area intersections are projected operate at acceptable LOS D or better under Horizon Year 2050 Conditions.

7.3 Horizon Year 2050 with Project Roadway Network and Traffic Volumes

Intersection geometrics under the Horizon Year 2050 with Project Conditions were assumed to be identical to the Horizon Year 2050 Conditions geometrics, as previously discussed in Chapter 6.1.

Peak hour intersection volumes for the Horizon Year 2050 with Project Conditions were derived by combining the Proposed Project trips (as previously shown in Figure 3.2) to the Horizon Year 2050 traffic volumes (as previously shown in Figure 7.1). Peak hour intersection volumes for this scenario are displayed in **Figure 7.2**.

7.4 Horizon Year 2050 with Project Traffic Conditions

LOS analyses under Horizon Year 2050 with Project Conditions were conducted using the methodologies described in Chapter 2. Study roadway segment and intersection LOS analysis results are discussed below.

7.4.1 Roadway Segment Analysis

Table 7.3 displays roadway segments and LOS analysis results for study roadway segments under Horizon Year 2050 with Project conditions.

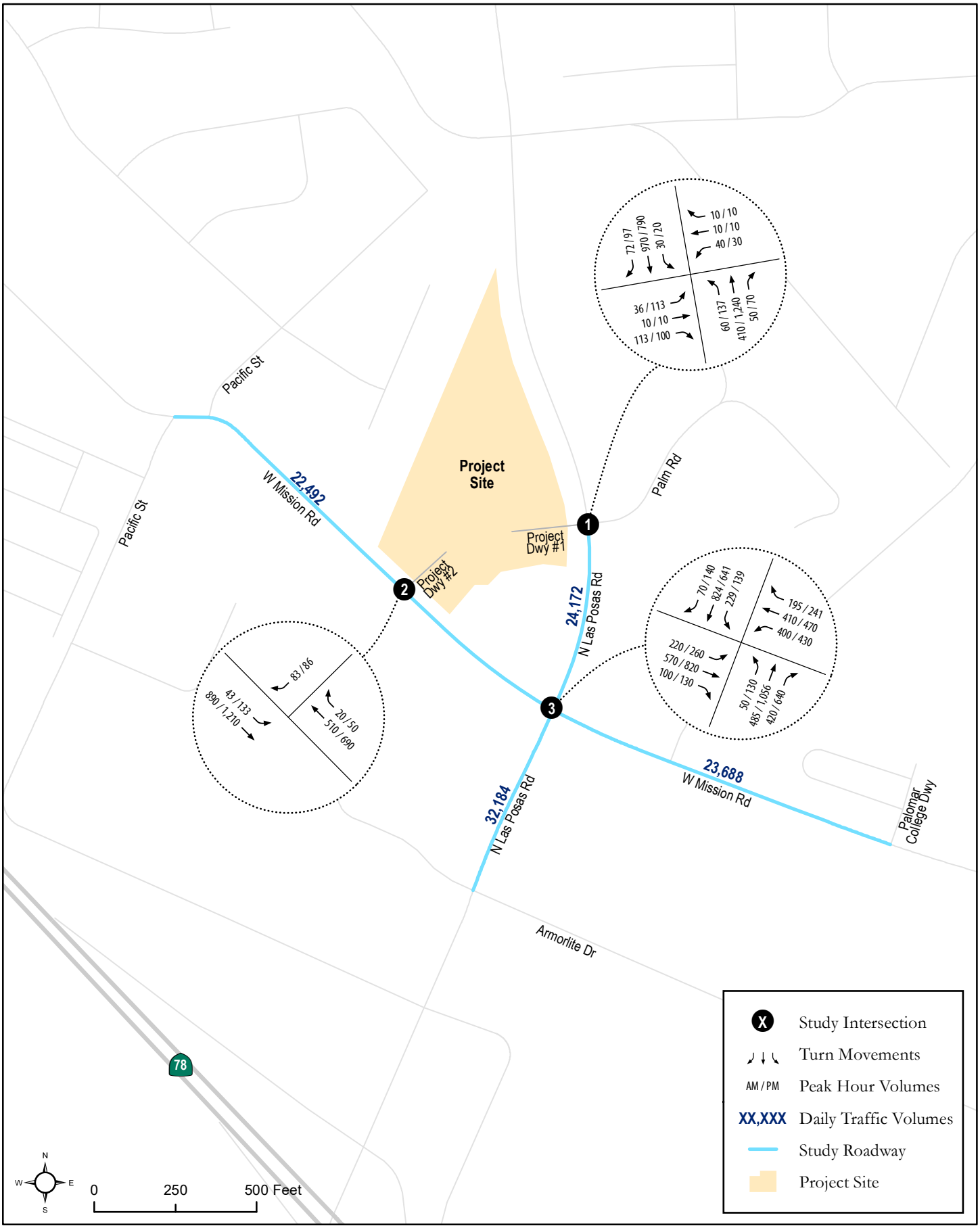
Table 7.3 - Roadway Segment LOS Results – Horizon Year 2050 with Project Conditions

Roadway	Segment	Function Classification	Daily Volume	LOS Threshold (LOS E)	V/C	LOS	LOS w/o Project	ΔV/C	I?
North Las Posas Road	Palm Road to West Mission Road	6-Lane Major Arterial	24,172	50,000	0.483	B	B	0.013	N
North Las Posas Road	West Mission Road to Armorlite Drive	6-Lane Major Arterial	32,184	50,000	0.644	C	C	0.008	N
West Mission Road	Pacific Street and North Las Posas Road	4-Lane Major Arterial	22,492	40,000	0.562	C	C	0.004	N
West Mission Road	North Las Posas Road to Palomar College Driveway	4-Lane Major Arterial	23,688	40,000	0.592	C	C	0.007	N

Source: CR Associates (2022)

Notes:
V/C = Volume/Capacity
I? = Improvement Required?

As shown in Table 7.3, all study roadway segments are projected to operate at acceptable LOS C or better under Horizon Year 2050 with Project conditions. Therefore, no study roadway segments are anticipated to degrade in LOS to unacceptable levels with implementation of the Proposed Project and no improvements will be required.



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Figure 7.2
Traffic Volumes
Horizon Year 2050 with Project Conditions

7.4.2 Intersection Analysis

Table 7.4 displays intersection LOS and average vehicle delay results for the key study area intersections under Horizon Year 2050 with Project conditions. LOS calculation worksheets for Horizon Year 2050 with Project Conditions are provided in **Appendix K**.

As shown in Table 7.4 all study area intersections are projected to operate at acceptable LOS D or better under Horizon Year 2050 with Project Conditions. Therefore, no study intersections are anticipated to degrade in LOS to unacceptable levels with implementation of the Proposed Project and no improvements will be required.

Table 7.4 - Peak Hour Intersection LOS Results – Horizon Year 2050 with Project Conditions

#	Intersection	Control Type	AM Peak Hour		PM Peak Hour		Delay w/o Project (AM / PM)	LOS w/o Project (AM / PM)	Δ in Delay (AM / PM)	I?
			Avg. Delay (sec.)	LOS	Avg. Delay (sec.)	LOS				
1	North Las Posas & Project Driveway #1 / Palm Road	Signal	24.1	C	27.7	C	22.1 / 25.0	C / C	2.0 / 2.7	N
2	Project Driveway #2 & West Mission Road	SSSC	10.9	B	12.3	B	10.8 / 12.2	B / B	0.1 / 0.1	N
3	North Las Posas & West Mission Road	Signal	46.4	D	53.9	D	46.1 / 53.0	D / D	0.3 / 0.9	N

Source: CR Associates (2022)

Notes:
SSSC = Side-Street Stop Controlled. For SSSC intersections, the delay shown is the worst delay experienced by any of the movements.
I? = Improvement Required?

8.0 LOS Deficiencies and Improvement Requirements

This chapter provides improvements requirements needed to increase LOS to acceptable or pre-project conditions for any roadway segments or intersections found to operate unacceptably with implementation of the Proposed Project.

8.1 Determination of the Need for Off-Site Improvements to Accommodate Project Traffic – Near-Term Year 2024 with Project Conditions

This section identifies required improvements for any study roadway segments or intersections that are associated with the Proposed Project under Near-Term Year 2024 Base with Project conditions.

Roadway Segment Analysis
No improvements required.

Intersection Analysis
No improvements required.

8.2 Determination of the Need for Off-Site Improvements to Accommodate Project Traffic – Horizon Year 2050 with Project Conditions

This section identifies required improvements for any study roadway segments or intersections that are associated with the Proposed Project under Horizon Year 2050 with Project conditions.

Roadway Segment Analysis
No improvements required.

Intersection Analysis
No improvements required.

9.0 Site Access & Circulation

This chapter addresses access to the project site and discusses the functionality of the project's internal circulation.

9.1 Driveway Access

The Proposed Project will be located approximately 250 feet northwest of the West Mission Road and North Las Posas Road intersection in the City of San Marcos. The project site is currently vacant and is bordered by North Las Posas Road on the northeast side, West Mission Road on the southwest side, single family dwelling units on the northwest side, and a CVS pharmacy to the south.

Project site access will be provided via two shared driveways with the adjacent CVS pharmacy with one located off North Las Posas Road and the other off West Mission Road. A brief description of each of the two driveways is provided below:

- Project Driveway #1 is located along North Las Posas Road via existing signalized intersection at North Las Posas Road / Palm Road functioning with full access. This driveway serves as the primary entry point and provides for one of the two access points to the project site from the east. This driveway is projected to operate at LOS C or better under all study scenarios.
- Project Driveway #2 is located along West Mission Road via existing side-street (the CVS driveway) stop controlled intersection that allows for left/right-in and right-out turning movements only. This driveway serves as the secondary entry point and provides for one of the two access points to the project site from the west. This driveway is projected to operate at LOS B or better under all study scenarios.

After further review of the project site plan, the following recommendations are provided:

- Driveways are recommended to be constructed in accordance with City standards
- Stop sign (R1-1) to be installed at project driveway #2
- High visibility pedestrian crossings where crossing is allowed at Project Driveway #1
- Modify existing traffic detection camera at traffic signal serving Driveway #1 to accommodate queuing vehicles exiting through this driveway

9.2 Queuing Analysis

A 95th percentile queue analysis was conducted to determine the extent of queueing at the project driveway intersections under Near-Term Year 2024 Base with Project conditions and Horizon Year 2050 with Project conditions. The queue analysis was conducted for the proposed project driveways and the movements along North Las Posas Road and West Mission Road. **Table 9.1** displays the 95th percentile queue analysis results for project driveway intersections under both analysis scenarios. Intersection queueing reports are provided in **Appendix L**.

As shown, the 95th percentile queues at project driveway intersections are projected to fit within the available storage and would not impede traffic at the driveways or adjacent roadway system.

Table 9.1 - Queuing Analysis at Project Driveways

#	Intersection	Control Type	Turning Movement	Peak Hour	Available Storage[1] (ft)	Near-Term Year 2024 with Project Conditions		Horizon Year 2050 with Project Conditions	
						95th Percentile Queue (ft)	Excess Queue (ft)	95th Percentile Queue (ft)	Excess Queue (ft)
1	North Las Posas & Project Driveway #1 / Palm Road	SSSC	NBL	AM	190	46	0	84	0
				PM		168	0	173	0
2	Project Driveway #2 & West Mission Road	SSSC	EBL	AM	135	25	0	25	0
				PM		25	0	25	0

Source: CR Associates (2022)

Note:
[1] Includes taper length.

9.3 Internal Circulation

Internal roadways on the project site allows for two-way flow of vehicle traffic. Dead-end aisles between buildings provide direct access to garages for each dwelling unit. Guest parking is also provided through the project site.

Based upon review of the project site plan, the following recommendations are provided:

- Appropriate signage to warn drivers of pedestrian foot traffic
- Consider installation of speed cushions/bumps along internal roadways to calm traffic

10.0 Parking

Parking will be provided within the Proposed Project. Per the City of San Marcos Code of Ordinance; *Title 20 – Zoning; Chapter 20.340 – Off-street Parking*, the Proposed Project is required to supply a total of 280 parking spaces. **Table 10.1** displays the Proposed Project's parking requirements.

Table 10.1 - Parking Requirements

Unit Type	Units	Requirement	Parking Stalls
2+ Bedroom	120	2 Spaces/Unit	240
Guest Parking	120	1 Space/3 Units	40
		Total	**280**

Source: City of San Marcos Code of Ordinance (2022)

The Proposed Project will provide 260 new parking spaces with the following breakdown:

- 240 garage spaces (includes 45 Tandem)
- 20 Guest Spaces (Includes 2 ADA Spaces, 2 EV Spaces and one mail space)

Additionally, there are 37 existing parking spaces located on-site that will be part of the total parking spaces provided by the project for a total of **297 parking spaces provided by the project** (260 new + 37 existing on-site), which exceeds the City's minimum requirements.

11.0 Sight Distance Analysis

A sight distance analysis was conducted at the two project driveways on September 22, 2022. The analysis was conducted consistent with the City of San Marcos Intersection Sight Distance Guidelines (December 2020) which evaluates the following:

- Intersection Sight Distance (Corner Sight Distance) is measured from the perspective of the vehicle waiting on the minor road. The setback measurement from the edge of traveled way of the major road should be 15 feet. It is measured from the driver's eye height of 3.5 feet on the minor road to the height of a 3.5-foot-tall object on the major road.

- Stopping Sight Distance is measured from the driver's eye height of 3.5 feet above the pavement surface, to an object ½-foot high on the road.

- Speed utilized to determine the minimum requirements shall be the roadway design speed.

Table 11.1 below displays the minimum intersection and stopping sight distance requirements.

Table 11.1 - Minimum Sight Distance Requirements

Design Speed	Intersection Sight Distance (left)	Intersection Sight Distance (right)	Stopping Sight Distance (ft)	Downgrades Steeper Than 3%
20	220	190	125	150
25	275	240	150	180
30	330	285	200	240
35	385	335	250	300
40	440	380	300	360
45	495	430	360	430
50	550	480	430	520

Source: City of San Marcos Intersection Sight Distance Guidelines (2020)

The design speed of North Las Posas Road and West Mission Road is determined based on their respective Mobility Element classification. North Las Posas Road is identified as a 6-Lane Major Arterial while West Mission Road is identified as a 4-Lane Major Road. According to the City of San Marcos *Urban Street Design Criteria*, both a 6-Lane and a 4-Lane Major Arterial have design speeds of 50 MPH. Therefore, a 50 MPH design speed was utilized for the analysis at both project driveways.

Figure 11.1 and **Figure 11.2** displays stopping sight distance for Project Driveway #1. **Figure 11.3** and **Figure 11.4** display the intersection and stopping sight distance measurements, respectively, for Project Driveway #2.

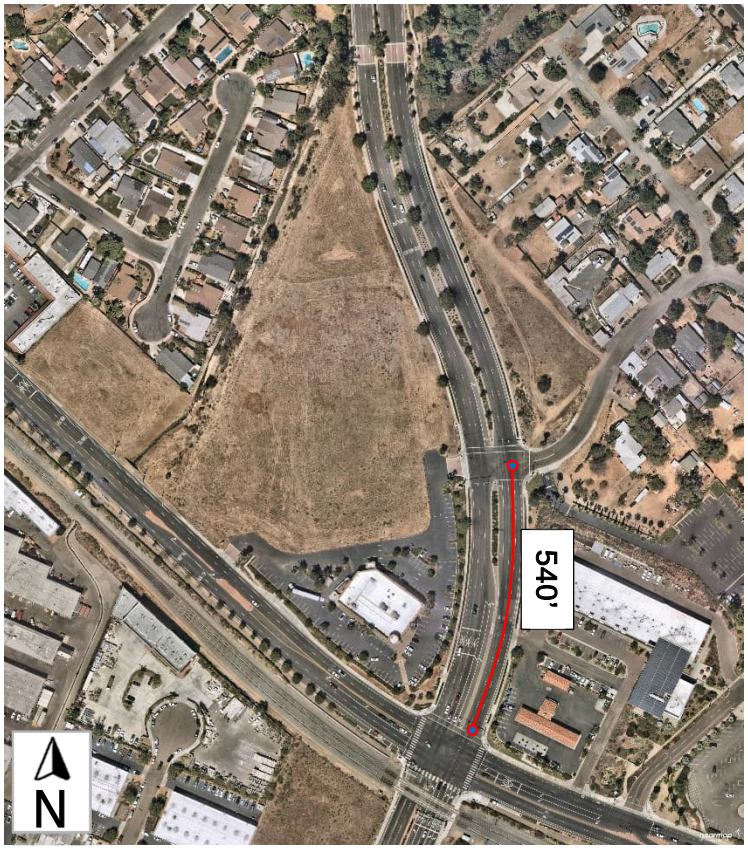
Figure 11.1 - Stopping Sight Distance at Project Driveway #1 (Southbound)



Driving Southbound Towards Project Driveway #1



Figure 11.2 - Stopping Sight Distance at Project Driveway #1 (Northbound)



Driving Northbound Towards Project Driveway #1



Figure 11.3 – Intersection Sight Distance at Project Driveway #2



Looking East from Project Driveway #2



Figure 11.4 – Stopping Sight Distance at Project Driveway #2



Driving Westbound Towards Project Driveway #2



Table 11.2 displays the measured intersection and stopping sight distance at the two project driveways. It is important to note that per the City of San Marcos Intersection Sight Distance Guidelines, only stopping sight distance shall be evaluated at signalized intersections (Project Driveway #1).

Table 11.2 - Sight Distance Analysis Results

		Intersection Sight Distance		
Location	**Design Speed**	**Measure (ft)**	**Required (ft)**	**Adequate?**
North Las Posas Road & Project Driveway #1/Palm Road	50	N/A	N/A	N/A
		Stopping Sight Distance		
Location	**Design Speed**	**Measure (ft)[1]**	**Required (ft)**	**Adequate?**
North Las Posas Road & Project Driveway #1/Palm Road	50	800 / 540	430	Yes / Yes
		Intersection Sight Distance		
Location	**Design Speed**	**Measure (ft)[2]**	**Required (ft)**	**Adequate?**
Project Driveway #2 & West Mission Road	50	N/A[3] / 450	N/A / 480	N/A / **No**
		Stopping Sight Distance		
Location	**Design Speed**	**Measure (ft)**	**Required (ft)**	**Adequate?**
Project Driveway #2 & West Mission Road	50	500	430	**Yes**

Notes:
[1] XX / XX = Driving Southbound / Driving Northbound
[2] XX / XX = Looking West / Looking East
[3] Left turns are prohibited coming out of the driveway. Therefore, there are no conflicts with vehicles traveling eastbound on West Mission Road.

As shown, both project driveways meet their respective minimum intersection and stopping sight distance requirements, except for the following:

- Project Driveway #2 & West Mission Road – The intersection sight distance needs an additional 30 feet of clear line of sight looking east from the project driveway.



This is mainly due to the presence of existing vegetation at the project driveway which limits the line of sight. Therefore, it is recommended to remove the existing vegetation or that trimming and maintenance of the landscape vegetation is conducted regularly in order to increase the line of sight at the project driveway to meet minimum requirements.

Figure 11.5 displays the proposed project as well as intersection and stopping sight distance measurements at the project driveways.



Figure 11.5
Sight Distance at Project Driveways

Appendix A - Memorandum of Approach – Gran Vista Multi-Family Project

TO: Johanna Crooker, Forward Planning Manager; MLC Holdings, Inc.

FROM: Jonathan Sanchez, PE, TE, PTOE; CR Associates

DATE: January 19, 2022

RE: Gran Vista Multi-Family Project – Memorandum of Approach (MOA)

This memorandum serves to document the assumptions that will be used to conduct a both a Transportation Impact Analysis (TIA) and a Local Transportation Analysis (LTA), for the Gran Vista Multi-Family project (the "Project"). The vehicle miles traveled (VMT) analysis and level of service (LOS) analyses will be conducted in accordance with the *City of San Marcos Transportation Impact Analysis Guidelines*, *November 2020* (TIA Guidelines).

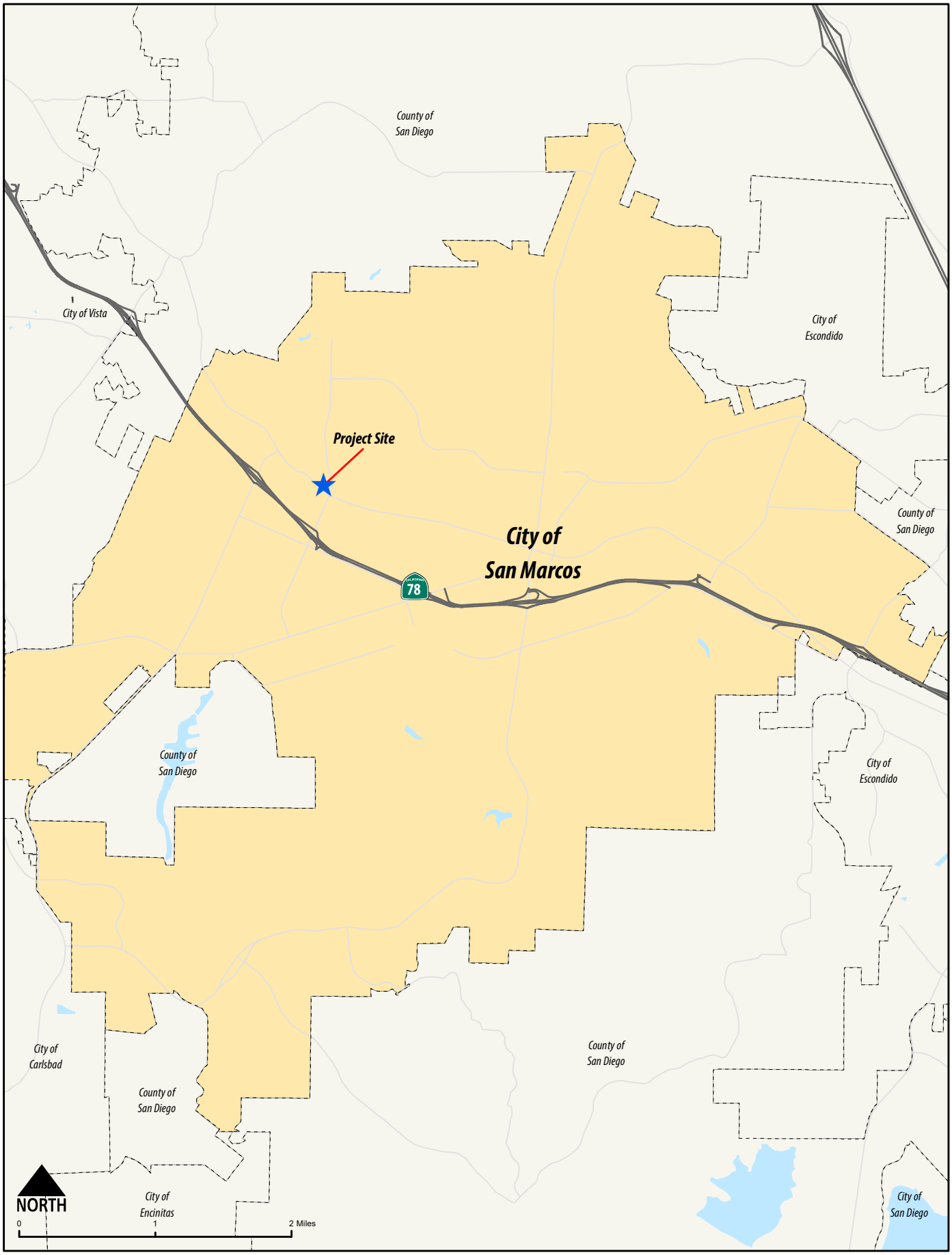
Project Description

The Gran Vista Multi-Family project (the "Proposed Project") proposes to construct 120 multi-family dwelling units at the northwest corner of West Mission Road and North Las Posas Road, in the City of San Marcos. The Proposed Project will share two driveways with the adjacent CVS pharmacy with one located off North Las Posas Road and the other off West Mission Road. The access off North Las Posas Road is via a signalized intersection at North Las Posas Road / Palm Road (Driveway 1), while the access off West Mission Road is via a side-street (the CVS driveway) stop controlled intersection that does not allow left-turn out movement (Driveway 2). **Figure 1** displays the Project's regional location. **Figure 2** displays the Project's current site plan.

VMT Analysis

According to the *City of San Marcos TIA Guidelines*, a VMT analysis will be conducted if the following criteria for screening projects are not met: (1) small project screening, (2) affordable housing screening, (3) local-serving retail or public facility screening, (3) High Quality Transit Area (HQTA) screening, (4) low VMT area screening.

The Proposed Project is within a High-Quality Transit Area, however, due to its inconsistency with the City's current general plan, the Project would have to conduct a detailed VMT analysis and document it in a TIA. The TIA will include discussions of VMT results, identify impacts, and make recommendations, as needed.



Gran Vista Multi-Family
Memorandum of Approach

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Figure 1
Project Regional Location

Three-Story Townhomes
- For-sale attached townhomes provide an efficient use of land and a more financially attainable housing solution that is compatible with adjacent single family uses
- Located near SPRINTER light rail line (nearest stop is 0.36 miles) to support transit use, promote walkabilty, and potentially reduce VMT and emissions
- Withing walking dictance of retail, parks, schools and other everyday services
- Implements Policy LU-2.1 of the 2020 Climate Action Plan to "Promote compact development patterns that reduce air pollution and automobile dependence and facilitate walking, bicycling, and transit use".

Las Posas Road Frontage/Paseos
- Varied building orientation breaks up massing and provides for an eclectic and interesting street scene
- Paseo access and landscaped pedestrian pathways provide connectivity to existing sidewalks to promote walkability
- Shade trees and landscaping soften the street scene and provide pedestrian comfort

Typical Tot Lot/Excercise Station
- Tot lots with play equipment (three areas shown in red) provided throughout site area are located adjacent to barbecues and other amenities to encourage family and community gathering
- Outdoor excercise equipment (three areas shown in blue) provides an exercise loop through the community to encourage and support fitness

Community Garden
- Raised planter beds with decompsed granite pathways encourage healthy eating and wellness
- Enhanced with a potting table and storage benches

Dog Park
- Off-leash, dog area for residents to excercise and enjoy pets
- Fenced with tublar steel fencing to provide an "open" appearance
- Artificial turf surface for durability and easy maitenance
- Dog clean-up station, double gated entry, and other amenities

Primary Community Entry
- Maintains existing site access at signalized intersection
- Provides front doors facing entry for a welcoming street scene
- Enhanced paving and landscaping to be designed by landscape architect



Project Summary

Gross Area: 7.6 Acres

Total Units: 120 Homes
30 - Plan 1: 1213 Sq.Ft., 2 Bed, side-by-side garage
45 - Plan 2: 1505 Sq.Ft., 3 Bed, tandem garage
45 - Plan 3: 1802 Sq.Ft., 3 Bed, side-by-side garage

Total Open Space:
148,297 Sq.Ft. of Recreation Area
17,325 Sq.Ft. of Private Open Space
165,622 Sq.Ft. Total

Private Open Space per floor plan:
Plan 1: 87 Sq.Ft.
Plan 2: 134 Sq.Ft.
Plan 3: 198 Sq.Ft.

Parking
240 Garages (Includes 45 Tandem Spaces)
20 Guest Spaces (Includes 1 ADA space)
264 Total Spaces (not including existing spaces)

Notes:
1. APNs 219-121-15 & 16
2. Existing General Plan Designation: Commercial
3. Proposed General Plan Designation: Specific Plan Area (SPA)
4. Existing Zoning Designation: Commercial
5. Proposed Zoning Designation: Specific Plan Area (SPA)

Central Recreation Area
- Centrally located near the primary entry to provide a focal point for the community
- Amenities include lawn game area with artificial turf, barbecue counter with bar, seating, and more
- Located adjacent to a tot lot to promote family and social gathering
- Underground vaults provide storm water treatment

Children's Play Area
- Larger play area with multi-age play equipment
- Located adjacent to barbecue counter and seating area to promote family and social gathering

Secondary Community Entry
- Maintains existing site access with left/right in and right-out only turning movements
- Enhanced by adjacent open space areas, special paving and landscaping

Turf Play Area
- Open artificial turf play area
- Can be used for bad mitten, pick-up soccer, and Frisbee and other informal games

Neighborhood Edge
- Buildings oriented to minimize windows
- Landscape planting designed to provide additional screening to maximize privacy of existing single-family homes
- Underground vaults provide storm water treatment

ILLUSTRATIVE SITE PLAN

40 20 0 40 80 120

PREPARED BY:

gmp LANDSCAPE ARCHITECTURE & PLANNING
3176 Lionshead Ave, Suite 102, Carlsbad, CA 92010
gmplandarch.com
T 858 558 8977

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MLC Holdings, Inc.

SITE DEVELOPMENT PLAN FOR
GRAN VISTA
LAS POSAS RD.
City of San Marcos, California

SHEET
P-1

Figure 2
Project Site Plan

Local Transportation Analysis

The purpose of the LTA is to evaluate how the Project will affect the surrounding local transportation network, as well as to determine if additional transportation improvements will be needed. The LTA analysis will evaluate the following six (6) scenarios:

1. Existing Conditions (2022) - This scenario is utilized to establish the existing baseline of traffic operations within the study area.

2. Near-Term 2024 Base Conditions – This scenario establishes a near-term baseline against which traffic generated by the Proposed Project can be compared to at the project opening day, anticipated to be Year 2024. Ambient growth rates or addition of cumulative projects' traffic will be used to develop the Opening Year 2024 Base Conditions.

3. Near-Term 2024 Base with Project Conditions – This scenario represents the Opening Year traffic conditions with the addition of traffic generated by the Proposed Project.

4. Horizon Year 2050 Base Conditions – This scenario represents projected long-range baseline traffic conditions for Year 2050.

5. Horizon Year 2050 Base with Project Conditions – This scenario represents Year 2050 base traffic conditions with the addition of traffic generated by the Proposed Project.

Trip Generation

Project trip generation estimates were derived utilizing *SANDAG's (not so) Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region* (SANDAG, April 2002). **Table 1** displays daily, as well as AM and PM peak hour project trip generation.

Table 1 Project Trip Generation

		Trip		AM Peak Hour					PM Peak Hour				
Land Use	Units	Rate	ADT	%	Trips	Split	In	Out	%	Trips	Split	In	Out
Multi-family	120 DU	8 / DU	960	8	77	2:8	15	62	10	96	7:3	67	29

Source: SANDAG (not so) Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region, April 2002

Note:
DU = Dwelling Unit

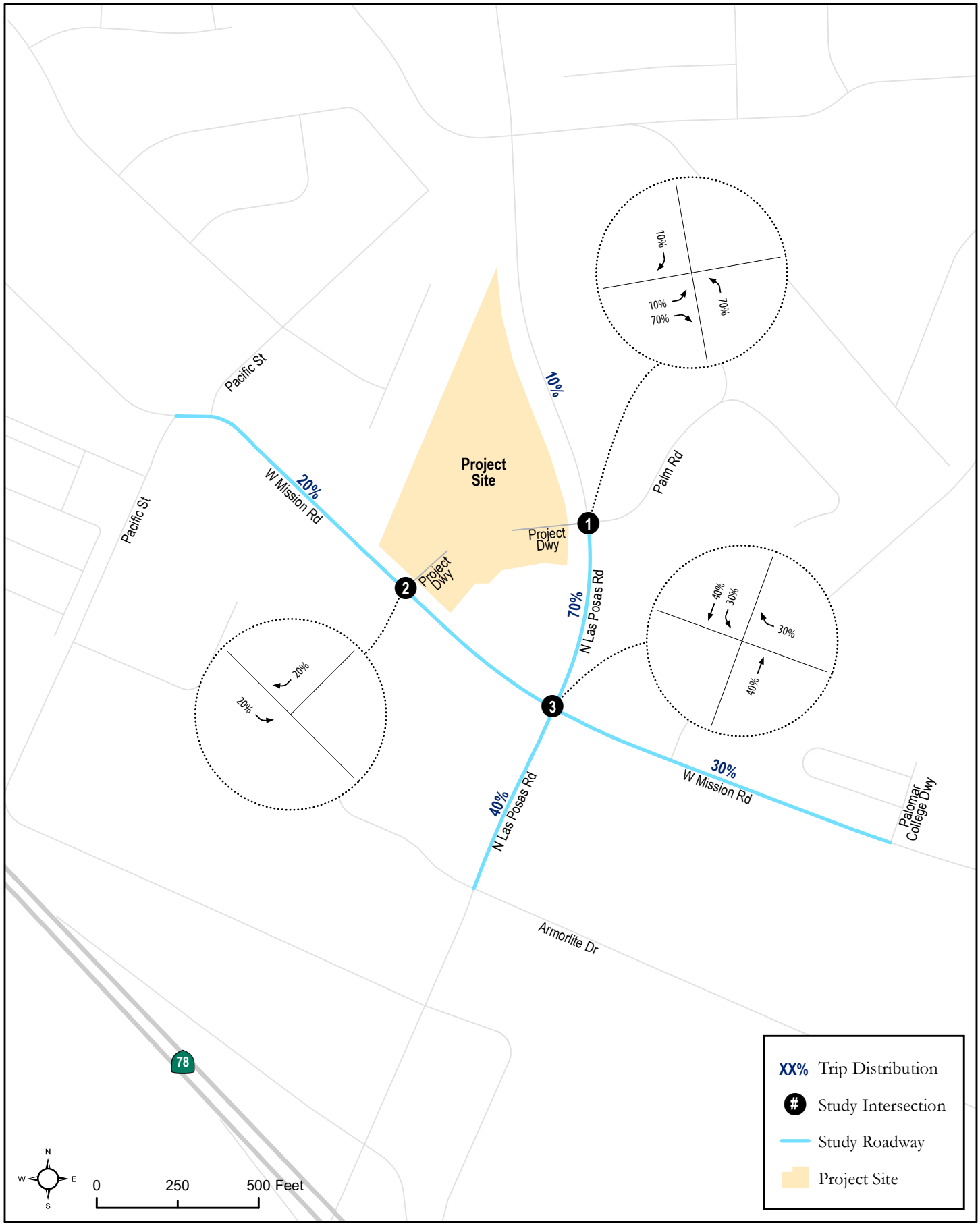
As shown in the table, the Project is anticipated to generate a total of 960 daily trips, including 77 (15-in / 62-out) trips during the AM peak hour and 96 trips (67-in / 29-out) during the PM peak hour.

Project Trip Distribution

The trip distribution for the Project was developed based on the geographical location of the Project, as well as the characteristics of the proposed and surrounding land uses. The project's trip distribution patterns for the AM and PM peak hours are in **Figure 3.**

Project Trip Assignment

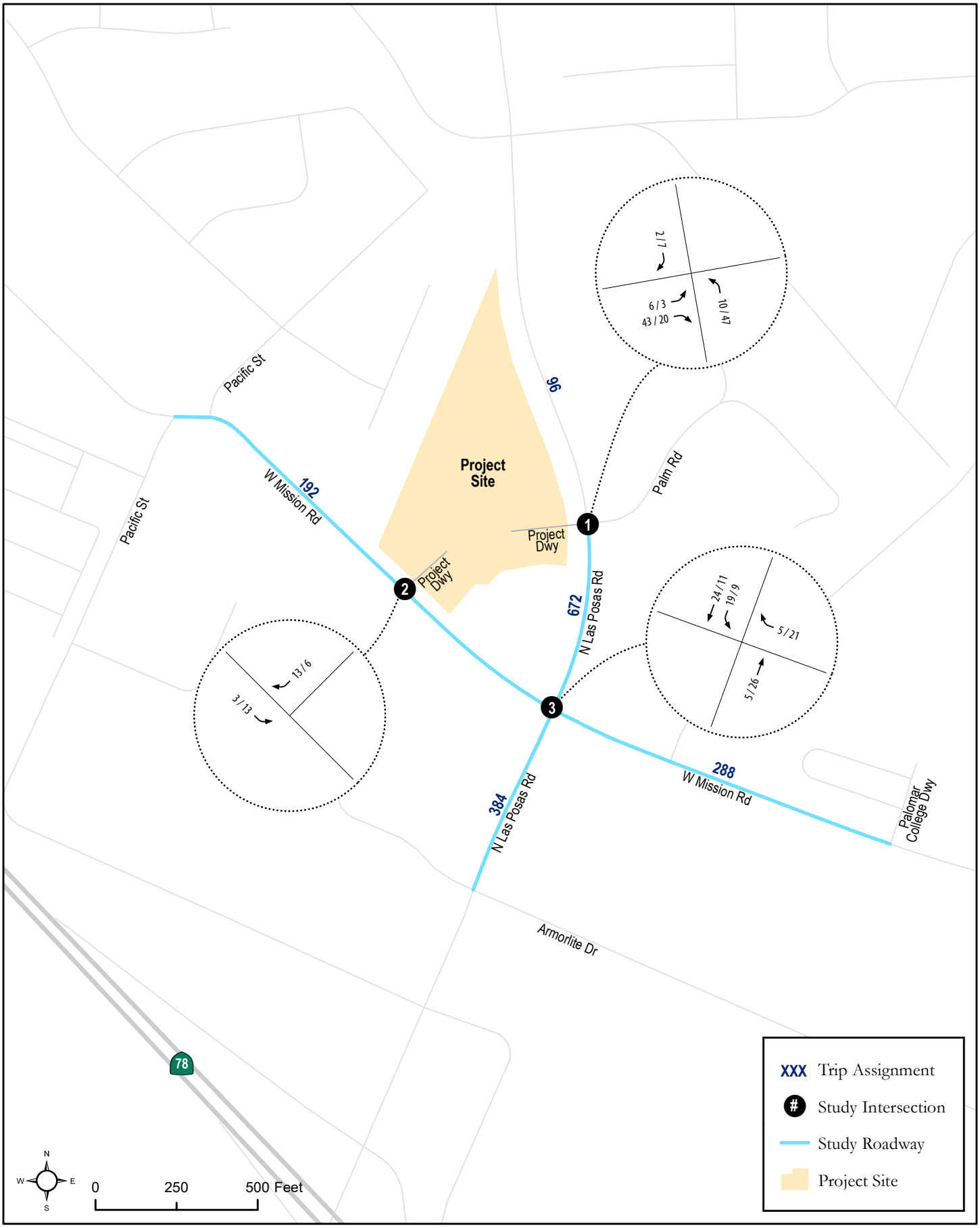
Based upon the Proposed Project trip generation (Table 1) and distribution (Figure 3), AM/PM peak hour and daily project trips were assigned to the adjacent roadway network, as displayed in **Figure 4**.



Gran Vista Multi-Family
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Figure 3
Project Trip Distribution



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Figure 4
Project Trip Assignment

Project Study Area

The following roadway segments and intersections will be included within the project study area:

Roadway Segments

- North Las Posas Road, between Palm Road and West Mission Road
- North Las Posas Road, between West Mission Road and Armorlite Drive
- West Mission Road, between Pacific Street and North Las Posas Road
- West Mission Road, between North Las Posas Road and Palomar College Driveway

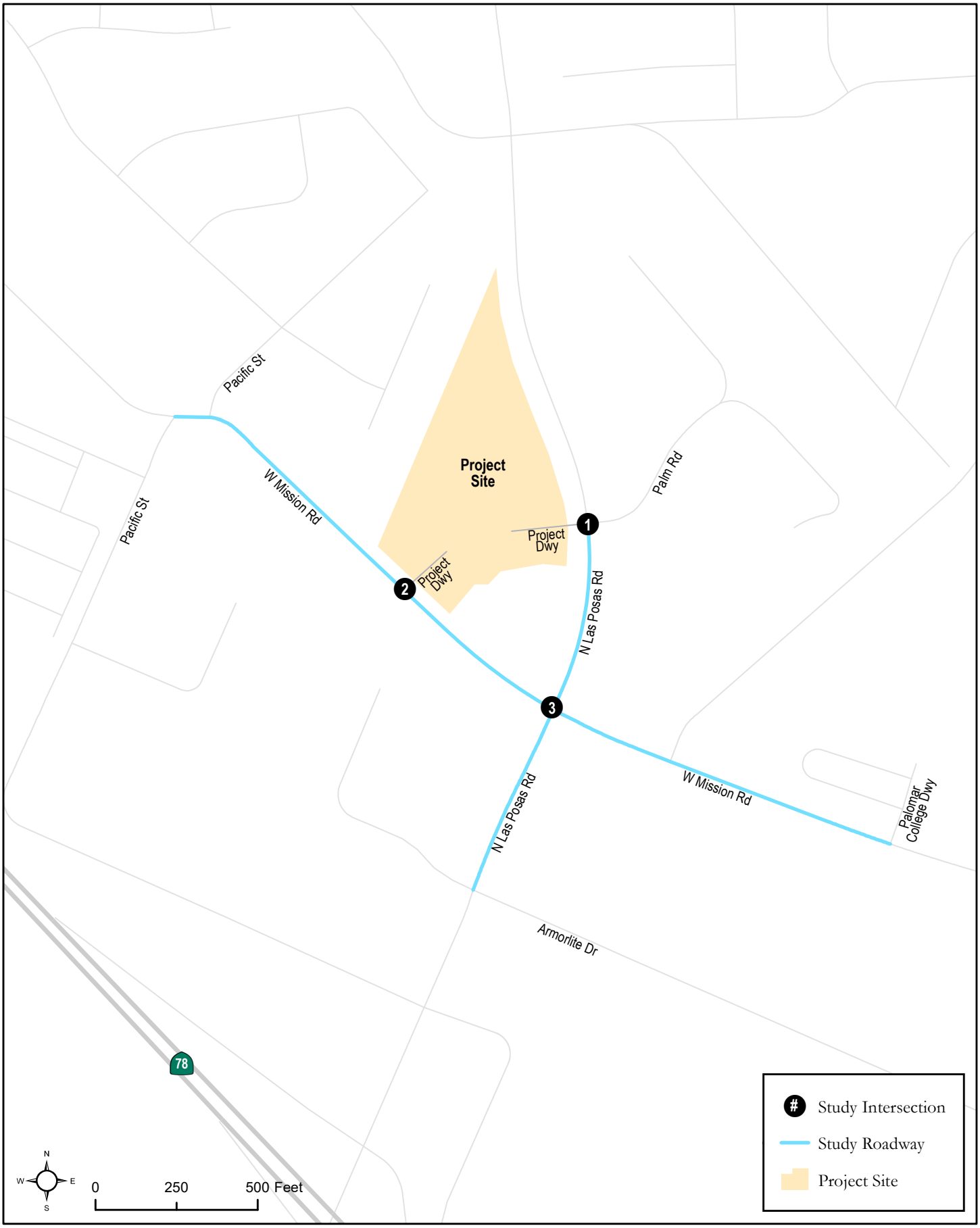
Intersections

1. North Las Posas Road & Project Driveway/Palm Road
2. West Mission Road & Project Driveway
3. North Las Posas Road & West Mission Road

The LTA will include a section regarding operational characteristics of the project driveways. **Figure 5** displays the project study area.

Traffic Volume Development

Traffic counts will be conducted along the study roadway segments and intersections listed above. To ensure that current travel patterns reflect traffic conditions prior to the COVID-19 restrictions, a count validation will be conducted. Historical counts will be compared against existing counts. If current travel patterns are observed to be similar (less than 5% variations) to pre-COVID-19 conditions, existing counts will be deemed appropriate to utilize for this TIA. Otherwise, existing traffic counts will be adjusted to account for reduced traffic conditions.



Gran Vista Multi-Family
Memorandum of Approach

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Figure 5
Project Study Area

Proposed Table of Contents

Executive Summary
1. Introduction
2. Project Setting
3. Analysis Methodology
4. VMT Analysis
5. LTA - Existing Conditions
6. LTA - Near-Term 2024 Base Conditions
7. LTA - Near-Term 2024 Base with Project Conditions
8. LTA - Horizon Year 2050 Base Conditions
9. LTA - Horizon Year 2050 Base with Project Conditions
10. Deficiencies & Mitigation Measures
11. Site Access & On-Site Circulation

Appendix B - Signal Timing Sheets

INTELIGHT

City of San Marcos

Las Posas @ Palm

Phase Timing and Options

Unit Information

Controller Number	29
Software	Intelight MAXTIME 2.X
Main Street	Las Posas
Side Street	Palm
IP Address	

Unit Parameters

Extended Mode	Disable
Startup Flash	0
Auto Ped Clear	Enable
Red Revert	6.0
Backup Time	600
Startup All Red	6
Man. Control Seq.	1
MCE Enable	Enable
Start Yel. Override	0.0
Start Red Override	0.0
Free Sequence	1
All Red Flash Exit	6
Local CVM Fash	Disable
All Red Flash Sns	Disable
All Dark Flash Sns	Disable

Phase Timing

Phase	1	2	3	4	5	6	7	8
Description			NB Left	SB	EB	WB	SB Left	NB
Walk				5		5		5
Ped Clear				15		32		15
Steady Don't Walk								
Min Green			7	10	9	9	8	10
Min Green 2								
Passage			3.0	4.0	3.0	3.0	3.0	4.0
Passage 2								
Max Green 1			25	60	15	40	25	60
Max Green 2								
Yellow Change			3.6	4.8	3.6	3.6	3.6	4.8
Red Clear			1.0	2.0	2.0	2.0	1.0	2.0
Added Initial								
Maximum Initial								
Time B4 Reduction								
Cars B4 Reduction								
Time To Reduce								
Reduce By								
Minimum Gap								
Advance Walk								
Delayed Ped								

Phase Options

Phase	1	2	3	4	5	6	7	8
Enable	.	.	X	X	X	X	X	X
Auto Flash Entry	.	.	.	.	.	X	.	.
Auto Flash Exit	.	.	.	X	.	.	.	X
Non Lock Detector	.	.	X	X	X	X	X	X
Min Vehicle Recall	.	.	.	X	.	.	.	X
Max Vehicle Recall	.	.	.	.	.	.	.	.
Ped Recall	.	.	.	.	.	.	.	.
Soft Vehicle Recall	.	.	.	.	.	.	.	.
Dual Entry	.	.	.	.	.	.	.	.
Sim. Gap Disable	.	.	.	.	.	.	.	.
Actuated Rest in Walk	.	.	.	.	.	.	.	.
Conditional Svc Enable	.	.	.	.	.	.	.	.
Add Initial Calculation	.	.	.	.	.	.	.	.
Ped Clear During Yellow	.	.	.	.	.	.	.	.
Ped Clear During Red Clr	.	.	.	.	.	.	.	.
Yellow Min Override	.	.	.	.	.	.	.	.
No Startup Call	.	.	.	.	.	.	.	.
No Ped Startup Call	.	.	.	.	.	.	.	.
Min Green 2	.	.	.	.	.	.	.	.
Max Green 2	.	.	.	.	.	.	.	.
Red Rest	.	.	.	.	.	.	.	.
Ped Recycle	.	.	.	X	.	X	.	X

Phase Configuration

Phase	Startup	Description
1	None	
2	None	
3	Phase Not On	NB Left
4	Green No Walk	SB
5	Phase Not On	EB
6	Phase Not On	WB
7	Phase Not On	SB Left
8	Green No Walk	NB

Global Phase Recalls

Phase	1	2	3	4	5	6	7	8
Min	.	.	.	.	.	.	.	.
Max	.	.	.	.	.	.	.	.
Ped	.	.	.	.	.	.	.	.

Notes

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Printed on: 3/25/2021

Sequences

Sequence 1

Ring	Sequence
1	a,3,4,b
2	5,6,a,7,8,b
3	
4	

Sequence 2

Ring	Sequence
1	2,1,a,3,4,b
2	5,6,a,7,8,b
3	
4	

Sequence 3

Ring	Sequence
1	1,2,a,4,3,b
2	5,6,a,7,8,b
3	
4	

Sequence 4

Ring	Sequence
1	2,1,a,4,3,b
2	5,6,a,7,8,b
3	
4	

Sequence 5

Ring	Sequence
1	a,3,4,b
2	5,6,a,7,8,b
3	
4	

Sequence 6

Ring	Sequence
1	a,3,4,b
2	5,6,a,7,8,b
3	
4	

Sequence 7

Ring	Sequence
1	1,2,a,4,3,b
2	6,5,a,7,8,b
3	
4	

Sequence 8

Ring	Sequence
1	2,1,a,4,3,b
2	6,5,a,7,8,b
3	
4	

Sequence 9

Ring	Sequence
1	1,2,a,3,4,b
2	5,6,a,8,7,b
3	
4	

Sequence 10

Ring	Sequence
1	2,1,a,3,4,b
2	5,6,a,8,7,b
3	
4	

Sequence 11

Ring	Sequence
1	1,2,a,4,3,b
2	5,6,a,8,7,b
3	
4	

Sequence 12

Ring	Sequence
1	2,1,a,4,3,b
2	5,6,a,8,7,b
3	
4	

Sequence 13

Ring	Sequence
1	1,2,a,3,4,b
2	6,5,a,8,7,b
3	
4	

Sequence 14

Ring	Sequence
1	2,1,a,3,4,b
2	6,5,a,8,7,b
3	
4	

Sequence 15

Ring	Sequence
1	1,2,a,4,3,b
2	6,5,a,8,7,b
3	
4	

Sequence 16

Ring	Sequence
1	2,1,a,4,3,b
2	6,5,a,8,7,b
3	
4	

Overlaps

Standard Overlaps

Overlap	1	2	3	4	5	6
Enabled	Disabled	Disabled	Disabled	Disabled	Disabled	Disabled
Description						
Type	Off	Off	Off	Off	Off	Off
Included Phs						
Modifier Phs						
Negative Phs						
Negative Ovlp						
Negative Ped						
Green Suppr						
Trail Green						
Trail Yellow						
Trail Red						
Walk						
Ped Clear						
Delay						
Startup Call	.	.	.	.	.	.
Recall	.	.	.	.	.	.
Call for Svc	.	.	.	.	.	.

Backup Prevention / No Serve Phases

Sequence 1

Backup Protection Plan

Serve Phase	Backup phase 1	2	3	4	5	6	7	8
1	.	.	.	.	.	.	.	.
2	.	.	.	.	.	.	.	.
3	.	.	.	.	.	.	.	.
4	.	.	.	.	.	.	.	.
5	.	.	.	.	.	.	.	.
6	.	.	.	.	.	.	.	.
7	.	.	.	.	.	.	.	.
8	.	.	.	.	.	.	.	.
Thru Red	No							

Call Phs

Ph	Call Ph
1	
2	
3	
4	
5	
6	
7	
8	

No Serve

Ph	No Srv
1	
2	
3	
4	
5	
6	
7	
8	

Sequence 2

Backup Protection Plan

Serve Phase	Backup phase 1	2	3	4	5	6	7	8
1	.	.	.	.	.	.	.	.
2	.	.	.	.	.	.	.	.
3	.	.	.	.	.	.	.	.
4	.	.	.	.	.	.	.	.
5	.	.	.	.	.	.	.	.
6	.	.	.	.	.	.	.	.
7	.	.	.	.	.	.	.	.
8	.	.	.	.	.	.	.	.
Thru Red	No							

Call Phs

Ph	Call Ph
1	
2	
3	
4	
5	
6	
7	
8	

No Serve

Ph	No Srv
1	
2	
3	
4	
5	
6	
7	
8	

Sequence 3

Backup Protection Plan

Serve Phase	Backup phase 1	2	3	4	5	6	7	8
1	.	.	.	.	.	.	.	.
2	.	.	.	.	.	.	.	.
3	.	.	.	.	.	.	.	.
4	.	.	.	.	.	.	.	.
5	.	.	.	.	.	.	.	.
6	.	.	.	.	.	.	.	.
7	.	.	.	.	.	.	.	.
8	.	.	.	.	.	.	.	.
Thru Red	No							

Call Phs

Ph	Call Ph
1	
2	
3	
4	
5	
6	
7	
8	

No Serve

Ph	No Srv
1	
2	
3	
4	
5	
6	
7	
8	

Sequence 4

Backup Protection Plan

Serve Phase	Backup phase 1	2	3	4	5	6	7	8
1	.	.	.	.	.	.	.	.
2	.	.	.	.	.	.	.	.
3	.	.	.	.	.	.	.	.
4	.	.	.	.	.	.	.	.
5	.	.	.	.	.	.	.	.
6	.	.	.	.	.	.	.	.
7	.	.	.	.	.	.	.	.
8	.	.	.	.	.	.	.	.
Thru Red	No							

Call Phs

Ph	Call Ph
1	
2	
3	
4	
5	
6	
7	
8	

No Serve

Ph	No Srv
1	
2	
3	
4	
5	
6	
7	
8	

Sequence 5

Backup Protection Plan

Serve Phase	Backup phase 1	2	3	4	5	6	7	8
1	.	.	.	.	.	.	.	.
2	.	.	.	.	.	.	.	.
3	.	.	.	.	.	.	.	.
4	.	.	.	.	.	.	.	.
5	.	.	.	.	.	.	.	.
6	.	.	.	.	.	.	.	.
7	.	.	.	.	.	.	.	.
8	.	.	.	.	.	.	.	.
Thru Red	No							

Call Phs

Ph	Call Ph
1	
2	
3	
4	
5	
6	
7	
8	

No Serve

Ph	No Srv
1	
2	
3	
4	
5	
6	
7	
8	

Sequence 6

Backup Protection Plan

Serve Phase	Backup phase 1	2	3	4	5	6	7	8
1	.	.	.	.	.	.	.	.
2	.	.	.	.	.	.	.	.
3	.	.	.	.	.	.	.	.
4	.	.	.	.	.	.	.	.
5	.	.	.	.	.	.	.	.
6	.	.	.	.	.	.	.	.
7	.	.	.	.	.	.	.	.
8	.	.	.	.	.	.	.	.
Thru Red	No							

Call Phs

Ph	Call Ph
1	
2	
3	
4	
5	
6	
7	
8	

No Serve

Ph	No Srv
1	
2	
3	
4	
5	
6	
7	
8	

Sequence 7

Backup Protection Plan

Serve Phase	Backup phase 1	2	3	4	5	6	7	8
1	.	.	.	.	.	.	.	.
2	.	.	.	.	.	.	.	.
3	.	.	.	.	.	.	.	.
4	.	.	.	.	.	.	.	.
5	.	.	.	.	.	.	.	.
6	.	.	.	.	.	.	.	.
7	.	.	.	.	.	.	.	.
8	.	.	.	.	.	.	.	.
Thru Red	No							

Call Phs

Ph	Call Ph
1	
2	
3	
4	
5	
6	
7	
8	

No Serve

Ph	No Srv
1	
2	
3	
4	
5	
6	
7	
8	

Sequence 8

Backup Protection Plan

Serve Phase	Backup phase 1	2	3	4	5	6	7	8
1	.	.	.	.	.	.	.	.
2	.	.	.	.	.	.	.	.
3	.	.	.	.	.	.	.	.
4	.	.	.	.	.	.	.	.
5	.	.	.	.	.	.	.	.
6	.	.	.	.	.	.	.	.
7	.	.	.	.	.	.	.	.
8	.	.	.	.	.	.	.	.
Thru Red	No							

Call Phs

Ph	Call Ph
1	
2	
3	
4	
5	
6	
7	
8	

No Serve

Ph	No Srv
1	
2	
3	
4	
5	
6	
7	
8	

Sequence 9

Backup Protection Plan

Serve Phase	Backup phase 1	2	3	4	5	6	7	8
1	.	.	.	.	.	.	.	.
2	.	.	.	.	.	.	.	.
3	.	.	.	.	.	.	.	.
4	.	.	.	.	.	.	.	.
5	.	.	.	.	.	.	.	.
6	.	.	.	.	.	.	.	.
7	.	.	.	.	.	.	.	.
8	.	.	.	.	.	.	.	.
Thru Red	No							

Call Phs

Ph	Call Ph
1	
2	
3	
4	
5	
6	
7	
8	

No Serve

Ph	No Srv
1	
2	
3	
4	
5	
6	
7	
8	

Detector Configuration

Vehicle Detectors

Detector	Slot	C1 Pin Number	Call Phas	Call O/L	Addtnl Call PH	Switch Phase	Delay	Extend	Queue Limit	No Activity	Max Pres.	Erratic Count	Fail Time	Failed Recall	Description
1	I-1	C1-56	1											None	
2	I-2U	C1-39	2											None	
3	I-2L	C1-43	2											None	
4	I-3U	C1-63	2											None	
5	I-3L	C1-76	2											None	
6	I-4	C1-47	2						20					None	
7	I-5	C1-58	3											None	
8	I-6U	C1-41	4											None	
9	I-6L	C1-45	4											None	
10	I-7U	C1-65	4											None	
11	I-7L	C1-78	4											None	
12	I-8	C1-49	4						20					None	
13	I-9U	C1-60	1											None	
14	I-9L	C1-62	3											None	
15	J-1	C1-55	5											None	
16	J-2U	C1-40	6											None	
17	J-2L	C1-44	6											None	
18	J-3U	C1-64	6											None	
19	J-3L	C1-77	6											None	
20	J-4	C1-48	6						20					None	
21	J-5	C1-57	7											None	
22	J-6U	C1-42	8											None	
23	J-6L	C1-46	8											None	
24	J-7U	C1-66	8											None	
25	J-7L	C1-79	8											None	
26	J-8	C1-50	8						20					None	
27	J-9U	C1-59	5											None	
28	J-9L	C1-61	7											None	

Pedestrian Detectors

Detector	Slot	C1 Pin Number	Call PH	Call O/L	Addtnl Call PH	No Act	Max Pres	Erratic Count
1	-------	-------						
2	I-12U	C1-67	2					
3	-------	-------						
4	I-12L	C1-69	4					
5	-------	-------						
6	I-13U	C1-68	6					
7	-------	-------						
8	I-13L	C1-70	8					

Global Vehicle Detector Parameters

Global No Activity	
Global Max Presence	20
Global Erratic Count	
Global Failed Recall	Max Recall
Detector Reset Enable	Enabled

Global Ped Detector Parameters

Global No Activity	
Global Max Pres.	5
Global Erratic Ct	

Vehicle Detection Options

Detector	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Volume	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Occupancy	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Yellow Lock Call	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Red Lock Call	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Extend	X	X	X	X	X	**X**	X	X	X	X	X	**X**	X	X	X	X	X	X	X	**X**	X	X	X	X	X	**X**	X	X
Added Initial	X	X	X	X	X	.	X	X	X	X	X	.	X	X	X	X	X	X	X	.	X	X	X	X	X	.	X	X
Queue	.	.	.	.	.	**.**	.	.	.	.	.	**.**	.	.	.	.	.	.	.	**.**	.	.	.	.	.	**.**	.	.
Call	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Min Green 2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Passage 2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Coordination Configuration

Coordination Parameters

Operational Mode	Manual Free
Coord Mode	Full Permissive
Maximum Mode	Per Pattern
Force Mode	Per Pattern
Correction Mode	Shortway (Auto)
Max Cyc Limit %	25
Min Cyc Limit %	25
Max Dwell	0
Trans. Cover Ped	Pattern

Patterns

Patt.	Cycle	Offset 1	Split	Seq	Reference	Coord Mode	FO Mode	Max Mode	Phs Pln	Det Pln	Ped Pln	OL Pln	Description
1					Yellow	Auto Permissive	Fixed	Max Inhibit	1	1	1	1	
2					Yellow	Auto Permissive	Fixed	Max Inhibit	1	1	1	1	
3					Yellow	Auto Permissive	Fixed	Max Inhibit	1	1	1	1	
4					Yellow	Auto Permissive	Fixed	Max Inhibit	1	1	1	1	
5					Yellow	Auto Permissive	Fixed	Max Inhibit	1	1	1	1	
6					Yellow	Auto Permissive	Fixed	Max Inhibit	1	1	1	1	
7					Yellow	Auto Permissive	Fixed	Max Inhibit	1	1	1	1	
8					Yellow	Auto Permissive	Fixed	Max Inhibit	1	1	1	1	
9					Yellow	Auto Permissive	Fixed	Max Inhibit	1	1	1	1	

Split Parameters

Split 1

PH.	Time	Min	Max	Coord Phase	Ref Phase	FO Mode	Mode
1				.	.	Fixed	None
2				.	.	Fixed	None
3				.	.	Fixed	None
4				.	.	Fixed	None
5				.	.	Fixed	None
6				.	.	Fixed	None
7				.	.	Fixed	None
8				.	.	Fixed	None

Split 2

PH.	Time	Min	Max	Coord Phase	Ref Phase	FO Mode	Mode
1				.	.	Fixed	None
2				.	.	Fixed	None
3				.	.	Fixed	None
4				.	.	Fixed	None
5				.	.	Fixed	None
6				.	.	Fixed	None
7				.	.	Fixed	None
8				.	.	Fixed	None

Split 3

PH.	Time	Min	Max	Coord Phase	Ref Phase	FO Mode	Mode
1				.	.	Fixed	None
2				.	.	Fixed	None
3				.	.	Fixed	None
4				.	.	Fixed	None
5				.	.	Fixed	None
6				.	.	Fixed	None
7				.	.	Fixed	None
8				.	.	Fixed	None

Split 4

PH.	Time	Min	Max	Coord Phase	Ref Phase	FO Mode	Mode
1				.	.	Fixed	None
2				.	.	Fixed	None
3				.	.	Fixed	None
4				.	.	Fixed	None
5				.	.	Fixed	None
6				.	.	Fixed	None
7				.	.	Fixed	None
8				.	.	Fixed	None

Split 5

PH.	Time	Min	Max	Coord Phase	Ref Phase	FO Mode	Mode
1				.	.	Fixed	None
2				.	.	Fixed	None
3				.	.	Fixed	None
4				.	.	Fixed	None
5				.	.	Fixed	None
6				.	.	Fixed	None
7				.	.	Fixed	None
8				.	.	Fixed	None

Split 6

PH.	Time	Min	Max	Coord Phase	Ref Phase	FO Mode	Mode
1				.	.	Fixed	None
2				.	.	Fixed	None
3				.	.	Fixed	None
4				.	.	Fixed	None
5				.	.	Fixed	None
6				.	.	Fixed	None
7				.	.	Fixed	None
8				.	.	Fixed	None

Split 7

PH.	Time	Min	Max	Coord Phase	Ref Phase	FO Mode	Mode
1				.	.	Fixed	None
2				.	.	Fixed	None
3				.	.	Fixed	None
4				.	.	Fixed	None
5				.	.	Fixed	None
6				.	.	Fixed	None
7				.	.	Fixed	None
8				.	.	Fixed	None

Split 8

PH.	Time	Min	Max	Coord Phase	Ref Phase	FO Mode	Mode
1				.	.	Fixed	None
2				.	.	Fixed	None
3				.	.	Fixed	None
4				.	.	Fixed	None
5				.	.	Fixed	None
6				.	.	Fixed	None
7				.	.	Fixed	None
8				.	.	Fixed	None

Split 9

PH.	Time	Min	Max	Coord Phase	Ref Phase	FO Mode	Mode
1				.	.	Fixed	None
2				.	.	Fixed	None
3				.	.	Fixed	None
4				.	.	Fixed	None
5				.	.	Fixed	None
6				.	.	Fixed	None
7				.	.	Fixed	None
8				.	.	Fixed	None

Advanced Coord Options

Pattern	1	2	3	4	5	6	7	8	9
Ring Plan									
Allow Split Underrun	.	.	.	.	.	.	.	.	.
Allow Split Overrun	.	.	.	.	.	.	.	.	.
Allow No Coord Phase	.	.	.	.	.	.	.	.	.
Coord Now	.	.	.	.	.	.	.	.	.

Ring Plans

Ring Plan 1

Ring	Offset	Early Gap
1		
2		
3		
4		

Ring Plan 2

Ring	Offset	Early Gap
1		
2		
3		
4		

Ring Plan 3

Ring	Offset	Early Gap
1		
2		
3		
4		

Ring Plan 4

Ring	Offset	Early Gap
1		
2		
3		
4		

Ring Plan 5

Ring	Offset	Early Gap
1		
2		
3		
4		

Ring Plan 6

Ring	Offset	Early Gap
1		
2		
3		
4		

Ring Plan 7

Ring	Offset	Early Gap
1		
2		
3		
4		

Ring Plan 8

Ring	Offset	Early Gap
1		
2		
3		
4		

Ring Plan 9

Ring	Offset	Early Gap
1		
2		
3		
4		

Scheduler Configuration

Schedule 1

Status	Disabled

Month of Year											
J	F	M	A	M	J	J	A	S	O	N	D
X	X	X	X	X	X	X	X	X	X	X	X

Description	Weekday

Days of Week							
S	M	T	W	T	F	S
.	X	X	X	X	X	.

Day Plan	1

Days of Month																															
									1										2										3		
1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Schedule 2

Status	Disabled

Month of Year											
J	F	M	A	M	J	J	A	S	O	N	D
X	X	X	X	X	X	X	X	X	X	X	X

Description	Weekend

Days of Week							
S	M	T	W	T	F	S
X	.	.	.	.	.	X

Day Plan	2

Days of Month																															
									1										2										3		
1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Schedule 3

Status	Disabled

Month of Year											
J	F	M	A	M	J	J	A	S	O	N	D
.	.	.	.	.	.	.	.	.	.	.	.

Description	

Days of Week							
S	M	T	W	T	F	S
.	.	.	.	.	.	.

Day Plan	0

Days of Month																															
									1										2										3		
1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1
.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Day Plans

Day Plan 1

Event	HR	MIN	ACT	Description
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				

Day Plan 2

Event	HR	MIN	ACT	Description
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				

Day Plan 3

Event	HR	MIN	ACT	Description
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				

Action Commands

Action	Command	Index
1	None	
2	None	
3	None	
4	None	
5	None	

Action	Command	Index
6	None	
7	None	
8	None	
9	None	
10	None	

Action	Command	Index
11	None	
12	None	
13	None	
14	None	
15	None	

Action	Command	Index
16	None	
17	None	
18	None	
19	None	
20	None	

Actions

		Aux			Special Functions						
Action	Pattern	1	2	3	1	2	3	4	5	6	7	8
1	Pattern 1	.	.	.	.	.	.	.	.	.	.	.
2	Pattern 2	.	.	.	.	.	.	.	.	.	.	.
3	Pattern 3	.	.	.	.	.	.	.	.	.	.	.
4	Pattern 4	.	.	.	.	.	.	.	.	.	.	.
5	Pattern 5	.	.	.	.	.	.	.	.	.	.	.
6	Pattern 6	.	.	.	.	.	.	.	.	.	.	.
7	Pattern 7	.	.	.	.	.	.	.	.	.	.	.
8	Pattern 8	.	.	.	.	.	.	.	.	.	.	.
9	Pattern 9	.	.	.	.	.	.	.	.	.	.	.
10	Pattern 10	.	.	.	.	.	.	.	.	.	.	.
11	None	.	.	.	.	.	.	.	.	.	.	.
12	None	.	.	.	.	.	.	.	.	.	.	.
13	None	.	.	.	.	.	.	.	.	.	.	.
14	None	.	.	.	.	.	.	.	.	.	.	.
15	None	.	.	.	.	.	.	.	.	.	.	.
16	None	.	.	.	.	.	.	.	.	.	.	.
17	None	.	.	.	.	.	.	.	.	.	.	.
18	None	.	.	.	.	.	.	.	.	.	.	.
19	None	.	.	.	.	.	.	.	.	.	.	.
20	None	.	.	.	.	.	.	.	.	.	.	.
64	Free	.	.	.	.	.	.	.	.	.	.	.

Preempt Configuration

Preemption Configuration

Preempt	1	2	3	4	5	6
Enabled	Enabled	Disabled	Enabled	Enabled	Enabled	Enabled
Type	Rail Road	Rail Road	Emergency Veh	Emergency Veh	Emergency Veh	Emergency Veh
Description	BBS Flash					
Track Phase						
Track 2 Phases						
Track Overlap						
Track 2 Overlap						
Dwell Phase			5	4,7	6	3,8
Dwell Ped						
Dwell Overlap						
Cycling Phase						
Cycling Ped						
Cycling Overlap						
Exit Phase			5	4,8	6	4,8
Exit Overlaps						
Recovery Exit Omit						

Preemption Options

Preempt	1	2	3	4	5	6
Non Lock Mem	.	.	.	.	.	.
Not Overide Flash	.	.	.	.	.	.
Not Overide Next Preempt	.	.	.	.	.	.
Flash Dwell	.	.	.	.	.	.
Ped Recycle in Dwell Cycle	.	.	.	.	.	.
Immediate Ped Clear	.	.	.	.	.	.
Dwell Only Status Output	.	.	.	.	.	.
All Red Flash Dwell	X	.	.	.	.	.
Allow All Overlaps	.	.	.	.	.	.
Require All Red Entry	.	.	.	.	.	.
Require Gate Down Track Exit	.	.	.	.	.	.
Require Gate Up Dwell Exit	.	.	.	.	.	.
Use Normal On/Normal Off Input	.	.	.	.	.	.

Preemption Parameters

Preempt	1	2	3	4	5	6
Link						
Delay						
Min Duration						
Min Presence						
Max Presence			255	255	255	255
Max Presence Action	Terminate	Terminate	Terminate	Terminate	Terminate	Terminate
Enter Min Green						
Enter Yellow Change	25.5	25.5	25.5	25.5	25.5	25.5
Enter Red Clear	25.5	25.5	25.5	25.5	25.5	25.5
Enter Min Walk						
Enter Ped Clear			7	7	7	7
Track Green						
Track Yellow Change	25.5	25.5	25.5	25.5	25.5	25.5
Track Red Clear	25.5	25.5	25.5	25.5	25.5	25.5
Track 2 Green						
Track 2 Yellow	25.5	25.5	25.5	25.5	25.5	25.5
Track 2 Red	25.5	25.5	25.5	25.5	25.5	25.5
Track Ext. Gate Down						

Preempt Parameters

Preempt	1	2	3	4	5	6
Dwell Green			1	1	1	1
Exit Ped Clear	255	255	255	255	255	255
Exit Yellow Change	25.5	25.5	25.5	25.5	25.5	25.5
Exit Red Clear	25.5	25.5	25.5	25.5	25.5	25.5
Dwell Ext Time						
Max Exit Green						
Exit Type	Exit Phases	Exit Phases	Exit Phases	Exit Phases	Exit Phases	Exit Phases
Exit Max Mode	Disabled	Disabled	Disabled	Disabled	Disabled	Disabled
Exit Max Apply Time						
Veh Exit Calls						
Ped Exit Calls						

Advanced I/O Configuration

Channel Configuration

Ch	Control Type	Source
1	Phase Vehicle	1
2	Phase Vehicle	2
3	Phase Vehicle	3
4	Phase Vehicle	4
5	Phase Vehicle	5
6	Phase Vehicle	6
7	Phase Vehicle	7
8	Phase Vehicle	8

Ch	Control Type	Source
9	None	
10	None	
11	None	
12	None	
13	Phase Ped	2
14	Phase Ped	4
15	Phase Ped	6
16	Phase Ped	8

Concurrency Mode

Concurrency Mode
Auto

Auto Concurrency

Ch	Concurrency
1	
2	13
3	7,8,16
4	7,8,14,16
5	
6	15
7	14
8	14,16
9	
10	
11	
12	
13	
14	16
15	
16	

Channel Options

Channel	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Flash Yellow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Flash Red	X	X	X	X	X	X	X	X	.	.	.	.	.	.	.	.
Flash Alternate Half Hertz	X	.	.	X	X	.	.	X	.	.	.	.	.	.	.	.

Cabinet Configuration

IO Modules

IO Module	Type
1	Caltrans 332

Input Points

Input	C1 Pin	Input Type	Idx
1	C1-39	Vehicle Det Call	2
2	C1-40	Vehicle Det Call	16
3	C1-41	Vehicle Det Call	8
4	C1-42	Vehicle Det Call	22
5	C1-43	Vehicle Det Call	3
6	C1-44	Vehicle Det Call	17
7	C1-45	Vehicle Det Call	9
8	C1-46	Vehicle Det Call	23
9	C1-47	Vehicle Det Call	6
10	C1-48	Vehicle Det Call	20
11	C1-49	Vehicle Det Call	12
12	C1-50	Vehicle Det Call	26
13	C1-51	Preempt Input	1
14	C1-52	Preempt Input	2
15	C1-53	Unit Manual Control Enable	1
16	C1-54	Not Active	

Input	C1 Pin	Input Type	Idx
17	C1-55	Vehicle Det Call	15
18	C1-56	Vehicle Det Call	1
19	C1-57	Vehicle Det Call	21
20	C1-58	Vehicle Det Call	7
21	C1-59	Vehicle Det Call	27
22	C1-60	Vehicle Det Call	13
23	C1-61	Vehicle Det Call	28
24	C1-62	Vehicle Det Call	14
25	C11-10	Not Active	
26	C11-11	Not Active	
27	C11-12	Not Active	
28	C11-13	Not Active	
29	C1-63	Vehicle Det Call	4
30	C1-64	Vehicle Det Call	18
31	C1-65	Vehicle Det Call	10
32	C1-66	Vehicle Det Call	24

Input	C1 Pin	Input Type	Idx
33	C1-67	Ped Det Call	2
34	C1-68	Ped Det Call	6
35	C1-69	Ped Det Call	4
36	C1-70	Ped Det Call	8
37	C1-71	Preempt Input	3
38	C1-72	Preempt Input	4
39	C1-73	Preempt Input	5
40	C1-74	Preempt Input	6
41	C1-75	Not Active	
42	C1-76	Vehicle Det Call	5
43	C1-77	Vehicle Det Call	19
44	C1-78	Vehicle Det Call	11
45	C1-79	Vehicle Det Call	25
46	C1-80	Unit Interval Advance	1
47	C1-81	Unit Local Flash Sense	1
48	C1-82	Unit Stop Time	1

Input	C1 Pin	Input Type	Idx
49	C11-15	Not Active	
50	C11-16	Not Active	
51	C11-17	Not Active	
52	C11-18	Not Active	
53	C11-19	Not Active	
54	C11-20	Not Active	
55	C11-21	Not Active	
56	C11-22	Not Active	
57	C11-23	Not Active	
58	C11-24	Not Active	
59	C11-25	Not Active	
60	C11-26	Not Active	
61	C11-27	Not Active	
62	C11-28	Not Active	
63	C11-29	Not Active	
64	C11-30	Not Active	

Cabinet Configuration

Output Points

Output	C1 Pin	Output Type	Idx
1	C1-2	Channel Red Do Not Walk Driver	14
2	C1-3	Channel Green Walk Driver	14
3	C1-4	Channel Red Do Not Walk Driver	4
4	C1-5	Channel Yellow Ped Clear Driver	4
5	C1-6	Channel Green Walk Driver	4
6	C1-7	Channel Red Do Not Walk Driver	3
7	C1-8	Channel Yellow Ped Clear Driver	3
8	C1-9	Channel Green Walk Driver	3
9	C1-10	Channel Red Do Not Walk Driver	13
10	C1-11	Channel Green Walk Driver	13
11	C1-12	Channel Red Do Not Walk Driver	2
12	C1-13	Channel Yellow Ped Clear Driver	2
13	C1-15	Channel Green Walk Driver	2
14	C1-16	Channel Red Do Not Walk Driver	1
15	C1-17	Channel Yellow Ped Clear Driver	1
16	C1-18	Channel Green Walk Driver	1
17	C1-19	Channel Red Do Not Walk Driver	16
18	C1-20	Channel Green Walk Driver	16
19	C1-21	Channel Red Do Not Walk Driver	8
20	C1-22	Channel Yellow Ped Clear Driver	8
21	C1-23	Channel Green Walk Driver	8
22	C1-24	Channel Red Do Not Walk Driver	7
23	C1-25	Channel Yellow Ped Clear Driver	7
24	C1-26	Channel Green Walk Driver	7
25	C1-27	Channel Red Do Not Walk Driver	15
26	C1-28	Channel Green Walk Driver	15
27	C1-29	Channel Red Do Not Walk Driver	6
28	C1-30	Channel Yellow Ped Clear Driver	6
29	C1-31	Channel Green Walk Driver	6
30	C1-32	Channel Red Do Not Walk Driver	5
31	C1-33	Channel Yellow Ped Clear Driver	5
32	C1-34	Channel Green Walk Driver	5

Output	C1 Pin	Output Type	Idx
33	C1-35	Channel Yellow Ped Clear Driver	13
34	C1-36	Channel Yellow Ped Clear Driver	15
35	C1-37	Channel Yellow Ped Clear Driver	14
36	C1-38	Channel Yellow Ped Clear Driver	16
37	C1-100	Channel Yellow Ped Clear Driver	18
38	C1-101	Channel Yellow Ped Clear Driver	11
39	C1-102	Detector Reset	1
40	C1-103	Watchdog	
41	C1-83	Channel Red Do Not Walk Driver	18
42	C1-84	Channel Green Walk Driver	18
43	C1-85	Channel Red Do Not Walk Driver	17
44	C1-86	Channel Yellow Ped Clear Driver	17
45	C1-87	Channel Green Walk Driver	17
46	C1-88	Channel Red Do Not Walk Driver	12
47	C1-89	Channel Yellow Ped Clear Driver	12
48	C1-90	Channel Green Walk Driver	12
49	C1-91	Channel Red Do Not Walk Driver	11
50	C1-93	Channel Green Walk Driver	11
51	C1-94	Channel Red Do Not Walk Driver	10
52	C1-95	Channel Yellow Ped Clear Driver	10
53	C1-96	Channel Green Walk Driver	10
54	C1-97	Channel Red Do Not Walk Driver	9
55	C1-98	Channel Yellow Ped Clear Driver	9
56	C1-99	Channel Green Walk Driver	9
57	C11-1	Not Active	
58	C11-2	Not Active	
59	C11-3	Not Active	
60	C11-4	Not Active	
61	C11-5	Not Active	
62	C11-6	Not Active	
63	C11-7	Not Active	
64	C11-8	Not Active	

User Programs

Program 1

Enabled

Line	Result	Idx	Operation	Parameter A	Idx	Parameter B	Idx	Dly	Ext	Description
1	Unit Stop Time	1	Result=A	Aux Switch State						Aux switch stop time
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23										
24										
25										
26										
27										
28										
29										
30										
31										
32										
33										
34										
35										
36										
37										
38										
39										
40										

INTELIGHT

City of San Marcos

Mission @ Las Posas

Phase Timing and Options

Unit Information

Controller Number	5005
Software	Intelight MAXTIME 2.X
Main Street	Mission
Side Street	Las Posas
IP Address	

Unit Parameters

Extended Mode	Disable
Startup Flash	0
Auto Ped Clear	Enable
Red Revert	6.0
Backup Time	600
Startup All Red	6
Man. Control Seq.	1
MCE Enable	Enable
Start Yel. Override	0.0
Start Red Override	0.0
Free Sequence	1
All Red Flash Exit	6
Local CVM Fash	Disable
All Red Flash Sns	Disable
All Dark Flash Sns	Disable

Phase Timing

Phase	1	2	3	4	5	6	7	8
Description	SB Left	NB	WB Left	EB	NB Left	SB	EB Left	WB
Walk		4		4		4		4
Ped Clear		29		34		29		34
Steady Don't Walk								
Min Green	10	10	10	10	10	10	10	10
Min Green 2								
Passage	2.0	4.0	3.0	3.0	3.0	4.0	2.0	4.0
Passage 2								
Max Green 1	25	40	30	35	25	40	20	45
Max Green 2								
Yellow Change	3.6	4.8	4.3	4.8	3.6	4.8	4.3	4.3
Red Clear	1.5	2.0	2.0	1.5	1.5	2.0	1.8	1.8
Added Initial								
Maximum Initial								
Time B4 Reduction								
Cars B4 Reduction								
Time To Reduce								
Reduce By								
Minimum Gap								
Advance Walk								
Delayed Ped								

Phase Options

Phase	1	2	3	4	5	6	7	8
Enable	X	X	X	X	X	X	X	X
Auto Flash Entry	.	.	.	X	.	.	.	X
Auto Flash Exit	.	X	.	.	.	X	.	.
Non Lock Detector	X	X	X	X	X	X	X	X
Min Vehicle Recall	.	X	.	.	.	X	.	.
Max Vehicle Recall	.	.	.	.	.	.	.	.
Ped Recall	.	.	.	.	.	.	.	.
Soft Vehicle Recall	.	.	.	.	.	.	.	.
Dual Entry	.	.	.	.	.	.	.	.
Sim. Gap Disable	.	.	.	.	.	.	.	.
Actuated Rest in Walk	.	.	.	.	.	.	.	.
Conditional Svc Enable	.	.	.	.	.	.	.	.
Add Initial Calculation	.	.	.	.	.	.	.	.
Ped Clear During Yellow	.	.	.	.	.	.	.	.
Ped Clear During Red Clr	.	.	.	.	.	.	.	.
Yellow Min Override	.	.	.	.	.	.	.	.
No Startup Call	.	.	.	.	.	.	.	.
No Ped Startup Call	.	.	.	.	.	.	.	.
Min Green 2	.	.	.	.	.	.	.	.
Max Green 2	.	.	.	.	.	.	.	.
Red Rest	.	.	.	.	.	.	.	.
Ped Recycle	.	X	.	X	.	X	.	X

Phase Configuration

Phase	Startup	Description
1	Phase Not On	SB Left
2	Green No Walk	NB
3	Phase Not On	WB Left
4	Phase Not On	EB
5	Phase Not On	NB Left
6	Green No Walk	SB
7	Phase Not On	EB Left
8	Phase Not On	WB

Global Phase Recalls

Phase	1	2	3	4	5	6	7	8
Min	.	.	.	.	.	.	.	.
Max	.	.	.	.	.	.	.	.
Ped	.	.	.	.	.	.	.	.

Notes

SAN MARCOS
DISCOVER LIFE'S POSSIBILITIES

Printed on: 3/25/2021

Sequences

Sequence 1

Ring	Sequence
1	1,2,a,3,4,b
2	5,6,a,7,8,b
3	9,c
4	

Sequence 2

Ring	Sequence
1	2,1,a,3,4,b
2	5,6,a,7,8,b
3	
4	

Sequence 3

Ring	Sequence
1	1,2,a,4,3,b
2	5,6,a,7,8,b
3	
4	

Sequence 4

Ring	Sequence
1	2,1,a,4,3,b
2	5,6,a,7,8,b
3	
4	

Sequence 5

Ring	Sequence
1	1,2,a,3,4,b
2	5,6,a,7,8,b
3	9,c
4	

Sequence 6

Ring	Sequence
1	1,2,a,3,4,b
2	5,6,a,7,8,b
3	
4	

Sequence 7

Ring	Sequence
1	1,2,a,4,3,b
2	6,5,a,7,8,b
3	
4	

Sequence 8

Ring	Sequence
1	2,1,a,4,3,b
2	6,5,a,7,8,b
3	
4	

Sequence 9

Ring	Sequence
1	1,2,a,3,4,b
2	5,6,a,8,7,b
3	
4	

Sequence 10

Ring	Sequence
1	2,1,a,3,4,b
2	5,6,a,8,7,b
3	
4	

Sequence 11

Ring	Sequence
1	1,2,a,4,3,b
2	5,6,a,8,7,b
3	
4	

Sequence 12

Ring	Sequence
1	2,1,a,4,3,b
2	5,6,a,8,7,b
3	
4	

Sequence 13

Ring	Sequence
1	1,2,a,3,4,b
2	6,5,a,8,7,b
3	
4	

Sequence 14

Ring	Sequence
1	2,1,a,3,4,b
2	6,5,a,8,7,b
3	
4	

Sequence 15

Ring	Sequence
1	1,2,a,4,3,b
2	6,5,a,8,7,b
3	
4	

Sequence 16

Ring	Sequence
1	2,1,a,4,3,b
2	6,5,a,8,7,b
3	
4	

Overlaps

Standard Overlaps

Overlap	1	2	3	4	5	6
Enabled	Enabled	Enabled	Enabled	Enabled	Enabled	Disabled
Description	Ph 8	Ph 3	Ph 1,5	Ph 4,5 RT		
Type	Normal	Normal	Normal	Normal	Normal	Off
Included Phs	8	3	1,5	5	2,3,4,6,7,8	
Modifier Phs						
Negative Phs	1,2,5,6,7	1,2,4,5,6	3,4,7,8		1,5	
Negative Ovlp						
Negative Ped						
Green Suppr	1,2,5,6,7	1,2,4,5,6	3,4,7,8		1,5	
Trail Green						
Trail Yellow						
Trail Red						
Walk						
Ped Clear						
Delay						
Startup Call	.	.	.	.	.	.
Recall	.	.	.	.	.	.
Call for Svc	.	.	.	.	.	.

Backup Prevention / No Serve Phases

Sequence 1

Backup Protection Plan

Serve Phase	Backup phase 1	2	3	4	5	6	7	8
1	.	.	.	.	.	.	.	.
2	.	.	.	.	.	.	.	.
3	.	.	.	.	.	.	.	.
4	.	.	.	.	.	.	.	.
5	.	.	.	.	.	.	.	.
6	.	.	.	.	.	.	.	.
7	.	.	.	.	.	.	.	.
8	.	.	.	.	.	.	.	.
Thru Red	No							

Call Phs

Ph	Call Ph
1	
2	
3	
4	
5	
6	
7	
8	

No Serve

Ph	No Srv
1	
2	
3	
4	
5	
6	
7	
8	

Sequence 2

Backup Protection Plan

Serve Phase	Backup phase 1	2	3	4	5	6	7	8
1	.	.	.	.	.	.	.	.
2	.	.	.	.	.	.	.	.
3	.	.	.	.	.	.	.	.
4	.	.	.	.	.	.	.	.
5	.	.	.	.	.	.	.	.
6	.	.	.	.	.	.	.	.
7	.	.	.	.	.	.	.	.
8	.	.	.	.	.	.	.	.
Thru Red	No							

Call Phs

Ph	Call Ph
1	
2	
3	
4	
5	
6	
7	
8	

No Serve

Ph	No Srv
1	
2	
3	
4	
5	
6	
7	
8	

Sequence 3

Backup Protection Plan

Serve Phase	Backup phase 1	2	3	4	5	6	7	8
1	.	.	.	.	.	.	.	.
2	.	.	.	.	.	.	.	.
3	.	.	.	.	.	.	.	.
4	.	.	.	.	.	.	.	.
5	.	.	.	.	.	.	.	.
6	.	.	.	.	.	.	.	.
7	.	.	.	.	.	.	.	.
8	.	.	.	.	.	.	.	.
Thru Red	No							

Call Phs

Ph	Call Ph
1	
2	
3	
4	
5	
6	
7	
8	

No Serve

Ph	No Srv
1	
2	
3	
4	
5	
6	
7	
8	

Sequence 4

Backup Protection Plan

Serve Phase	Backup phase 1	2	3	4	5	6	7	8
1	.	.	.	.	.	.	.	.
2	.	.	.	.	.	.	.	.
3	.	.	.	.	.	.	.	.
4	.	.	.	.	.	.	.	.
5	.	.	.	.	.	.	.	.
6	.	.	.	.	.	.	.	.
7	.	.	.	.	.	.	.	.
8	.	.	.	.	.	.	.	.
Thru Red	No							

Call Phs

Ph	Call Ph
1	
2	
3	
4	
5	
6	
7	
8	

No Serve

Ph	No Srv
1	
2	
3	
4	
5	
6	
7	
8	

Sequence 5

Backup Protection Plan

Serve Phase	Backup phase 1	2	3	4	5	6	7	8
1	.	.	.	.	.	.	.	.
2	.	.	.	.	.	.	.	.
3	.	.	.	.	.	.	.	.
4	.	.	.	.	.	.	.	.
5	.	.	.	.	.	.	.	.
6	.	.	.	.	.	.	.	.
7	.	.	.	.	.	.	.	.
8	.	.	.	.	.	.	.	.
Thru Red	No							

Call Phs

Ph	Call Ph
1	
2	
3	
4	
5	
6	
7	
8	

No Serve

Ph	No Srv
1	
2	
3	
4	
5	
6	
7	
8	

Sequence 6

Backup Protection Plan

Serve Phase	Backup phase 1	2	3	4	5	6	7	8
1	.	.	.	.	.	.	.	.
2	.	.	.	.	.	.	.	.
3	.	.	.	.	.	.	.	.
4	.	.	.	.	.	.	.	.
5	.	.	.	.	.	.	.	.
6	.	.	.	.	.	.	.	.
7	.	.	.	.	.	.	.	.
8	.	.	.	.	.	.	.	.
Thru Red	No							

Call Phs

Ph	Call Ph
1	
2	
3	
4	
5	
6	
7	
8	

No Serve

Ph	No Srv
1	
2	
3	
4	
5	
6	
7	
8	

Sequence 7

Backup Protection Plan

Serve Phase	Backup phase 1	2	3	4	5	6	7	8
1	.	.	.	.	.	.	.	.
2	.	.	.	.	.	.	.	.
3	.	.	.	.	.	.	.	.
4	.	.	.	.	.	.	.	.
5	.	.	.	.	.	.	.	.
6	.	.	.	.	.	.	.	.
7	.	.	.	.	.	.	.	.
8	.	.	.	.	.	.	.	.
Thru Red	No							

Call Phs

Ph	Call Ph
1	
2	
3	
4	
5	
6	
7	
8	

No Serve

Ph	No Srv
1	
2	
3	
4	
5	
6	
7	
8	

Sequence 8

Backup Protection Plan

Serve Phase	Backup phase 1	2	3	4	5	6	7	8
1	.	.	.	.	.	.	.	.
2	.	.	.	.	.	.	.	.
3	.	.	.	.	.	.	.	.
4	.	.	.	.	.	.	.	.
5	.	.	.	.	.	.	.	.
6	.	.	.	.	.	.	.	.
7	.	.	.	.	.	.	.	.
8	.	.	.	.	.	.	.	.
Thru Red	No							

Call Phs

Ph	Call Ph
1	
2	
3	
4	
5	
6	
7	
8	

No Serve

Ph	No Srv
1	
2	
3	
4	
5	
6	
7	
8	

Sequence 9

Backup Protection Plan

Serve Phase	Backup phase 1	2	3	4	5	6	7	8
1	.	.	.	.	.	.	.	.
2	.	.	.	.	.	.	.	.
3	.	.	.	.	.	.	.	.
4	.	.	.	.	.	.	.	.
5	.	.	.	.	.	.	.	.
6	.	.	.	.	.	.	.	.
7	.	.	.	.	.	.	.	.
8	.	.	.	.	.	.	.	.
Thru Red	No							

Call Phs

Ph	Call Ph
1	
2	
3	
4	
5	
6	
7	
8	

No Serve

Ph	No Srv
1	
2	
3	
4	
5	
6	
7	
8	

Detector Configuration

Vehicle Detectors

Detector	Slot	C1 Pin Number	Call Phas	Call O/L	Addtnl Call PH	Switch Phase	Delay	Extend	Queue Limit	No Activity	Max Pres.	Erratic Count	Fail Time	Failed Recall	Description
1	I-1	C1-56	1											None	
2	I-2U	C1-39	2											None	
3	I-2L	C1-43	2											None	
4	I-3U	C1-63	2											None	
5	I-3L	C1-76	2											None	
6	I-4	C1-47	2											None	
7	I-5	C1-58	3											None	
8	I-6U	C1-41	4											None	
9	I-6L	C1-45	4											None	
10	I-7U	C1-65	4											None	
11	I-7L	C1-78	4											None	
12	I-8	C1-49	4											None	
13	I-9U	C1-60	1											None	
14	I-9L	C1-62	**1**											None	
15	J-1	C1-55	5											None	
16	J-2U	C1-40	6											None	
17	J-2L	C1-44	6											None	
18	J-3U	C1-64												None	
19	J-3L	C1-77	6											None	
20	J-4	C1-48	6		1									None	
21	J-5	C1-57	7											None	
22	J-6U	C1-42	8											None	
23	J-6L	C1-46	8											None	
24	J-7U	C1-66	8											None	
25	J-7L	C1-79	8											None	
26	J-8	C1-50	8											None	
27	J-9U	C1-59												None	
28	J-9L	C1-61												None	

Pedestrian Detectors

Detector	Slot	C1 Pin Number	Call PH	Call O/L	Addtnl Call PH	No Act	Max Pres	Erratic Count
1	-------	-------	1					
2	I-12U	C1-67	2					
3	-------	-------	3					
4	I-12L	C1-69	4					
5	-------	-------	5					
6	I-13U	C1-68	6					
7	-------	-------	7					
8	I-13L	C1-70	8					

Global Vehicle Detector Parameters

Global No Activity	
Global Max Presence	20
Global Erratic Count	
Global Failed Recall	Max Recall
Detector Reset Enable	Enabled

Global Ped Detector Parameters

Global No Activity	
Global Max Pres.	5
Global Erratic Ct	

Vehicle Detection Options

Detector	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Volume	X	X	X	X	X	.	X	X	X	X	X	.	X	X	X	X	X	X	X	.	X	X	X	X	X	.	X	X
Occupancy	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Yellow Lock Call	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Red Lock Call	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Extend	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Added Initial	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Queue	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Call	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Min Green 2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Passage 2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Coordination Configuration

Coordination Parameters

Operational Mode	Automatic
Coord Mode	Full Permissive
Maximum Mode	Per Pattern
Force Mode	Per Pattern
Correction Mode	Shortway (Auto)
Max Cyc Limit %	30
Min Cyc Limit %	30
Max Dwell	0
Trans. Cover Ped	Pattern

Patterns

Patt.	Cycle	Offset 1	Split	Seq	Reference	Coord Mode	FO Mode	Max Mode	Phs Pln	Det Pln	Ped Pln	OL Pln	Description
1	100	25	1	1	Yellow	Auto Permissive	Float	Max Inhibit	1	1	1	1	
2	100	38	2	1	Yellow	Auto Permissive	Float	Max Inhibit	1	1	1	1	
3	110	109	3	1	Yellow	Auto Permissive	Float	Max Inhibit	1	1	1	1	
4					Yellow	Auto Permissive	Fixed	Max Inhibit	1	1	1	1	
5					Yellow	Auto Permissive	Fixed	Max Inhibit	1	1	1	1	
6					Yellow	Auto Permissive	Fixed	Max Inhibit	1	1	1	1	
7					Yellow	Auto Permissive	Fixed	Max Inhibit	1	1	1	1	
8					Yellow	Auto Permissive	Fixed	Max Inhibit	1	1	1	1	
9					Yellow	Auto Permissive	Fixed	Max Inhibit	1	1	1	1	

Split Parameters

Split 1

PH.	Time	Min	Max	Coord Phase	Ref Phase	FO Mode	Mode
1	18			.	.	Fixed	None
2	28			X	.	Fixed	None
3	19			.	.	Fixed	None
4	35			.	.	Fixed	None
5	18			.	.	Fixed	None
6	28			X	X	Fixed	None
7	19			.	.	Fixed	None
8	35			.	.	Fixed	None

Split 2

PH.	Time	Min	Max	Coord Phase	Ref Phase	FO Mode	Mode
1	16			.	.	Fixed	None
2	29			X	X	Fixed	None
3	21			.	.	Fixed	None
4	34			.	.	Fixed	None
5	16			.	.	Fixed	None
6	29			X	.	Fixed	None
7	21			.	.	Fixed	None
8	34			.	.	Fixed	None

Split 3

PH.	Time	Min	Max	Coord Phase	Ref Phase	FO Mode	Mode
1	20			.	.	Fixed	None
2	30			X	.	Fixed	None
3	23			.	.	Fixed	None
4	37			.	.	Fixed	None
5	20			.	.	Fixed	None
6	30			X	X	Fixed	None
7	23			.	.	Fixed	None
8	37			.	.	Fixed	None

Split 4

PH.	Time	Min	Max	Coord Phase	Ref Phase	FO Mode	Mode
1				.	.	Fixed	None
2				.	.	Fixed	None
3				.	.	Fixed	None
4				.	.	Fixed	None
5				.	.	Fixed	None
6				.	.	Fixed	None
7				.	.	Fixed	None
8				.	.	Fixed	None

Split 5

PH.	Time	Min	Max	Coord Phase	Ref Phase	FO Mode	Mode
1				.	.	Fixed	None
2				.	.	Fixed	None
3				.	.	Fixed	None
4				.	.	Fixed	None
5				.	.	Fixed	None
6				.	.	Fixed	None
7				.	.	Fixed	None
8				.	.	Fixed	None

Split 6

PH.	Time	Min	Max	Coord Phase	Ref Phase	FO Mode	Mode
1				.	.	Fixed	None
2				.	.	Fixed	None
3				.	.	Fixed	None
4				.	.	Fixed	None
5				.	.	Fixed	None
6				.	.	Fixed	None
7				.	.	Fixed	None
8				.	.	Fixed	None

Split 7

PH.	Time	Min	Max	Coord Phase	Ref Phase	FO Mode	Mode
1				.	.	Fixed	None
2				.	.	Fixed	None
3				.	.	Fixed	None
4				.	.	Fixed	None
5				.	.	Fixed	None
6				.	.	Fixed	None
7				.	.	Fixed	None
8				.	.	Fixed	None

Split 8

PH.	Time	Min	Max	Coord Phase	Ref Phase	FO Mode	Mode
1				.	.	Fixed	None
2				.	.	Fixed	None
3				.	.	Fixed	None
4				.	.	Fixed	None
5				.	.	Fixed	None
6				.	.	Fixed	None
7				.	.	Fixed	None
8				.	.	Fixed	None

Split 9

PH.	Time	Min	Max	Coord Phase	Ref Phase	FO Mode	Mode
1				.	.	Fixed	None
2				.	.	Fixed	None
3				.	.	Fixed	None
4				.	.	Fixed	None
5				.	.	Fixed	None
6				.	.	Fixed	None
7				.	.	Fixed	None
8				.	.	Fixed	None

Advanced Coord Options

Pattern	1	2	3	4	5	6	7	8	9
Ring Plan									
Allow Split Underrun	.	.	.	.	.	.	.	.	.
Allow Split Overrun	.	.	.	.	.	.	.	.	.
Allow No Coord Phase	.	.	.	.	.	.	.	.	.
Coord Now	.	.	.	.	.	.	.	.	.

Ring Plans

Ring Plan 1

Ring	Offset	Early Gap
1		
2		
3		
4		

Ring Plan 2

Ring	Offset	Early Gap
1		
2		
3		
4		

Ring Plan 3

Ring	Offset	Early Gap
1		
2		
3		
4		

Ring Plan 4

Ring	Offset	Early Gap
1		
2		
3		
4		

Ring Plan 5

Ring	Offset	Early Gap
1		
2		
3		
4		

Ring Plan 6

Ring	Offset	Early Gap
1		
2		
3		
4		

Ring Plan 7

Ring	Offset	Early Gap
1		
2		
3		
4		

Ring Plan 8

Ring	Offset	Early Gap
1		
2		
3		
4		

Ring Plan 9

Ring	Offset	Early Gap
1		
2		
3		
4		

Scheduler Configuration

Schedule 1

Status	Enabled

Description	

Day Plan	1

Month of Year											
J	F	M	A	M	J	J	A	S	O	N	D
X	X	X	X	X	X	X	X	X	X	X	X

Days of Week						
S	M	T	W	T	F	S
.	X	X	X	X	X	.

Days of Month																															
									1																					2																							3	
1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Schedule 2

Status	Enabled

Description	

Day Plan	2

Month of Year											
J	F	M	A	M	J	J	A	S	O	N	D
X	X	X	X	X	X	X	X	X	X	X	X

Days of Week						
S	M	T	W	T	F	S
X	.	.	.	.	.	X

Days of Month																															
									1																					2																							3	
1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Schedule 3

Status	Enabled

Description	

Day Plan	3

Month of Year											
J	F	M	A	M	J	J	A	S	O	N	D
X	X	X	X	X	X	X	X	X	X	X	X

Days of Week						
S	M	T	W	T	F	S
X	X	X	X	X	X	X

Days of Month																															
									1																					2																							3	
1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Day Plans

Day Plan 1

Event	HR	MIN	ACT	Description
1			64	
2	6	30	1	
3	9	30	2	
4	14	30	3	
5	20		64	
6				
7				
8				
9				
10				

Day Plan 2

Event	HR	MIN	ACT	Description
1			64	
2	9		2	
3	20		64	
4				
5				
6				
7				
8				
9				
10				

Day Plan 3

Event	HR	MIN	ACT	Description
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				

Actions

		Aux			Special Functions						
Action	Pattern	1	2	3	1	2	3	4	5	6	7	8
1	Pattern 1	.	.	.	.	.	.	.	.	.	.	.
2	Pattern 2	.	.	.	.	.	.	.	.	.	.	.
3	Pattern 3	.	.	.	.	.	.	.	.	.	.	.
4	Pattern 4	.	.	.	.	.	.	.	.	.	.	.
5	Pattern 5	.	.	.	.	.	.	.	.	.	.	.
6	Pattern 6	.	.	.	.	.	.	.	.	.	.	.
7	Pattern 7	.	.	.	.	.	.	.	.	.	.	.
8	Pattern 8	.	.	.	.	.	.	.	.	.	.	.
9	Pattern 9	.	.	.	.	.	.	.	.	.	.	.
10	Pattern 10	.	.	.	.	.	.	.	.	.	.	.
11	None	.	.	.	.	.	.	.	.	.	.	.
12	None	.	.	.	.	.	.	.	.	.	.	.
13	None	.	.	.	.	.	.	.	.	.	.	.
14	None	.	.	.	.	.	.	.	.	.	.	.
15	None	.	.	.	.	.	.	.	.	.	.	.
16	None	.	.	.	.	.	.	.	.	.	.	.
17	None	.	.	.	.	.	.	.	.	.	.	.
18	None	.	.	.	.	.	.	.	.	.	.	.
19	None	.	.	.	.	.	.	.	.	.	.	.
20	None	.	.	.	.	.	.	.	.	.	.	.
64	Free	.	.	.	.	.	.	.	.	.	.	.

Action Commands

Action	Command	Index
1	None	
2	None	
3	None	
4	None	
5	None	

Action	Command	Index
6	None	
7	None	
8	None	
9	None	
10	None	

Action	Command	Index
11	None	
12	None	
13	None	
14	None	
15	None	

Action	Command	Index
16	None	
17	None	
18	None	
19	None	
20	None	

Preempt Configuration

Preemption Configuration

Preempt	1	2	3	4	5	6
Enabled	Enabled	Enabled	Enabled	Enabled	Enabled	Enabled
Type	Rail Road	Rail Road	Emergency Veh	Emergency Veh	Emergency Veh	Emergency Veh
Description	BBS Flash	RR Preempt				
Track Phase		2,5				
Track 2 Phases						
Track Overlap						
Track 2 Overlap						
Dwell Phase			2,5	4,7	1,6	3,8
Dwell Ped						
Dwell Overlap			3			1,2,5
Cycling Phase		1,4,7,8,9				
Cycling Ped		4,8,9				
Cycling Overlap		1,3,5				
Exit Phase			2,6	4,8	2,6	4,8
Exit Overlaps				1,5		1,5
Recovery Exit Omit		1,2,4,5,7				

Preemption Options

Preempt	1	2	3	4	5	6
Non Lock Mem	.	.	.	.	.	.
Not Overide Flash	X	X	X	X	X	X
Not Overide Next Preempt	.	.	.	.	.	.
Flash Dwell	.	.	.	.	.	.
Ped Recycle in Dwell Cycle	.	.	.	.	.	.
Immediate Ped Clear	.	.	.	.	.	.
Dwell Only Status Output	.	.	.	.	.	.
All Red Flash Dwell	X	.	.	.	.	.
Allow All Overlaps	.	.	.	.	.	.
Require All Red Entry	.	.	.	.	.	.
Require Gate Down Track Exit	.	.	.	.	.	.
Require Gate Up Dwell Exit	.	.	.	.	.	.
Use Normal On/Normal Off Input	.	.	.	.	.	.

Preemption Parameters

Preempt	1	2	3	4	5	6
Link						
Delay						
Min Duration						
Min Presence						
Max Presence			120	120	120	120
Max Presence Action	Terminate	Terminate	Terminate	Terminate	Terminate	Terminate
Enter Min Green						
Enter Yellow Change	25.5	25.5	25.5	25.5	25.5	25.5
Enter Red Clear	25.5	25.5	25.5	25.5	25.5	25.5
Enter Min Walk						
Enter Ped Clear			255	255	255	255
Track Green		27				
Track Yellow Change	25.5	25.5	25.5	25.5	25.5	25.5
Track Red Clear	25.5	25.5	25.5	25.5	25.5	25.5
Track 2 Green						
Track 2 Yellow	25.5	25.5	25.5	25.5	25.5	25.5
Track 2 Red	25.5	25.5	25.5	25.5	25.5	25.5
Track Ext. Gate Down						

Preempt Parameters

Preempt	1	2	3	4	5	6
Dwell Green			1	1	1	1
Exit Ped Clear	255	255	255	255	255	255
Exit Yellow Change	25.5	25.5	25.5	25.5	25.5	25.5
Exit Red Clear	25.5	25.5	25.5	25.5	25.5	25.5
Dwell Ext Time						
Max Exit Green						
Exit Type	Exit Phases	st Phase Skip	Exit Phases	Exit Phases	Exit Phases	Exit Phases
Exit Max Mode	Disabled	Disabled	Disabled	Disabled	Disabled	Disabled
Exit Max Apply Time						
Veh Exit Calls						
Ped Exit Calls						

Advanced I/O Configuration

Channel Configuration

Ch	Control Type	Source
1	Phase Vehicle	1
2	Phase Vehicle	2
3	**Overlap**	2
4	Phase Vehicle	4
5	Phase Vehicle	5
6	Phase Vehicle	6
7	Phase Vehicle	7
8	**Overlap**	5

Ch	Control Type	Source
9	Overlap	3
10	None	
11	Overlap	4
12	Overlap	1
13	Phase Ped	2
14	Phase Ped	4
15	Phase Ped	6
16	Phase Ped	8

Concurrency Mode

Concurrency Mode
Auto

Auto Concurrency

Ch	Concurrency
1	5,6,8,9,11,15
2	5,6,8,9,11,13,15,17
3	13
4	7,8,12,14,16,17
5	8,9,11,13
6	8,9,13,15,17
7	8,14,17
8	12,13,14,15,16,17
9	11,13,15
10	
11	13,14
12	14,17
13	15,17
14	16,17
15	17
16	17

Channel Options

Channel	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Flash Yellow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Flash Red	X	X	X	X	X	X	X	X	X	X	.	X	.	.	.	.
Flash Alternate Half Hertz	X	.	.	X	X	.	.	X	.	.	.	X	.	.	.	.

Cabinet Configuration

IO Modules

IO Module	Type
1	Caltrans 332

Input Points

Input	C1 Pin	Input Type	Idx
1	C1-39	Vehicle Det Call	2
2	C1-40	Vehicle Det Call	16
3	C1-41	Vehicle Det Call	8
4	C1-42	Vehicle Det Call	22
5	C1-43	Vehicle Det Call	3
6	C1-44	Vehicle Det Call	17
7	C1-45	Vehicle Det Call	9
8	C1-46	Vehicle Det Call	23
9	C1-47	Vehicle Det Call	6
10	C1-48	Vehicle Det Call	20
11	C1-49	Vehicle Det Call	12
12	C1-50	Vehicle Det Call	26
13	C1-51	Preempt Input	1
14	C1-52	Preempt Input	2
15	C1-53	Unit Manual Control Enable	1
16	C1-54	Not Active	

Input	C1 Pin	Input Type	Idx
17	C1-55	Vehicle Det Call	15
18	C1-56	Vehicle Det Call	1
19	C1-57	Vehicle Det Call	21
20	C1-58	Vehicle Det Call	7
21	C1-59	Vehicle Det Call	27
22	C1-60	Vehicle Det Call	13
23	C1-61	Vehicle Det Call	28
24	C1-62	Vehicle Det Call	14
25	C11-10	Not Active	
26	C11-11	Not Active	
27	C11-12	Not Active	
28	C11-13	Not Active	
29	C1-63	Vehicle Det Call	4
30	C1-64	Vehicle Det Call	18
31	C1-65	Vehicle Det Call	10
32	C1-66	Vehicle Det Call	24

Input	C1 Pin	Input Type	Idx
33	C1-67	Ped Det Call	2
34	C1-68	Ped Det Call	6
35	C1-69	Ped Det Call	4
36	C1-70	Ped Det Call	8
37	C1-71	Preempt Input	3
38	C1-72	Preempt Input	4
39	C1-73	Preempt Input	5
40	C1-74	Preempt Input	6
41	C1-75	Not Active	
42	C1-76	Vehicle Det Call	5
43	C1-77	Vehicle Det Call	19
44	C1-78	Vehicle Det Call	11
45	C1-79	Vehicle Det Call	25
46	C1-80	Unit Interval Advance	1
47	C1-81	Unit Local Flash Sense	1
48	C1-82	Unit Stop Time	1

Input	C1 Pin	Input Type	Idx
49	C11-15	Not Active	
50	C11-16	Not Active	
51	C11-17	Not Active	
52	C11-18	Not Active	
53	C11-19	Not Active	
54	C11-20	Not Active	
55	C11-21	Not Active	
56	C11-22	Not Active	
57	C11-23	Not Active	
58	C11-24	Not Active	
59	C11-25	Not Active	
60	C11-26	Not Active	
61	C11-27	Not Active	
62	C11-28	Not Active	
63	C11-29	Not Active	
64	C11-30	Not Active	

Cabinet Configuration

Output Points

Output	C1 Pin	Output Type	Idx
1	C1-2	Channel Red Do Not Walk Driver	14
2	C1-3	Channel Green Walk Driver	14
3	C1-4	Channel Red Do Not Walk Driver	4
4	C1-5	Channel Yellow Ped Clear Driver	4
5	C1-6	Channel Green Walk Driver	4
6	C1-7	Channel Red Do Not Walk Driver	3
7	C1-8	Channel Yellow Ped Clear Driver	3
8	C1-9	Channel Green Walk Driver	3
9	C1-10	Channel Red Do Not Walk Driver	13
10	C1-11	Channel Green Walk Driver	13
11	C1-12	Channel Red Do Not Walk Driver	2
12	C1-13	Channel Yellow Ped Clear Driver	2
13	C1-15	Channel Green Walk Driver	2
14	C1-16	Channel Red Do Not Walk Driver	1
15	C1-17	Channel Yellow Ped Clear Driver	1
16	C1-18	Channel Green Walk Driver	1
17	C1-19	Channel Red Do Not Walk Driver	16
18	C1-20	Channel Green Walk Driver	16
19	C1-21	Channel Red Do Not Walk Driver	8
20	C1-22	Channel Yellow Ped Clear Driver	8
21	C1-23	Channel Green Walk Driver	8
22	C1-24	Channel Red Do Not Walk Driver	7
23	C1-25	Channel Yellow Ped Clear Driver	7
24	C1-26	Channel Green Walk Driver	7
25	C1-27	Channel Red Do Not Walk Driver	15
26	C1-28	Channel Green Walk Driver	15
27	C1-29	Channel Red Do Not Walk Driver	6
28	C1-30	Channel Yellow Ped Clear Driver	6
29	C1-31	Channel Green Walk Driver	6
30	C1-32	Channel Red Do Not Walk Driver	5
31	C1-33	Channel Yellow Ped Clear Driver	5
32	C1-34	Channel Green Walk Driver	5

Output	C1 Pin	Output Type	Idx
33	C1-35	**Channel Green Walk Driver**	17
34	C1-36	Not Active	
35	C1-37	**Channel Red Do Not Walk Driver**	17
36	C1-38	Not Active	
37	C1-100	Channel Yellow Ped Clear Driver	18
38	C1-101	Channel Yellow Ped Clear Driver	11
39	C1-102	Detector Reset	1
40	C1-103	Watchdog	
41	C1-83	Channel Red Do Not Walk Driver	18
42	C1-84	Channel Green Walk Driver	18
43	C1-85	Channel Red Do Not Walk Driver	12
44	C1-86	Channel Yellow Ped Clear Driver	12
45	C1-87	Channel Green Walk Driver	12
46	C1-88	Channel Red Do Not Walk Driver	11
47	C1-89	Channel Yellow Ped Clear Driver	11
48	C1-90	Channel Green Walk Driver	11
49	C1-91	Channel Red Do Not Walk Driver	17
50	C1-93	Channel Green Walk Driver	17
51	C1-94	Channel Red Do Not Walk Driver	10
52	C1-95	Channel Yellow Ped Clear Driver	10
53	C1-96	Channel Green Walk Driver	10
54	C1-97	Channel Red Do Not Walk Driver	9
55	C1-98	Channel Yellow Ped Clear Driver	9
56	C1-99	Channel Green Walk Driver	9
57	C11-1	Not Active	
58	C11-2	Not Active	
59	C11-3	Not Active	
60	C11-4	Not Active	
61	C11-5	Not Active	
62	C11-6	Not Active	
63	C11-7	Not Active	
64	C11-8	Not Active	

User Programs

Program 1 **RR Exit Logic**

Enabled

Line	Result	Idx	Operation	Parameter A	Idx	Parameter B	Idx	Dly	Ext	Description
1	Unit Stop Time	1	Result=A	Aux Switch State						Aux switch stop time
2										
3	Global Variable	101	Result=(A OR B)	Phase On	1	Phase On	5			Phase 1 or 5 On
4	Ped Detector Call	9	Result=!A	Global Variable	101					Place P9 Ped Call
5										
6	Global Variable	121	Result=A	Vehicle Detector Input	27			5.0		Det 3,8 On
7	Global Variable	122	Result=!A	Vehicle Detector Input	27					Det 3,8 Off
8	Global Variable	123	Result=Latch(A, B)	Global Variable	121	Global Variable	122			Det 3,8 Latch
9	Global Variable	124	Result=A	Vehicle Detector Input	18			5.0		Det 1,6 On
10	Global Variable	125	Result=!A	Vehicle Detector Input	18					Det 1,6 Off
11	Global Variable	126	Result=Latch(A, B)	Global Variable	124	Global Variable	125			Det 1,6 Latch
12	Global Variable	127	Result=A	Vehicle Detector Input				5.0		Det 4,7 On
13	Global Variable	128	Result=!A	Vehicle Detector Input						Det 4,7 Off
14	Global Variable	129	Result=Latch(A, B)	Global Variable	127	Global Variable	128			Det 4,7 Latch
15	Global Variable	130	Result=A	Vehicle Detector Input				5.0		Det 2,5 On
16	Global Variable	131	Result=!A	Vehicle Detector Input						Det 2,5 Off
17	Global Variable	132	Result=Latch(A, B)	Global Variable	130	Global Variable	131			Det 2,5 Latch
18	Global Variable	112	Result=(A == B)	Preempt Interval	2	Number	8		1.0	RR2 Interval Is Exiting
19	Preempt Input	10	Result=(A AND B)	Global Variable	123	Global Variable	112		2.0	RR2 Exiting and Queue Det 3,8
20	Preempt Input	11	Result=(A AND B)	Global Variable	126	Global Variable	112		2.0	RR2 Exiting and Queue Det 1,6
21	Preempt Input	12	Result=(A AND B)	Global Variable	129	Global Variable	112		2.0	RR2 Exiting and Queue Det 4,7
22	Preempt Input	13	Result=(A AND B)	Global Variable	132	Global Variable	112		2.0	RR2 Exiting and Queue Det 2,5
23										
24										
25										
26										
27										
28										
29										
30										
31										
32										
33										
34										
35										
36										
37										
38										
39										
40										

Appendix C - Crosswalk Discussion

September 22, 2022

Johanna Crooker, Director of Entitlements
MLC Holdings, Inc.
5 Peters Canyon Road, Suite 310
Irvine, CA 92606

Re: Meritage Gran Vista TIS – City of San Marcos Staff Review (2nd submittal)

Dear Johanna,

Based on the comments provided by City of San Marcos staff on the 2nd submittal of the Meritage Gran Vista Project, the implementation of a crosswalk is being requested at the south leg of the intersection of North Las Posas Road and Palm Road/Project Driveway. However, due to factors listed below, a crosswalk at this location is not anticipated to be needed or deemed appropriate.

- The existing crosswalk at the north leg of the intersection provides the same crossing opportunity to access destination points located to the north or east of the project such as Palomar Elementary School, Palomar College, the Palomar College Transit Station. Providing a pedestrian crosswalk at the south leg does not reduce travel time (walking) to any of the destinations previously mentioned.



- Most of the anticipated pedestrians utilizing the requested south leg crosswalk would be coming from the Gran Vista Project. However, pedestrians are more likely to walk along the sidewalk on the west side of North Las Posas Road and head south to the intersection with West Mission Road and cross there. This is because the west side of North Las Posas Road has a more comfortable pedestrian environment as there are no driveways and wayfinding signage is present. See **Figure 1** below.

Figure 1 – West side of North Las Posas Road (looking south)





- Implementation of a crosswalk at the south leg would require providing a pedestrian phase at the existing traffic signal. The existing traffic signal has a "split phasing" configuration, and the eastbound movement (Phase 5/Project Driveway) has a minimum split of 14.6 seconds. With the implementation of the requested crosswalk at the south leg, a pedestrian phase would have to be provided at the eastbound movement (Phase 5/Project Driveway) which would extend the split phase to 44 seconds and is deemed excessive for the amount of traffic coming out of the Gran Vista Project and existing CVS pharmacy. See **Figure 2** and **Figure 3** below.
- Implementation of a crosswalk at the south leg would require shifting the existing limit line to the south, as well as modifications to the raised median, which would reduce the length of the existing left turn lane pocket providing access to the project site.



- Implementation of a pedestrian crosswalk at the south leg would be paired with the eastbound movement (Phase 5/Project Driveway), which would introduce more conflict between the vehicles coming out of the driveway and the pedestrians crossing the south leg. It is a safer alternative for pedestrians to cross North Las Posas Road by utilizing the existing north leg crosswalk as there is less conflict potential due to lower volumes coming out of Palm Road.

Figure 2 – Existing Traffic

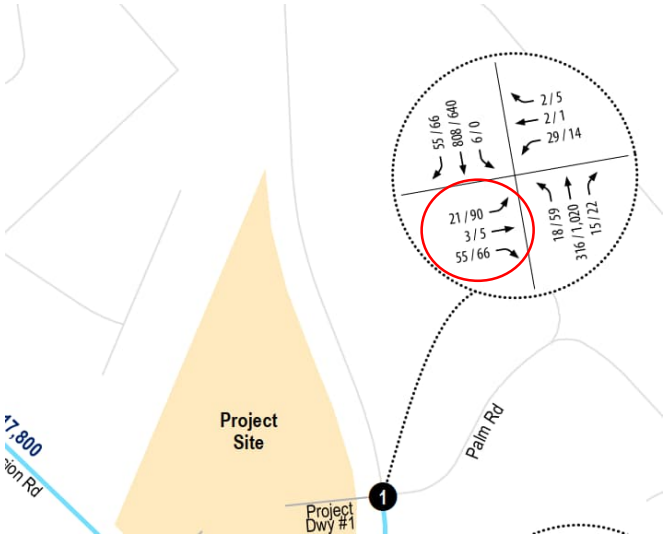
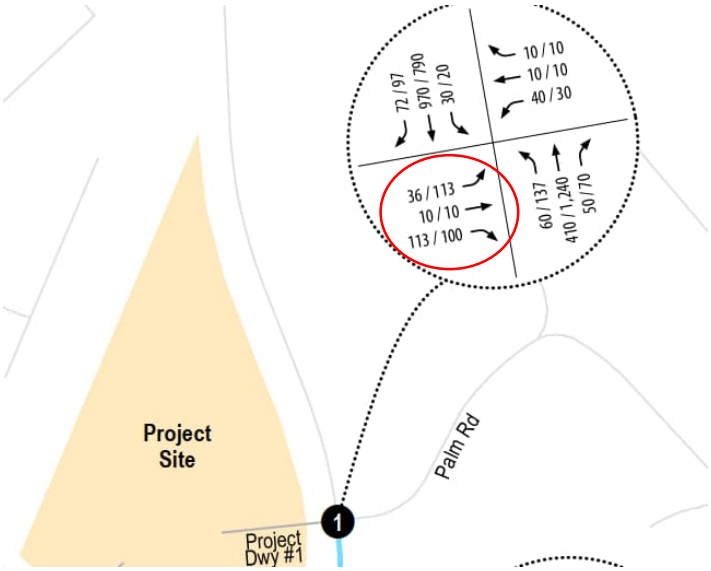


Figure 3 – Horizon Year 2050 with Project Conditions



Recommendation

Based on the discussion above, a crosswalk is not recommended to be implemented at the south leg of the intersection of North Las Posas Road and Palm Road/Project Driveway. Instead, appropriate signage and guard rail barricade shall be installed to inform pedestrians that there is no crosswalk at

the south leg. Additionally, it is recommended that a continental crosswalk is striped, to the satisfaction of the City Traffic Engineer, at the north leg of the intersection of North Las Posas Road and West Mission Road.



Please feel free to contact me with any questions and/or comments.

Sincerely,

REGISTERED PROFESSIONAL ENGINEER
JONATHAN U. SANCHEZ SANDOVAL
T 2957
TRAFFIC
STATE OF CALIFORNIA

Jonathan Sanchez, PE, TE, PTOE
CA TE: 2957
CRA

Appendix D - Existing Traffic Counts and Count Validation

Count Comparison

			2020 N Las Posas Road & W Mission Road				AM Peak Hour						AM % diff.
NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	Total	50.44%
29	406	390	151	666	35	177	529	72	338	379	135	3307	

			2020 N Las Posas Road & W Mission Road				PM Peak Hour					
NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	Total
101	854	584	82	531	89	201	771	88	342	416	107	4166

			2021 N Las Posas Road & W Mission Road				AM Peak Hour						PM % diff.
NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	Total	35.98%
35	146	72	42	428	44	46	152	51	289	298	36	1639	

			2021 N Las Posas Road & W Mission Road				PM Peak Hour					
NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	Total
108	567	367	68	319	58	145	456	91	172	260	56	2667

2021 ITM Counts

N Las Posas Road & Palm Road / Project Driveway AM Peak Hour

NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	Total	PHF
5	210	10	4	498	36	10	2	10	19	1	1	806	0.884

N Las Posas Road & Palm Road / Project Driveway PM Peak Hour

NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	Total	PHF
11	750	16	0	429	44	64	4	35	10	1	4	1368	0.969

Project Driveway & West Mission Road AM Peak Hour

NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	Total	PHF
0	0	0	0	0	33	14	263	0	0	389	2	701	0.942

Project Driveway & West Mission Road PM Peak Hour

NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	Total	PHF
0	0	0	0	0	53	74	705	0	0	447	29	1308	0.991

N Las Posas Road & W Mission Road AM Peak Hour

NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	Total	PHF
35	146	72	42	428	44	46	152	51	289	298	36	1639	0.955

N Las Posas Road & W Mission Road PM Peak Hour

NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	Total	PHF
108	567	367	68	319	58	145	456	91	172	260	56	2667	0.966

ITM AM Adjustment

2021 AM Count

INTID	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	Total
1	5	210	10	4	498	36	10	2	10	19	1	1	806
2	0	0	0	0	0	33	14	263	0	0	389	2	701
3	35	146	72	42	428	44	46	152	51	289	298	36	1639

Percent Growth
50.44%

2021 AM Count % per Movement

INTID	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	Total
1	0.62%	26.05%	1.24%	0.50%	61.79%	4.47%	1.24%	0.25%	1.24%	2.36%	0.12%	0.12%	806
2	0.00%	0.00%	0.00%	0.00%	0.00%	4.71%	2.00%	37.52%	0.00%	0.00%	55.49%	0.29%	701
3	2.14%	8.91%	4.39%	2.56%	26.11%	2.68%	2.81%	9.27%	3.11%	17.63%	18.18%	2.20%	1639

2021 AM Count Adjusted (Unbalanced)

INTID	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	Total
1	**8**	**316**	**15**	**6**	**749**	**54**	**15**	**3**	**15**	**29**	**2**	**2**	1212.5
2	**0**	**0**	**0**	**0**	**0**	**33**	**14**	**263**	**0**	**0**	**389**	**2**	701.0
3	**35**	**146**	**72**	**42**	**428**	**44**	**46**	**152**	**51**	**289**	**298**	**36**	1639.0

ITM PM Adjustment

2021 PM Count

INTID	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	Total
1	11	750	16	0	429	44	64	4	35	10	1	4	1368
2	0	0	0	0	0	53	74	705	0	0	447	29	1308
3	108	567	367	68	319	58	145	456	91	172	260	56	2667

Percent Growth: 35.98%

2021 PM Count % per Movement

INTID	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	Total
1	0.80%	54.82%	1.17%	0.00%	31.36%	3.22%	4.68%	0.29%	2.56%	0.73%	0.07%	0.29%	1368
2	0.00%	0.00%	0.00%	0.00%	0.00%	4.05%	5.66%	53.90%	0.00%	0.00%	34.17%	2.22%	1308
3	4.05%	21.26%	13.76%	2.55%	11.96%	2.17%	5.44%	17.10%	3.41%	6.45%	9.75%	2.10%	2667

2021 PM Count Adjusted (Unbalanced)

INTID	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	Total
1	**15**	**1020**	**22**	**0**	**583**	**60**	**87**	**5**	**48**	**14**	**1**	**5**	1860.2
2	**0**	**0**	**0**	**0**	**0**	**53**	**74**	**705**	**0**	**0**	**447**	**29**	1308.0
3	**108**	**567**	**367**	**68**	**319**	**58**	**145**	**456**	**91**	**172**	**260**	**56**	2667.0

ADT Adjustment

ADT Comparison		
2020 ADT Vol W Mission Road, East of Las Posas Road 17,843 2021 ADT Vol W Mission Road, East of Las Posas Road 12,329		% diff 30.90%

2021 Las Posas Road, From W Mission to Palm 13,653 2021 Las Posas Road, from W Mission to Palm w/ growth 17,872	Analysis ADT **17,900**	

2021 Las Posas Road, South of W Mission Road 16,838 2021 Las Posas Road, South of W Mission Road w/growth 22,041	Analysis ADT **22,000**	

2021 W Mission Road, West of Las Posas 11,263 2021 W Mission Road, West of Las Posas w/ growth 14,744	Analysis ADT (from 2019) **17,800**	Used 2020 counts for analysis for this segment.

2021 W Mission Road, East of Las Posas 12,329 2021 W Mission Road, East of Las Posas w/ growth 16,139	Analysis ADT (from 2019) **17,800**	Used 2020 counts for analysis for this segment.

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: ELITE TRAFFIC DYNAMICS, LLC

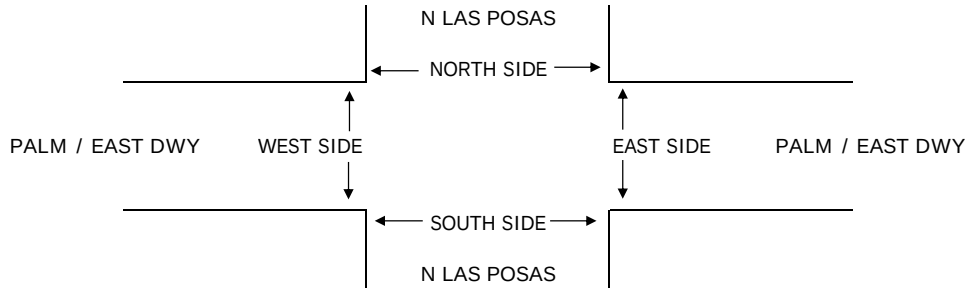
DATE:	LOCATION:	SAN MARCOS	PROJECT #:	ETD21-0618-01
6/15/21	NORTH & SOUTH:	N LAS POSAS	LOCATION #:	1
TUESDAY	EAST & WEST:	PALM / EAST DWY	CONTROL:	SIGNAL

NOTES:

INCLUDES BIKE & PED

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

		NORTHBOUND N LAS POSAS			SOUTHBOUND N LAS POSAS			EASTBOUND PALM / EAST DWY			WESTBOUND PALM / EAST DWY				U-TURNS				
	LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL	NB X	SB X	EB X	WB X	TTL
AM	7:00 AM	2	21	3	1	135	8	0	0	1	6	0	1	178	1				1
	7:15 AM	0	41	1	0	122	4	5	0	2	5	0	0	180	3				3
	7:30 AM	0	46	0	0	150	8	2	0	5	2	0	1	214	4	1			5
	7:45 AM	3	54	3	1	127	16	1	1	3	4	0	0	213	2				2
	8:00 AM	0	54	3	1	110	8	3	1	4	5	0	1	190	3	1			4
	8:15 AM	1	43	2	0	114	8	2	0	1	3	1	0	175	2				2
	8:30 AM	1	59	2	2	147	4	4	0	2	7	0	0	228	1				1
	8:45 AM	3	57	2	3	102	7	4	0	6	6	0	1	191	2				2
	VOLUMES	10	375	16	8	1,007	63	21	2	24	38	1	4	1,569	18	2	0	0	20
	APPROACH %	2%	94%	4%	1%	93%	6%	45%	4%	51%	88%	2%	9%						
	APP/DEPART	401	/	400	1,078	/	1,069	47	/	26	43	/	74	0					
	BEGIN PEAK HR		7:45 AM																
	VOLUMES	5	210	10	4	498	36	10	2	10	19	1	1	806					
	APPROACH %	2%	93%	4%	1%	93%	7%	45%	9%	45%	90%	5%	5%						
	PEAK HR FACTOR		0.907			0.879			0.688			0.750		0.884					
	APP/DEPART	225	/	221	538	/	527	22	/	16	21	/	42	0					
PM	4:00 PM	7	160	3	2	77	6	9	0	10	0	0	1	275	5				5
	4:15 PM	5	173	3	0	89	9	12	0	6	3	0	0	300	6				6
	4:30 PM	8	162	5	0	107	7	21	2	10	2	0	0	324	1				1
	4:45 PM	1	199	3	0	106	12	17	1	5	0	1	1	346	2				2
	5:00 PM	3	192	4	0	104	14	17	0	13	5	0	1	353	2				2
	5:15 PM	4	178	1	0	112	9	21	2	7	3	0	0	337	4				4
	5:30 PM	3	181	8	0	107	9	9	1	10	2	0	2	332	2				2
	5:45 PM	3	165	6	0	105	9	17	0	7	3	0	0	315	4				4
	VOLUMES	34	1,410	33	2	807	75	123	6	68	18	1	5	2,582	26	0	0	0	26
	APPROACH %	2%	95%	2%	0%	91%	8%	62%	3%	35%	75%	4%	21%						
	APP/DEPART	1,477	/	1,538	884	/	893	197	/	41	24	/	110	0					
	BEGIN PEAK HR		4:45 PM																
	VOLUMES	11	750	16	0	429	44	64	4	35	10	1	4	1,368					
	APPROACH %	1%	97%	2%	0%	91%	9%	62%	4%	34%	67%	7%	27%						
	PEAK HR FACTOR		0.957			0.977			0.858			0.625		0.969					
	APP/DEPART	777	/	818	473	/	474	103	/	20	15	/	56	0					



		PEDESTRIAN CROSSINGS					PEDESTRIAN ACTIVATIONS					BICYCLE CROSSINGS				
		N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	NS	SS	ES	WS	TOTAL
AM	7:00 AM			3	1	4					0					0
	7:15 AM			4	1	5					0					0
	7:30 AM	1		2	1	4					0					0
	7:45 AM			2		2					0					0
	8:00 AM				1	1					0					0
	8:15 AM	1		1	2	4					0			1		1
	8:30 AM	1		3		4					0			2	1	3
	8:45 AM			1	1	2					0					0
	TOTAL	3	0	16	7	26	0	0	0	0	0	0	0	3	1	4
PM	4:00 PM	1				1					0					0
	4:15 PM			1		1					0			2		2
	4:30 PM				1	1					0					0
	4:45 PM			1	1	2					0				1	1
	5:00 PM			2		2					0			2		2
	5:15 PM					0					0			1		1
	5:30 PM	2		1	2	5					0			2		2
	5:45 PM	4		1		5					0			1		1
	TOTAL	7	0	6	4	17	0	0	0	0	0	0	0	8	1	9

TUESDAY - JUNE 15, 2021 AREA: SAN MARCOS PROJECT: ETD21-0618-0

N LAS POSAS - W MISSION TO PALM

AM	NB		SB		EB	WB		PM	NB		SB		EB	WB	
00:00	14		5					12:00	107		92				
00:15	9		9					12:15	112		115				
00:30	6		6					12:30	95		114				
00:45	7	36	3	23			59	12:45	105	419	98	419			838
01:00	9		3					13:00	105		89				
01:15	5		4					13:15	100		109				
01:30	7		2					13:30	88		105				
01:45	6	27	5	14			41	13:45	126	419	88	391			810
02:00	4		2					14:00	110		93				
02:15	1		3					14:15	128		97				
02:30	4		2					14:30	106		115				
02:45	1	10	2	9			19	14:45	135	479	91	396			875
03:00	3		4					15:00	145		90				
03:15	1		6					15:15	133		110				
03:30	5		6					15:30	130		104				
03:45	3	12	6	22			34	15:45	121	529	89	393			922
04:00	0		4					16:00	164		90				
04:15	2		10					16:15	188		99				
04:30	4		21					16:30	161		120				
04:45	6	12	23	58			70	16:45	191	704	112	421			1125
05:00	6		33					17:00	187		119				
05:15	6		42					17:15	184		122				
05:30	12		57					17:30	183		123				
05:45	16	40	72	204			244	17:45	181	735	113	477			1212
06:00	29		72					18:00	179		104				
06:15	21		80					18:15	174		105				
06:30	21		93					18:30	138		102				
06:45	33	104	119	364			468	18:45	137	628	82	393			1021
07:00	31		145					19:00	129		109				
07:15	45		124					19:15	123		75				
07:30	56		166					19:30	99		74				
07:45	61	193	139	574			767	19:45	94	445	81	339			784
08:00	60		125					20:00	124		63				
08:15	49		121					20:15	90		72				
08:30	64		153					20:30	89		49				
08:45	64	237	115	514			751	20:45	97	400	43	227			627
09:00	64		119					21:00	76		58				
09:15	65		100					21:15	68		48				
09:30	80		116					21:30	66		41				
09:45	71	280	112	447			727	21:45	66	276	29	176			452
10:00	69		91					22:00	53		22				
10:15	75		87					22:15	45		21				
10:30	63		103					22:30	31		17				
10:45	87	294	100	381			675	22:45	30	159	25	85			244
11:00	68		97					23:00	32		9				
11:15	91		102					23:15	24		13				
11:30	94		108					23:30	25		9				
11:45	99	352	98	405			757	23:45	12	93	7	38			131
Total Vol.		1597		3015			**4612**			5286		3755			**9041**

Daily Totals

NB	SB	EB	WB	**Combined**
6883	6770			**13653**

	AM			**PM**		
Split %	34.6%	65.4%	**33.8%**	58.5%	41.5%	**66.2%**
Peak Hour	11:45	07:00	**11:45**	16:45	17:00	**16:45**
Volume	413	574	**832**	745	477	**1221**
P.H.F.	0.92	0.86	**0.92**	0.98	0.97	**1.00**

PREPARED BY: ELITE TRAFFIC DYNAMICS, LLC

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: ELITE TRAFFIC DYNAMICS, LLC

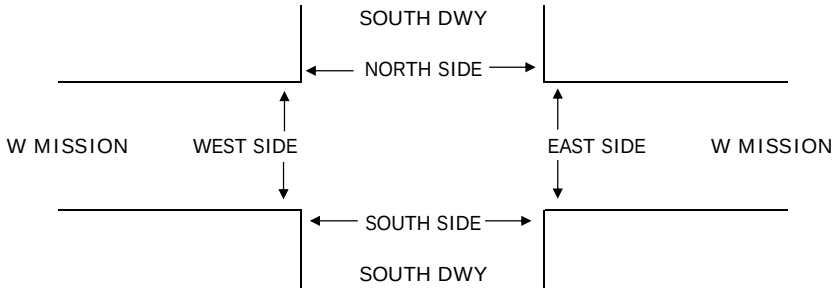
DATE:	LOCATION:	SAN MARCOS	PROJECT #:	ETD21-0618-01
6/15/21	NORTH & SOUTH:	SOUTH DWY	LOCATION #:	2
TUESDAY	EAST & WEST:	W MISSION	CONTROL:	NONE

NOTES:

INCLUDES BIKE & PED

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

		NORTHBOUND SOUTH DWY			SOUTHBOUND SOUTH DWY			EASTBOUND W MISSION			WESTBOUND W MISSION				U-TURNS				
	LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL	NB X	SB X	EB X	WB X	TTL
AM	7:00 AM						8	1	50			75	2	136					0
	7:15 AM						6	5	63			60	2	136					0
	7:30 AM						9	5	45			67	3	129					0
	7:45 AM						14	3	70			80	0	167					0
	8:00 AM						7	4	68			106	0	185					0
	8:15 AM						8	1	61			91	2	163					0
	8:30 AM						4	6	64			112	0	186					0
	8:45 AM						6	6	59			76	3	150					0
	VOLUMES	0	0	0	0	0	62	31	480	0	0	667	12	1,252	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	100%	6%	94%	0%	0%	98%	2%						
	APP/DEPART	0	/	43	62	/	0	511	/	480	679	/	729	0					
	BEGIN PEAK HR		7:45 AM																
	VOLUMES	0	0	0	0	0	33	14	263	0	0	389	2	701					
	APPROACH %	0%	0%	0%	0%	0%	100%	5%	95%	0%	0%	99%	1%						
	PEAK HR FACTOR		0.000			0.589			0.949			0.873		0.942					
	APP/DEPART	0	/	16	33	/	0	277	/	263	391	/	422	0					
PM	4:00 PM						9	11	160			107	3	290			1		1
	4:15 PM						8	9	163			96	5	281					0
	4:30 PM						11	20	165			114	12	322					0
	4:45 PM						12	16	173			123	6	330					0
	5:00 PM						16	17	197			95	4	329					0
	5:15 PM						14	21	170			115	7	327					0
	5:30 PM						11	8	164			118	4	305					0
	5:45 PM						9	14	129			94	9	255					0
	VOLUMES	0	0	0	0	0	90	116	1,321	0	0	862	50	2,439	0	0	1	0	1
	APPROACH %	0%	0%	0%	0%	0%	100%	8%	92%	0%	0%	95%	5%						
	APP/DEPART	0	/	166	90	/	0	1,437	/	1,321	912	/	952	0					
	BEGIN PEAK HR		4:30 PM																
	VOLUMES	0	0	0	0	0	53	74	705	0	0	447	29	1,308					
	APPROACH %	0%	0%	0%	0%	0%	100%	9%	91%	0%	0%	94%	6%						
	PEAK HR FACTOR		0.000			0.828			0.910			0.922		0.991					
	APP/DEPART	0	/	103	53	/	0	779	/	705	476	/	500	0					



		PEDESTRIAN CROSSINGS					PEDESTRIAN ACTIVATIONS					BICYCLE CROSSINGS				
		N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	NS	SS	ES	WS	TOTAL
AM	7:00 AM	1				1					0		1			1
	7:15 AM	1				1					0	1	2			3
	7:30 AM	2				2					0	1	3			4
	7:45 AM					0					0		3			3
	8:00 AM	2				2					0	1				1
	8:15 AM					0					0		5			5
	8:30 AM					0					0		1			1
	8:45 AM					0					0		2			2
	TOTAL	6	0	0	0	6	0	0	0	0	0	3	17	0	0	20
PM	4:00 PM	1				1					0		1			1
	4:15 PM	1				1					0	1				1
	4:30 PM	1				1					0	1	1			2
	4:45 PM					0					0		1			1
	5:00 PM					0					0	1				1
	5:15 PM	1				1					0		2			2
	5:30 PM					0					0	1	2			3
	5:45 PM					0					0	1	1			2
	TOTAL	4	0	0	0	4	0	0	0	0	0	5	8	0	0	13

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: ELITE TRAFFIC DYNAMICS, LLC

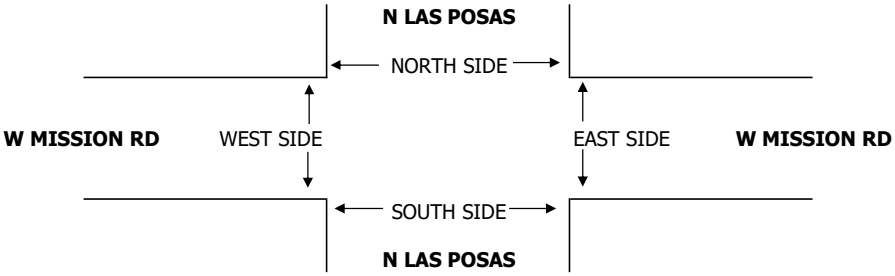
DATE:	LOCATION:	SAN MARCOS	PROJECT #:	ETD21-0618-01
6/15/21	NORTH & SOUTH:	N LAS POSAS	LOCATION #:	3
TUESDAY	EAST & WEST:	W MISSION RD	CONTROL:	SIGNAL

NOTES:

INCLUDES BIKE & PED

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

		NORTHBOUND N LAS POSAS			SOUTHBOUND N LAS POSAS			EASTBOUND W MISSION RD			WESTBOUND W MISSION RD				U-TURNS				
	LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL	NB X	SB X	EB X	WB X	TTL
AM	7:00 AM	5	24	5	6	133	15	7	29	10	44	53	1	332					0
	7:15 AM	6	25	10	4	102	8	6	43	15	45	44	4	312					0
	7:30 AM	4	30	17	9	139	13	5	29	10	74	60	7	397					0
	7:45 AM	4	41	20	11	118	11	13	30	15	56	62	8	389					0
	8:00 AM	6	34	14	13	93	14	11	53	10	69	85	9	411					0
	8:15 AM	6	33	21	12	95	11	7	38	16	85	71	10	405					0
	8:30 AM	12	36	24	11	128	15	16	26	17	57	82	5	429					0
	8:45 AM	11	43	13	6	112	4	12	35	8	78	60	12	394					0
	VOLUMES	54	266	124	72	920	91	77	283	101	508	517	56	3,069	0	0	0	0	0
	APPROACH %	12%	60%	28%	7%	85%	8%	17%	61%	22%	47%	48%	5%						
	APP/DEPART	444	/	399	1,083	/	1,529	461	/	479	1,081	/	662	0					
	BEGIN PEAK HR		8:00 AM																
	VOLUMES	35	146	72	42	428	44	46	152	51	289	298	36	1,639					
	APPROACH %	14%	58%	28%	8%	83%	9%	18%	61%	20%	46%	48%	6%						
	PEAK HR FACTOR		0.878			0.834			0.841			0.938		0.955					
	APP/DEPART	253	/	228	514	/	768	249	/	266	623	/	377	0					
PM	4:00 PM	24	133	59	11	67	9	27	118	17	40	74	15	594					0
	4:15 PM	21	133	83	12	76	11	40	96	11	57	61	13	614			1		1
	4:30 PM	18	135	81	11	96	11	24	115	15	44	86	12	648					0
	4:45 PM	34	130	91	16	81	13	44	109	14	53	69	15	669					0
	5:00 PM	22	147	95	17	85	14	40	124	34	37	62	13	690					0
	5:15 PM	24	141	91	20	78	15	30	103	23	41	63	16	645					0
	5:30 PM	28	149	90	15	75	16	31	120	20	41	66	12	663					0
	5:45 PM	27	137	69	15	93	22	30	83	17	29	53	13	588					0
	VOLUMES	198	1,105	659	117	651	111	266	868	151	342	534	109	5,111	0	0	1	0	1
	APPROACH %	10%	56%	34%	13%	74%	13%	21%	68%	12%	35%	54%	11%						
	APP/DEPART	1,962	/	1,480	879	/	1,144	1,285	/	1,644	985	/	843	0					
	BEGIN PEAK HR		4:45 PM																
	VOLUMES	108	567	367	68	319	58	145	456	91	172	260	56	2,667					
	APPROACH %	10%	54%	35%	15%	72%	13%	21%	66%	13%	35%	53%	11%						
	PEAK HR FACTOR		0.976			0.959			0.874			0.891		0.966					
	APP/DEPART	1,042	/	768	445	/	582	692	/	891	488	/	426	0					



		PEDESTRIAN CROSSINGS					PEDESTRIAN ACTIVATIONS					BICYCLE CROSSINGS				
		N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	NS	SS	ES	WS	TOTAL
AM	7:00 AM	1	1	1	1	4					0		3			3
	7:15 AM	1	1	1		3					0	1	2			3
	7:30 AM			1	1	2					0		2		1	3
	7:45 AM			1		1					0		3			3
	8:00 AM				2	2					0	1				1
	8:15 AM		1			1					0		2	1		3
	8:30 AM				1	1					0		2			2
	8:45 AM					0					0					0
	TOTAL	2	3	4	5	14	0	0	0	0	0	2	14	1	1	18
PM	4:00 PM	1				1					0		1			1
	4:15 PM					0					0		2			2
	4:30 PM	1	1	2		4					0	1				1
	4:45 PM	1	2	1	1	5					0					0
	5:00 PM	2	2	4		8					0		2		1	3
	5:15 PM	1	3	2		6					0		1			1
	5:30 PM	1				1					0		1			1
	5:45 PM	3	1	1		5					0	1	1	1		3
	TOTAL	10	9	10	1	30	0	0	0	0	0	2	8	1	1	12

TUESDAY - JUNE 15, 2021 AREA: SAN MARCOS PROJECT: ETD21-0618-01

W MISSION - WEST OF N LAS POSAS

AM	NB	SB	EB		WB			PM	NB	SB	EB		WB		
00:00			3		5			12:00			106		68		
00:15			7		9			12:15			87		75		
00:30			4		10			12:30			71		67		
00:45			5	19	2	26	45	12:45			85	349	65	275	624
01:00			5		4			13:00			76		63		
01:15			3		3			13:15			95		73		
01:30			5		3			13:30			84		63		
01:45			4	17	2	12	29	13:45			97	352	64	263	615
02:00			2		1			14:00			90		71		
02:15			0		3			14:15			95		88		
02:30			3		1			14:30			137		66		
02:45			5	10	4	9	19	14:45			146	468	96	321	789
03:00			5		4			15:00			163		76		
03:15			6		3			15:15			160		84		
03:30			11		5			15:30			186		109		
03:45			2	24	4	16	40	15:45			164	673	98	367	1040
04:00			5		2			16:00			173		115		
04:15			2		5			16:15			166		112		
04:30			9		8			16:30			183		120		
04:45			21	37	7	22	59	16:45			185	707	128	475	1182
05:00			10		13			17:00			210		102		
05:15			18		23			17:15			185		127		
05:30			27		37			17:30			173		123		
05:45			44	99	54	127	226	17:45			151	719	107	459	1178
06:00			37		40			18:00			148		100		
06:15			40		57			18:15			108		73		
06:30			38		48			18:30			82		56		
06:45			58	173	91	236	409	18:45			85	423	84	313	736
07:00			50		79			19:00			70		62		
07:15			69		62			19:15			77		43		
07:30			50		79			19:30			64		60		
07:45			71	240	95	315	555	19:45			64	275	53	218	493
08:00			73		118			20:00			67		65		
08:15			62		98			20:15			65		66		
08:30			69		110			20:30			56		48		
08:45			61	265	84	410	675	20:45			57	245	44	223	468
09:00			50		73			21:00			49		42		
09:15			58		86			21:15			44		25		
09:30			64		57			21:30			29		41		
09:45			57	229	57	273	502	21:45			43	165	18	126	291
10:00			64		52			22:00			30		31		
10:15			67		58			22:15			28		26		
10:30			53		52			22:30			23		18		
10:45			62	246	57	219	465	22:45			19	100	21	96	196
11:00			58		63			23:00			18		10		
11:15			69		77			23:15			20		13		
11:30			64		66			23:30			18		10		
11:45			69	260	59	265	525	23:45			10	66	3	36	102
Total Vol.				1619		1930	**3549**					4542		3172	**7714**

Daily Totals

NB	SB	EB	WB	**Combined**
		6161	5102	**11263**

	AM			**PM**		
Split %	45.6%	54.4%	**31.5%**	58.9%	41.1%	**68.5%**
Peak Hour	11:45	07:45	**07:45**	16:30	16:45	**16:30**
Volume	333	421	**696**	763	480	**1240**
P.H.F.	0.79	0.89	**0.91**	0.91	0.94	**0.99**

PREPARED BY: ELITE TRAFFIC DYNAMICS, LLC

TUESDAY - JUNE 15, 202`1 AREA: SAN MARCOS PROJECT: ETD21-0618-01

W MISSION - EAST OF N LAS POSAS

AM	NB	SB	EB		WB			PM	NB	SB	EB		WB		
00:00			5		3			12:00			103		90		
00:15			7		8			12:15			87		89		
00:30			5		8			12:30			86		79		
00:45			5	22	2	21	43	12:45			82	358	83	341	699
01:00			4		5			13:00			81		75		
01:15			3		1			13:15			86		79		
01:30			0		4			13:30			91		74		
01:45			4	11	3	13	24	13:45			81	339	76	304	643
02:00			2		1			14:00			79		69		
02:15			1		2			14:15			82		90		
02:30			3		1			14:30			131		67		
02:45			1	7	4	8	15	14:45			144	436	77	303	739
03:00			1		4			15:00			175		100		
03:15			3		5			15:15			167		117		
03:30			3		6			15:30			241		100		
03:45			5	12	6	21	33	15:45			195	778	108	425	1203
04:00			5		3			16:00			189		127		
04:15			3		7			16:15			194		149		
04:30			7		10			16:30			204		141		
04:45			12	27	15	35	62	16:45			214	801	150	567	1368
05:00			8		17			17:00			220		115		
05:15			17		25			17:15			208		144		
05:30			22		53			17:30			225		121		
05:45			30	77	68	163	240	17:45			163	816	100	480	1296
06:00			31		54			18:00			130		99		
06:15			38		79			18:15			111		95		
06:30			39		89			18:30			86		69		
06:45			64	172	125	347	519	18:45			75	402	61	324	726
07:00			43		93			19:00			71		66		
07:15			60		92			19:15			69		43		
07:30			55		136			19:30			69		57		
07:45			65	223	135	456	679	19:45			59	268	54	220	488
08:00			81		170			20:00			58		54		
08:15			78		191			20:15			53		44		
08:30			64		132			20:30			50		56		
08:45			57	280	146	639	919	20:45			52	213	46	200	413
09:00			61		112			21:00			45		34		
09:15			56		77			21:15			49		34		
09:30			66		86			21:30			28		33		
09:45			66	249	76	351	600	21:45			31	153	17	118	271
10:00			48		70			22:00			29		29		
10:15			51		72			22:15			29		19		
10:30			70		71			22:30			19		10		
10:45			53	222	71	284	506	22:45			24	101	9	67	168
11:00			54		53			23:00			16		17		
11:15			56		93			23:15			13		12		
11:30			81		77			23:30			16		14		
11:45			84	275	65	288	563	23:45			16	61	8	51	112
Total Vol.				1577		2626	**4203**					4726		3400	**8126**

Daily Totals

NB	SB	EB	WB	Combined
		6303	6026	**12329**

	AM			PM		
Split %	37.5%	62.5%	**34.1%**	58.2%	41.8%	**65.9%**
Peak Hour	11:45	08:00	**08:00**	16:45	16:00	**16:45**
Volume	360	639	**919**	867	567	**1397**
P.H.F.	0.87	0.84	**0.85**	0.96	0.95	**0.96**

PREPARED BY: ELITE TRAFFIC DYNAMICS, LLC

TUESDAY - JUNE 15, 2021 AREA: SAN MARCOS PROJECT: ETD21-0618-01

ADT05 - N LAS POSAS - SOUTH OF W MISSION

AM	NB		SB		EB	WB		PM	NB		SB		EB	WB	
00:00	16		6					12:00	118		129				
00:15	13		8					12:15	139		150				
00:30	9		9					12:30	134		115				
00:45	13	51	4	27			78	12:45	122	513	141	535			1048
01:00	9		5					13:00	131		115				
01:15	7		5					13:15	120		134				
01:30	6		6					13:30	106		124				
01:45	8	30	7	23			53	13:45	127	484	116	489			973
02:00	5		4					14:00	135		115				
02:15	2		1					14:15	125		128				
02:30	5		4					14:30	149		153				
02:45	1	13	5	14			27	14:45	170	579	107	503			1082
03:00	2		8					15:00	192		139				
03:15	1		9					15:15	165		142				
03:30	5		15					15:30	197		124				
03:45	4	12	6	38			50	15:45	179	733	127	532			1265
04:00	2		6					16:00	199		123				
04:15	4		13					16:15	231		133				
04:30	4		25					16:30	222		163				
04:45	8	18	37	81			99	16:45	248	900	134	553			1453
05:00	5		37					17:00	248		168				
05:15	10		49					17:15	234		162				
05:30	10		68					17:30	254		130				
05:45	19	44	86	240			284	17:45	199	935	132	592			1527
06:00	23		88					18:00	194		131				
06:15	22		98					18:15	182		118				
06:30	32		132					18:30	151		126				
06:45	50	127	158	476			603	18:45	166	693	101	476			1169
07:00	35		174					19:00	136		122				
07:15	45		155					19:15	131		88				
07:30	65		216					19:30	133		83				
07:45	60	205	174	719			924	19:45	106	506	94	387			893
08:00	57		175					20:00	119		72				
08:15	63		185					20:15	95		83				
08:30	73		202					20:30	90		46				
08:45	74	267	193	755			1022	20:45	109	413	60	261			674
09:00	83		136					21:00	83		49				
09:15	97		129					21:15	71		59				
09:30	92		146					21:30	75		41				
09:45	84	356	134	545			901	21:45	57	286	36	185			471
10:00	71		112					22:00	60		24				
10:15	90		127					22:15	54		24				
10:30	90		133					22:30	46		22				
10:45	86	337	115	487			824	22:45	37	197	22	92			289
11:00	88		121					23:00	35		21				
11:15	118		137					23:15	18		12				
11:30	123		126					23:30	26		14				
11:45	133	462	127	511			973	23:45	19	98	11	58			156
Total Vol.		1922		3916			**5838**			6337		4663			**11000**

Daily Totals

NB	SB	EB	WB	**Combined**
8259	8579			**16838**

	AM			**PM**		
Split %	32.9%	67.1%	**34.7%**	57.6%	42.4%	**65.3%**
Peak Hour	11:45	08:00	**11:30**	16:45	16:30	**16:30**
Volume	524	755	**1045**	984	627	**1579**
P.H.F.	0.94	0.93	**0.90**	0.97	0.93	**0.95**

PREPARED BY: ELITE TRAFFIC DYNAMICS, LLC

Prepared by National Data & Surveying Services

CLASSIFICATION

W Mission Rd Bet. Palomar College & Comet Cir East

Day: Tuesday
Date: 3/3/2020

City: San Marcos
Project #: CA20_4063_006e

East Bound

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	9	0	0	0	0	0	0	0	0	0	0	0	9
00:15	0	5	0	0	0	0	0	0	0	0	0	0	0	5
00:30	0	3	0	0	0	0	0	0	0	0	0	0	0	3
00:45	0	2	0	0	0	0	0	0	0	0	0	0	0	2
01:00	0	4	1	0	0	0	0	0	0	0	0	0	0	5
01:15	0	4	0	0	0	0	0	0	0	0	0	0	0	4
01:30	0	1	2	0	0	0	0	0	0	0	0	0	0	3
01:45	0	2	0	0	0	0	0	0	0	0	0	0	0	2
02:00	0	4	0	0	0	0	0	0	0	0	0	0	0	4
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	0	1	0	0	0	0	0	0	0	0	0	0	0	1
02:45	0	2	0	0	0	0	0	0	0	0	0	0	0	2
03:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
03:15	0	2	0	0	0	0	0	0	0	0	0	0	0	2
03:30	0	1	1	0	0	0	0	0	0	0	0	0	0	2
03:45	0	3	1	0	0	0	0	0	0	0	0	0	0	4
04:00	0	1	1	0	0	0	0	0	0	0	0	0	0	2
04:15	0	4	1	0	0	0	0	0	0	0	0	0	0	5
04:30	0	9	1	0	0	0	0	0	0	0	0	0	0	10
04:45	0	2	2	1	0	0	0	0	0	0	0	0	0	5
05:00	0	8	2	0	0	0	0	0	0	0	0	0	0	10
05:15	0	8	1	0	0	0	0	0	0	0	0	0	0	9
05:30	0	23	3	1	1	0	0	0	0	0	0	0	0	28
05:45	0	30	1	0	0	1	0	0	0	0	0	0	0	32
06:00	0	17	6	1	0	2	0	0	0	0	0	0	0	26
06:15	0	41	7	0	1	0	0	0	0	0	0	0	0	49
06:30	0	58	4	1	2	0	0	0	0	0	0	0	0	65
06:45	0	88	9	1	1	0	0	0	0	0	0	0	0	99
07:00	0	124	13	1	2	0	0	0	0	0	0	0	0	140
07:15	0	154	19	0	2	0	0	0	0	0	0	0	0	175
07:30	0	221	29	2	3	0	0	1	0	0	0	0	0	256
07:45	0	124	19	1	4	0	0	0	0	0	0	0	0	148
08:00	0	72	21	1	4	0	0	0	0	0	0	0	0	98
08:15	0	89	15	2	0	0	0	0	0	0	0	0	0	106
08:30	0	88	19	0	2	1	0	0	0	0	0	0	0	110
08:45	0	70	13	1	2	0	0	0	0	0	0	0	0	86
09:00	0	74	10	4	4	0	0	0	0	0	0	0	0	92
09:15	0	60	10	0	4	0	0	0	0	0	0	0	0	74
09:30	0	65	15	1	1	0	0	0	0	0	0	0	0	82
09:45	1	69	14	0	2	0	0	0	0	0	0	0	0	86
10:00	1	60	5	2	1	2	0	0	0	0	0	0	0	71
10:15	0	58	7	1	2	1	0	0	0	0	0	0	0	69
10:30	0	60	9	2	1	0	0	0	0	0	0	0	0	72
10:45	1	101	9	0	3	1	0	0	0	0	0	0	0	115
11:00	0	120	16	1	3	0	0	0	0	0	0	0	0	140
11:15	2	97	7	0	3	0	0	0	0	0	0	0	0	109
11:30	1	80	8	1	1	0	0	0	0	0	0	0	0	91
11:45	1	95	4	0	2	1	0	0	0	0	0	0	0	103
12:00 PM	3	95	15	1	3	0	0	0	0	0	0	0	0	117
12:15	1	79	14	0	0	0	0	0	0	0	0	0	0	94
12:30	1	110	19	1	1	0	0	2	0	0	0	0	0	134
12:45	0	124	10	0	1	0	0	0	0	0	0	0	0	135
13:00	2	90	13	1	3	0	0	0	0	0	0	0	0	109
13:15	1	95	9	0	2	0	0	0	0	0	0	0	0	107
13:30	2	109	12	2	4	0	0	0	0	0	0	0	0	129
13:45	1	96	14	0	3	1	0	0	0	0	0	0	0	115
14:00	0	160	27	1	6	1	0	0	0	0	0	0	0	195
14:15	3	186	20	0	5	1	0	0	0	0	0	0	0	215
14:30	2	179	29	1	2	1	0	0	0	0	0	0	0	214
14:45	0	197	31	0	6	1	0	0	0	0	0	0	0	235
15:00	1	184	20	1	3	0	0	0	0	0	0	0	0	209
15:15	1	233	26	1	7	0	0	0	0	0	0	0	0	268
15:30	0	247	26	3	5	0	0	0	0	0	0	0	0	281
15:45	0	283	33	1	4	1	0	0	0	0	0	0	0	322
16:00	0	270	33	1	7	0	0	0	0	0	0	0	0	311
16:15	0	285	33	0	11	0	0	2	0	0	0	0	0	331
16:30	2	266	32	1	2	0	0	0	0	0	0	0	0	303
16:45	1	295	34	0	3	0	0	0	0	0	0	0	0	333
17:00	1	303	37	1	3	0	0	0	0	0	0	0	0	345
17:15	0	315	32	0	6	0	0	0	0	0	0	0	0	353
17:30	1	284	32	1	8	0	0	0	0	0	0	0	0	326
17:45	0	238	30	1	1	0	0	0	0	0	0	0	0	270
18:00	0	209	30	1	3	0	0	0	0	0	0	0	0	243
18:15	0	122	18	0	1	0	0	0	0	0	0	0	0	141
18:30	1	110	12	1	3	0	0	0	0	0	0	0	0	127
18:45	0	95	13	0	2	0	0	0	0	0	0	0	0	110
19:00	0	95	8	1	1	0	0	0	0	0	0	0	0	105
19:15	1	85	8	0	2	0	0	0	0	0	0	0	0	96
19:30	0	67	6	1	0	0	0	0	0	0	0	0	0	74
19:45	0	51	10	0	2	0	0	0	0	0	0	0	0	63
20:00	0	51	5	0	3	0	0	0	0	0	0	0	0	59
20:15	0	65	6	0	0	0	0	0	0	0	0	0	0	71
20:30	0	69	9	1	0	0	0	0	0	0	0	0	0	79
20:45	0	63	7	0	1	0	0	0	0	0	0	0	0	71
21:00	0	49	5	2	1	0	0	0	0	0	0	0	0	57
21:15	0	62	6	1	0	0	0	0	0	0	0	0	0	69
21:30	0	42	8	0	0	0	0	0	0	0	0	0	0	50
21:45	0	42	3	0	0	0	0	0	0	0	0	0	0	45
22:00	0	26	4	0	2	0	0	0	0	0	0	0	0	32
22:15	0	23	3	0	1	0	0	0	0	0	0	0	0	27
22:30	0	9	0	1	0	0	0	0	0	0	0	0	0	10
22:45	0	12	2	0	0	0	0	0	0	0	0	0	0	14
23:00	0	10	2	0	0	0	0	0	0	0	0	0	0	12
23:15	0	16	2	0	0	0	0	0	0	0	0	0	0	18
23:30	0	10	0	1	0	0	0	0	0	0	0	0	0	11
23:45	0	8	1	0	0	0	0	0	0	0	0	0	0	9
Totals	**32**	**8328**	**1054**	**53**	**169**	**15**		**5**						**9656**
% of Totals	0%	86%	11%	1%	2%	0%		0%						100%

AM Volumes	7	2214	305	25	51	9	0	1	0	0	0	0	0	2612
% AM	0%	23%	3%	0%	1%	0%		0%						27%
AM Peak Hour Volume														
PM Volumes	25	6114	749	28	118	6	0	4	0	0	0	0	0	7044
% PM	0%	63%	8%	0%	1%	0%		0%						73%
PM Peak Hour Volume														

Directional Peak Periods	AM 7-9		NOON 12-2		PM 4-6		Off Peak Volumes	
All Classes	Volume	%	Volume	%	Volume	%	Volume	%
	1119 ←→	12%	940 ←→	10%	2572 ←→	27%	5025 ←→	52%

Classification Definitions

1 Motorcycles	**4** Buses	**7** > =4-Axle Single Units	**10** >=6-Axle Single Trailers	**13** >=7-Axle Multi-Trailers
2 Passenger Cars	**5** 2-Axle, 6-Tire Single Units	**8** <=4-Axle Single Trailers	**11** <=5-Axle Multi-Trailers	
3 2-Axle, 4-Tire Single Units	**6** 3-Axle Single Units	**9** 5-Axle Single Trailers	**12** 6-Axle Multi-Trailers	

Prepared by National Data & Surveying Services

CLASSIFICATION

W Mission Rd Bet. Palomar College & Comet Cir East

Day: Tuesday
Date: 3/3/2020

City: San Marcos
Project #: CA20_4063_006w

West Bound

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	3	0	0	0	0	0	0	0	0	0	0	0	3
00:15	0	5	0	0	0	0	0	0	0	0	0	0	0	5
00:30	0	3	0	0	0	0	0	0	0	0	0	0	0	3
00:45	0	2	0	0	0	0	0	0	0	0	0	0	0	2
01:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
01:15	0	2	0	0	0	0	0	0	0	0	0	0	0	2
01:30	0	1	0	0	0	0	0	0	0	0	0	0	0	1
01:45	0	3	0	0	0	0	0	0	0	0	0	0	0	3
02:00	0	1	1	0	0	0	0	0	0	0	0	0	0	2
02:15	0	2	0	0	0	0	0	0	0	0	0	0	0	2
02:30	0	1	0	0	0	0	0	0	0	0	0	0	0	1
02:45	0	2	0	0	0	0	0	0	0	0	0	0	0	2
03:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
03:15	0	2	0	0	0	0	0	0	0	0	0	0	0	2
03:30	1	5	0	0	0	0	0	0	0	0	0	0	0	6
03:45	0	4	0	0	0	0	0	0	0	0	0	0	0	4
04:00	0	3	1	0	0	0	0	0	0	0	0	0	0	4
04:15	0	2	0	1	0	0	0	0	0	0	0	0	0	3
04:30	0	14	1	0	0	0	0	0	0	0	0	0	0	15
04:45	0	19	2	1	0	0	0	0	0	0	0	0	0	22
05:00	0	14	1	0	0	0	0	0	0	0	0	0	0	15
05:15	0	29	5	1	0	0	0	0	0	0	0	0	0	35
05:30	0	51	7	0	0	0	0	0	0	0	0	0	0	58
05:45	0	42	6	1	0	0	0	0	0	0	0	0	0	49
06:00	1	43	5	0	0	0	0	0	0	0	0	0	0	49
06:15	0	53	8	1	1	0	0	0	0	0	0	0	0	63
06:30	0	77	15	1	4	0	0	0	0	0	0	0	0	97
06:45	0	133	18	1	2	0	0	0	0	0	0	0	0	154
07:00	0	114	15	0	3	0	0	0	0	0	0	0	0	132
07:15	1	174	23	0	2	0	0	0	0	0	0	0	0	200
07:30	1	202	22	2	1	0	0	0	0	0	0	0	0	228
07:45	3	241	28	1	3	0	0	1	0	0	0	0	0	277
08:00	0	169	24	0	1	0	0	0	0	0	0	0	0	194
08:15	2	143	21	1	2	0	0	0	0	0	0	0	0	169
08:30	1	142	11	0	3	0	0	0	0	0	0	0	0	157
08:45	0	109	10	1	2	0	0	0	0	0	0	0	0	122
09:00	0	105	12	0	4	1	0	0	0	0	0	0	0	122
09:15	0	114	14	2	2	0	0	0	0	0	0	0	0	132
09:30	2	77	13	1	1	0	0	0	0	0	0	0	0	94
09:45	1	84	6	0	2	0	0	0	0	0	0	0	0	93
10:00	0	76	10	1	1	0	0	0	0	0	0	0	0	88
10:15	0	89	11	1	2	0	0	0	0	0	0	0	0	103
10:30	0	85	9	0	0	0	0	0	0	0	0	0	0	94
10:45	0	70	11	2	1	2	0	0	0	0	0	0	0	86
11:00	2	97	10	0	1	0	0	0	0	0	0	0	0	110
11:15	0	91	11	1	4	0	0	0	0	0	0	0	0	107
11:30	0	83	12	0	3	1	0	0	0	0	0	0	0	99
11:45	0	74	7	1	2	0	0	0	0	0	0	0	0	84
12:00 PM	0	93	13	0	0	0	0	0	0	0	0	0	0	106
12:15	1	88	6	0	2	0	0	0	0	0	0	0	0	97
12:30	2	115	20	0	1	0	0	0	0	0	0	0	0	138
12:45	1	89	8	1	2	1	0	0	0	0	0	0	0	102
13:00	0	75	10	0	1	0	0	0	0	0	0	0	0	86
13:15	0	86	9	0	1	0	0	0	0	0	0	0	0	96
13:30	0	65	7	1	0	0	0	0	0	0	0	0	0	73
13:45	1	93	14	1	1	0	0	0	0	0	0	0	0	110
14:00	1	84	11	0	3	0	0	0	0	0	0	0	0	99
14:15	0	132	12	0	2	0	0	0	0	0	0	0	0	146
14:30	1	188	22	2	5	0	0	0	0	0	0	0	0	218
14:45	0	123	19	1	4	0	0	0	0	0	0	0	0	147
15:00	0	126	12	0	3	0	0	0	0	0	0	0	0	141
15:15	0	119	14	2	2	0	0	0	0	0	0	0	0	137
15:30	1	164	27	1	3	0	0	0	0	0	0	0	0	196
15:45	1	125	20	1	5	0	0	0	0	0	0	0	0	152
16:00	0	149	20	1	1	0	0	0	0	0	0	0	0	171
16:15	3	182	23	1	2	0	0	0	0	0	0	0	0	211
16:30	2	159	19	0	1	1	0	1	0	0	0	0	0	183
16:45	1	179	25	0	0	0	0	0	0	0	0	0	0	205
17:00	0	166	23	2	5	0	0	0	0	0	0	0	0	196
17:15	2	188	20	0	2	0	0	0	0	0	0	0	0	212
17:30	1	185	18	1	2	0	0	0	0	0	0	0	0	207
17:45	0	160	16	2	0	0	0	0	0	0	0	0	0	178
18:00	0	127	15	0	2	0	0	0	0	0	0	0	0	144
18:15	2	116	13	2	1	0	0	0	0	0	0	0	0	134
18:30	0	117	15	1	1	0	0	0	0	0	0	0	0	134
18:45	0	83	9	0	2	0	0	0	0	0	0	0	0	94
19:00	0	86	13	1	1	0	0	0	0	0	0	0	0	101
19:15	0	78	5	2	0	0	0	0	0	0	0	0	0	85
19:30	0	50	7	0	0	0	0	0	0	0	0	0	0	57
19:45	0	49	8	0	0	0	0	0	0	0	0	0	0	57
20:00	0	53	6	1	0	0	0	0	0	0	0	0	0	60
20:15	0	38	8	1	0	0	0	0	0	0	0	0	0	47
20:30	0	35	7	0	0	0	0	0	0	0	0	0	0	42
20:45	0	42	4	0	1	0	0	0	0	0	0	0	0	47
21:00	0	40	3	0	0	0	0	0	0	0	0	0	0	43
21:15	0	53	6	1	0	0	0	0	0	0	0	0	0	60
21:30	0	33	4	0	0	0	0	0	0	0	0	0	0	37
21:45	0	24	3	0	0	0	0	0	0	0	0	0	0	27
22:00	0	19	2	0	0	0	0	0	0	0	0	0	0	21
22:15	0	15	4	1	0	0	0	0	0	0	0	0	0	20
22:30	0	11	2	0	1	0	0	0	0	0	0	0	0	14
22:45	0	13	1	0	0	0	0	0	0	0	0	0	0	14
23:00	0	7	3	0	0	0	0	0	0	0	0	0	0	10
23:15	0	12	1	0	0	0	0	0	0	0	0	0	0	13
23:30	0	10	2	0	0	0	0	0	0	0	0	0	0	12
23:45	0	7	0	0	1	0	0	0	0	0	0	0	0	8
Totals	**33**	**7112**	**879**	**48**	**105**	**8**		**2**						**8187**
% of Totals	0%	87%	11%	1%	1%	0%		0%						100%

AM Volumes	15	2861	350	21	47	4	0	1	0	0	0	0	0	3299
% AM	0%	35%	4%	0%	1%	0%		0%						40%
AM Peak Hour Volume														
PM Volumes	20	4251	529	27	58	2	0	1	0	0	0	0	0	4888
% PM	0%	52%	6%	0%	1%	0%		0%						60%
PM Peak Hour Volume														

Directional Peak Periods	AM 7-9		NOON 12-2		PM 4-6		Off Peak Volumes	
All Classes	Volume	%	Volume	%	Volume	%	Volume	%
	1479	18%	808	10%	1563	19%	4337	53%

Classification Definitions

1 Motorcycles	**4** Buses	**7** > =4-Axle Single Units	**10** >=6-Axle Single Trailers	**13** >=7-Axle Multi-Trailers
2 Passenger Cars	**5** 2-Axle, 6-Tire Single Units	**8** <=4-Axle Single Trailers	**11** <=5-Axle Multi-Trailers	
3 2-Axle, 4-Tire Single Units	**6** 3-Axle Single Units	**9** 5-Axle Single Trailers	**12** 6-Axle Multi-Trailers	

Prepared by National Data & Surveying Services

CLASSIFICATION

W Mission Rd Bet. Palomar College & Comet Cir East

Day: Tuesday
Date: 3/3/2020

City: San Marcos
Project #: CA20_4063_006

Summary

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	12	0	0	0	0	0	0	0	0	0	0	0	12
00:15	0	10	0	0	0	0	0	0	0	0	0	0	0	10
00:30	0	6	0	0	0	0	0	0	0	0	0	0	0	6
00:45	0	4	0	0	0	0	0	0	0	0	0	0	0	4
01:00	0	7	1	0	0	0	0	0	0	0	0	0	0	8
01:15	0	6	0	0	0	0	0	0	0	0	0	0	0	6
01:30	0	2	2	0	0	0	0	0	0	0	0	0	0	4
01:45	0	5	0	0	0	0	0	0	0	0	0	0	0	5
02:00	0	5	1	0	0	0	0	0	0	0	0	0	0	6
02:15	0	2	0	0	0	0	0	0	0	0	0	0	0	2
02:30	0	2	0	0	0	0	0	0	0	0	0	0	0	2
02:45	0	4	0	0	0	0	0	0	0	0	0	0	0	4
03:00	0	4	0	0	0	0	0	0	0	0	0	0	0	4
03:15	0	4	0	0	0	0	0	0	0	0	0	0	0	4
03:30	1	6	1	0	0	0	0	0	0	0	0	0	0	8
03:45	0	7	1	0	0	0	0	0	0	0	0	0	0	8
04:00	0	4	2	0	0	0	0	0	0	0	0	0	0	6
04:15	0	6	1	1	0	0	0	0	0	0	0	0	0	8
04:30	0	23	2	0	0	0	0	0	0	0	0	0	0	25
04:45	0	21	4	2	0	0	0	0	0	0	0	0	0	27
05:00	0	22	3	0	0	0	0	0	0	0	0	0	0	25
05:15	0	37	6	1	0	0	0	0	0	0	0	0	0	44
05:30	0	74	10	1	1	0	0	0	0	0	0	0	0	86
05:45	0	72	7	1	0	1	0	0	0	0	0	0	0	81
06:00	1	60	11	1	0	2	0	0	0	0	0	0	0	75
06:15	0	94	15	1	2	0	0	0	0	0	0	0	0	112
06:30	0	135	19	2	6	0	0	0	0	0	0	0	0	162
06:45	0	221	27	2	3	0	0	0	0	0	0	0	0	253
07:00	0	238	28	1	5	0	0	0	0	0	0	0	0	272
07:15	1	328	42	0	4	0	0	0	0	0	0	0	0	375
07:30	1	423	51	4	4	0	0	1	0	0	0	0	0	484
07:45	3	365	47	2	7	0	0	1	0	0	0	0	0	425
08:00	0	241	45	1	5	0	0	0	0	0	0	0	0	292
08:15	2	232	36	3	2	0	0	0	0	0	0	0	0	275
08:30	1	230	30	0	5	1	0	0	0	0	0	0	0	267
08:45	0	179	23	2	4	0	0	0	0	0	0	0	0	208
09:00	0	179	22	4	8	1	0	0	0	0	0	0	0	214
09:15	0	174	24	2	6	0	0	0	0	0	0	0	0	206
09:30	2	142	28	2	2	0	0	0	0	0	0	0	0	176
09:45	2	153	20	0	4	0	0	0	0	0	0	0	0	179
10:00	1	136	15	3	2	2	0	0	0	0	0	0	0	159
10:15	0	147	18	2	4	1	0	0	0	0	0	0	0	172
10:30	0	145	18	2	1	0	0	0	0	0	0	0	0	166
10:45	1	171	20	2	4	3	0	0	0	0	0	0	0	201
11:00	2	217	26	1	4	0	0	0	0	0	0	0	0	250
11:15	2	188	18	1	7	0	0	0	0	0	0	0	0	216
11:30	1	163	20	1	4	1	0	0	0	0	0	0	0	190
11:45	1	169	11	1	4	1	0	0	0	0	0	0	0	187
12:00 PM	3	188	28	1	3	0	0	0	0	0	0	0	0	223
12:15	2	167	20	0	2	0	0	0	0	0	0	0	0	191
12:30	3	225	39	1	2	0	0	2	0	0	0	0	0	272
12:45	1	213	18	1	3	1	0	0	0	0	0	0	0	237
13:00	2	165	23	1	4	0	0	0	0	0	0	0	0	195
13:15	1	181	18	0	3	0	0	0	0	0	0	0	0	203
13:30	2	174	19	3	4	0	0	0	0	0	0	0	0	202
13:45	2	189	28	1	4	1	0	0	0	0	0	0	0	225
14:00	1	244	38	1	9	1	0	0	0	0	0	0	0	294
14:15	3	318	32	0	7	1	0	0	0	0	0	0	0	361
14:30	3	367	51	3	7	1	0	0	0	0	0	0	0	432
14:45	0	320	50	1	10	1	0	0	0	0	0	0	0	382
15:00	1	310	32	1	6	0	0	0	0	0	0	0	0	350
15:15	1	352	40	3	9	0	0	0	0	0	0	0	0	405
15:30	1	411	53	4	8	0	0	0	0	0	0	0	0	477
15:45	1	408	53	2	9	1	0	0	0	0	0	0	0	474
16:00	0	419	53	2	8	0	0	0	0	0	0	0	0	482
16:15	3	467	56	1	13	0	0	2	0	0	0	0	0	542
16:30	4	425	51	1	3	1	0	1	0	0	0	0	0	486
16:45	2	474	59	0	3	0	0	0	0	0	0	0	0	538
17:00	1	469	60	3	8	0	0	0	0	0	0	0	0	541
17:15	2	503	52	0	8	0	0	0	0	0	0	0	0	565
17:30	2	469	50	2	10	0	0	0	0	0	0	0	0	533
17:45	0	398	46	3	1	0	0	0	0	0	0	0	0	448
18:00	0	336	45	1	5	0	0	0	0	0	0	0	0	387
18:15	2	238	31	2	2	0	0	0	0	0	0	0	0	275
18:30	1	227	27	2	4	0	0	0	0	0	0	0	0	261
18:45	0	178	22	0	4	0	0	0	0	0	0	0	0	204
19:00	0	181	21	2	2	0	0	0	0	0	0	0	0	206
19:15	1	163	13	2	2	0	0	0	0	0	0	0	0	181
19:30	0	117	13	1	0	0	0	0	0	0	0	0	0	131
19:45	0	100	18	0	2	0	0	0	0	0	0	0	0	120
20:00	0	104	11	1	3	0	0	0	0	0	0	0	0	119
20:15	0	103	14	1	0	0	0	0	0	0	0	0	0	118
20:30	0	104	16	1	0	0	0	0	0	0	0	0	0	121
20:45	0	105	11	0	2	0	0	0	0	0	0	0	0	118
21:00	0	89	8	2	1	0	0	0	0	0	0	0	0	100
21:15	0	115	12	2	0	0	0	0	0	0	0	0	0	129
21:30	0	75	12	0	0	0	0	0	0	0	0	0	0	87
21:45	0	66	6	0	0	0	0	0	0	0	0	0	0	72
22:00	0	45	6	0	2	0	0	0	0	0	0	0	0	53
22:15	0	38	7	1	1	0	0	0	0	0	0	0	0	47
22:30	0	20	2	1	1	0	0	0	0	0	0	0	0	24
22:45	0	25	3	0	0	0	0	0	0	0	0	0	0	28
23:00	0	17	5	0	0	0	0	0	0	0	0	0	0	22
23:15	0	28	3	0	0	0	0	0	0	0	0	0	0	31
23:30	0	20	2	1	0	0	0	0	0	0	0	0	0	23
23:45	0	15	1	0	1	0	0	0	0	0	0	0	0	17
Totals	**67**	**15440**	**1933**	**101**	**274**	**21**		**7**						**17843**
% of Totals	0%	87%	11%	1%	2%	0%		0%						100%

AM Volumes	22	5075	655	46	98	13	0	2	0	0	0	0	0	5911
% AM	0%	28%	4%	0%	1%	0%		0%						33%
AM Peak Hour	11:45	07:15	07:15	07:30	08:30	10:00		07:00						07:15
Volume	9	1357	185	10	23	6		2						1576
PM Volumes	45	10365	1278	55	176	8	0	5	0	0	0	0	0	11932
% PM	0%	58%	7%	0%	1%	0%		0%						67%
PM Peak Hour	16:15	16:45	16:15	15:15	15:30	13:45		15:45						16:45
Volume	10	1915	226	11	38	4		3						2177

Directional Peak Periods	AM 7-9		NOON 12-2		PM 4-6		Off Peak Volumes	
All Classes	Volume	%	Volume	%	Volume	%	Volume	%
	2598 ⟷	15%	1748 ⟷	10%	4135 ⟷	23%	9362 ⟷	52%

Classification Definitions

1 Motorcycles	**4** Buses	**7** > =4-Axle Single Units	**10** >=6-Axle Single Trailers	**13** >=7-Axle Multi-Trailers
2 Passenger Cars	**5** 2-Axle, 6-Tire Single Units	**8** <=4-Axle Single Trailers	**11** <=5-Axle Multi-Trailers	
3 2-Axle, 4-Tire Single Units	**6** 3-Axle Single Units	**9** 5-Axle Single Trailers	**12** 6-Axle Multi-Trailers	

Prepared by National Data & Surveying Services

CLASSIFICATION

W Mission Rd Bet. Palomar College & Comet Cir East

Day: Tuesday
Date: 3/3/2020

City: San Marcos
Project #: CA20_4063_006e

East Bound

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	19	0	0	0	0	0	0	0	0	0	0	0	19
01:00	0	11	3	0	0	0	0	0	0	0	0	0	0	14
02:00	0	7	0	0	0	0	0	0	0	0	0	0	0	7
03:00	0	7	2	0	0	0	0	0	0	0	0	0	0	9
04:00	0	16	5	1	0	0	0	0	0	0	0	0	0	22
05:00	0	69	7	1	1	1	0	0	0	0	0	0	0	79
06:00	0	204	26	3	4	2	0	0	0	0	0	0	0	239
07:00	0	623	80	4	11	0	0	1	0	0	0	0	0	719
08:00	0	319	68	4	8	1	0	0	0	0	0	0	0	400
09:00	1	268	49	5	11	0	0	0	0	0	0	0	0	334
10:00	2	279	30	5	7	4	0	0	0	0	0	0	0	327
11:00	4	392	35	2	9	1	0	0	0	0	0	0	0	443
12:00 PM	5	408	58	2	5	0	0	2	0	0	0	0	0	480
13:00	6	390	48	3	12	1	0	0	0	0	0	0	0	460
14:00	5	722	107	2	19	4	0	0	0	0	0	0	0	859
15:00	2	947	105	6	19	1	0	0	0	0	0	0	0	1080
16:00	3	1116	132	2	23	0	0	2	0	0	0	0	0	1278
17:00	2	1140	131	3	18	0	0	0	0	0	0	0	0	1294
18:00	1	536	73	2	9	0	0	0	0	0	0	0	0	621
19:00	1	298	32	2	5	0	0	0	0	0	0	0	0	338
20:00	0	248	27	1	4	0	0	0	0	0	0	0	0	280
21:00	0	195	22	3	1	0	0	0	0	0	0	0	0	221
22:00	0	70	9	1	3	0	0	0	0	0	0	0	0	83
23:00	0	44	5	1	0	0	0	0	0	0	0	0	0	50
Totals	**32**	**8328**	**1054**	**53**	**169**	**15**		**5**						**9656**
% of Totals	0%	86%	11%	1%	2%	0%		0%						100%

AM Volumes	7	2214	305	25	51	9	0	1	0	0	0	0	0	2612
% AM	0%	23%	3%	0%	1%	0%		0%						27%
AM Peak Hour	11:00	07:00	07:00	09:00	07:00	10:00		07:00						07:00
Volume	4	623	80	5	11	4		1						719
PM Volumes	25	6114	749	28	118	6	0	4	0	0	0	0	0	7044
% PM	0%	63%	8%	0%	1%	0%		0%						73%
PM Peak Hour	13:00	17:00	16:00	15:00	16:00	14:00		12:00						17:00
Volume	6	1140	132	6	23	4		2						1294

Directional Peak Periods	**AM 7-9**			**NOON 12-2**			**PM 4-6**			**Off Peak Volumes**		
All Classes	Volume	↔	%	Volume	↔	%	Volume	↔	%	Volume	↔	%
	1119		12%	940		10%	2572		27%	5025		52%

Classification Definitions

1 Motorcycles
2 Passenger Cars
3 2-Axle, 4-Tire Single Units
4 Buses
5 2-Axle, 6-Tire Single Units
6 3-Axle Single Units
7 > =4-Axle Single Units
8 <=4-Axle Single Trailers
9 5-Axle Single Trailers
10 >=6-Axle Single Trailers
11 <=5-Axle Multi-Trailers
12 6-Axle Multi-Trailers
13 >=7-Axle Multi-Trailers

Prepared by National Data & Surveying Services

CLASSIFICATION

W Mission Rd Bet. Palomar College & Comet Cir East

Day: Tuesday
Date: 3/3/2020

City: San Marcos
Project #: CA20_4063_006w

West Bound

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	13	0	0	0	0	0	0	0	0	0	0	0	13
01:00	0	9	0	0	0	0	0	0	0	0	0	0	0	9
02:00	0	6	1	0	0	0	0	0	0	0	0	0	0	7
03:00	1	14	0	0	0	0	0	0	0	0	0	0	0	15
04:00	0	38	4	2	0	0	0	0	0	0	0	0	0	44
05:00	0	136	19	2	0	0	0	0	0	0	0	0	0	157
06:00	1	306	46	3	7	0	0	0	0	0	0	0	0	363
07:00	5	731	88	3	9	0	0	1	0	0	0	0	0	837
08:00	3	563	66	2	8	0	0	0	0	0	0	0	0	642
09:00	3	380	45	3	9	1	0	0	0	0	0	0	0	441
10:00	0	320	41	4	4	2	0	0	0	0	0	0	0	371
11:00	2	345	40	2	10	1	0	0	0	0	0	0	0	400
12:00 PM	4	385	47	1	5	1	0	0	0	0	0	0	0	443
13:00	1	319	40	2	3	0	0	0	0	0	0	0	0	365
14:00	2	527	64	3	14	0	0	0	0	0	0	0	0	610
15:00	2	534	73	4	13	0	0	0	0	0	0	0	0	626
16:00	6	669	87	2	4	1	0	1	0	0	0	0	0	770
17:00	3	699	77	5	9	0	0	0	0	0	0	0	0	793
18:00	2	443	52	3	6	0	0	0	0	0	0	0	0	506
19:00	0	263	33	3	1	0	0	0	0	0	0	0	0	300
20:00	0	168	25	2	1	0	0	0	0	0	0	0	0	196
21:00	0	150	16	1	0	0	0	0	0	0	0	0	0	167
22:00	0	58	9	1	1	0	0	0	0	0	0	0	0	69
23:00	0	36	6	0	1	0	0	0	0	0	0	0	0	43
Totals	35	7112	879	48	105	6		2						8187
% of Totals	0%	87%	11%	1%	1%	0%		0%						100%

AM Volumes	15	2861	350	21	47	4	0	1	0	0	0	0	0	3299
% AM	0%	35%	4%	0%	1%	0%		0%						40%
AM Peak Hour	07:00	07:00	07:00	10:00	11:00	10:00		07:00						07:00
Volume	5	731	88	4	10	2		1						837
PM Volumes	20	4251	529	27	58	2	0	1	0	0	0	0	0	4888
% PM	0%	52%	6%	0%	1%	0%		0%						60%
PM Peak Hour	16:00	17:00	16:00	17:00	14:00	12:00		16:00						17:00
Volume	6	699	87	5	14	1		1						793

Directional Peak Periods	AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
All Classes	Volume	↔	%	Volume	↔	%	Volume	↔	%	Volume	↔	%
	1479		18%	808		10%	1563		19%	4337		53%

Classification Definitions

1 Motorcycles
2 Passenger Cars
3 2-Axle, 4-Tire Single Units
4 Buses
5 2-Axle, 6-Tire Single Units
6 3-Axle Single Units
7 > =4-Axle Single Units
8 <=4-Axle Single Trailers
9 5-Axle Single Trailers
10 >=6-Axle Single Trailers
11 <=5-Axle Multi-Trailers
12 6-Axle Multi-Trailers
13 >=7-Axle Multi-Trailers

Prepared by National Data & Surveying Services

CLASSIFICATION

W Mission Rd Bet. Palomar College & Comet Cir East

Day: Tuesday
Date: 3/3/2020

City: San Marcos
Project #: CA20_4063_006

Summary

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	32	0	0	0	0	0	0	0	0	0	0	0	32
01:00	0	20	3	0	0	0	0	0	0	0	0	0	0	23
02:00	0	13	1	0	0	0	0	0	0	0	0	0	0	14
03:00	1	21	2	0	0	0	0	0	0	0	0	0	0	24
04:00	0	54	9	3	0	0	0	0	0	0	0	0	0	66
05:00	0	205	26	3	1	1	0	0	0	0	0	0	0	236
06:00	1	510	72	6	11	2	0	0	0	0	0	0	0	602
07:00	5	1354	168	7	20	0	0	2	0	0	0	0	0	1556
08:00	3	882	134	6	16	1	0	0	0	0	0	0	0	1042
09:00	4	648	94	8	20	1	0	0	0	0	0	0	0	775
10:00	2	599	71	9	11	6	0	0	0	0	0	0	0	698
11:00	6	737	75	4	19	2	0	0	0	0	0	0	0	843
12:00 PM	9	793	105	3	10	1	0	2	0	0	0	0	0	923
13:00	7	709	88	5	15	1	0	0	0	0	0	0	0	825
14:00	7	1249	171	5	33	4	0	0	0	0	0	0	0	1469
15:00	4	1481	178	10	32	1	0	0	0	0	0	0	0	1706
16:00	9	1785	219	4	27	1	0	3	0	0	0	0	0	2048
17:00	5	1839	208	8	27	0	0	0	0	0	0	0	0	2087
18:00	3	979	125	5	15	0	0	0	0	0	0	0	0	1127
19:00	1	561	65	5	6	0	0	0	0	0	0	0	0	638
20:00	0	416	52	3	5	0	0	0	0	0	0	0	0	476
21:00	0	345	38	4	1	0	0	0	0	0	0	0	0	388
22:00	0	128	18	2	4	0	0	0	0	0	0	0	0	152
23:00	0	80	11	1	1	0	0	0	0	0	0	0	0	93
Totals	67	15440	1933	101	274	21		7						17843
% of Totals	0%	87%	11%	1%	2%	0%		0%						100%

AM Volumes	22	5075	655	46	98	13	0	2	0	0	0	0	0	5911
% AM	0%	28%	4%	0%	1%	0%		0%						33%
AM Peak Hour	11:00	07:00	07:00	10:00	07:00	10:00		07:00						07:00
Volume	6	1354	168	9	20	6		2						1556
PM Volumes	45	10365	1278	55	176	8	0	5	0	0	0	0	0	11932
% PM	0%	58%	7%	0%	1%	0%		0%						67%
PM Peak Hour	12:00	17:00	16:00	15:00	14:00	14:00		16:00						17:00
Volume	9	1839	219	10	33	4		3						2087

Directional Peak Periods	AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
All Classes	Volume	↔	%	Volume	↔	%	Volume	↔	%	Volume	↔	%
	2598		15%	1748		10%	4135		23%	9362		52%

Classification Definitions

1 Motorcycles
2 Passenger Cars
3 2-Axle, 4-Tire Single Units
4 Buses
5 2-Axle, 6-Tire Single Units
6 3-Axle Single Units
7 > =4-Axle Single Units
8 <=4-Axle Single Trailers
9 5-Axle Single Trailers
10 >=6-Axle Single Trailers
11 <=5-Axle Multi-Trailers
12 6-Axle Multi-Trailers
13 >=7-Axle Multi-Trailers

Prepared by NDS/ATD

Prepared by National Data & Surveying Services

VOLUME

W Mission Rd Bet. Palomar College & Comet Cir East

Day: Tuesday
Date: 3/3/2020

City: San Marcos
Project #: CA20_4063_006

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	9,656	8,187	17,843

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00	0	0	9		3		12		12:00	0	0	117		106		223	
00:15	0	0	5		5		10		12:15	0	0	94		97		191	
00:30	0	0	3		3		6		12:30	0	0	134		138		272	
00:45	0	0	2	19	2	13	4	32	12:45	0	0	135	480	102	443	237	923
01:00	0	0	5		3		8		13:00	0	0	109		86		195	
01:15	0	0	4		2		6		13:15	0	0	107		96		203	
01:30	0	0	3		1		4		13:30	0	0	129		73		202	
01:45	0	0	2	14	3	9	5	23	13:45	0	0	115	460	110	365	225	825
02:00	0	0	4		2		6		14:00	0	0	195		99		294	
02:15	0	0	0		2		2		14:15	0	0	215		146		361	
02:30	0	0	1		1		2		14:30	0	0	214		218		432	
02:45	0	0	2	7	2	7	4	14	14:45	0	0	235	859	147	610	382	1469
03:00	0	0	1		3		4		15:00	0	0	209		141		350	
03:15	0	0	2		2		4		15:15	0	0	268		137		405	
03:30	0	0	2		6		8		15:30	0	0	281		196		477	
03:45	0	0	4	9	4	15	8	24	15:45	0	0	322	1080	152	626	474	1706
04:00	0	0	2		4		6		16:00	0	0	311		171		482	
04:15	0	0	5		3		8		16:15	0	0	331		211		542	
04:30	0	0	10		15		25		16:30	0	0	303		183		486	
04:45	0	0	5	22	22	44	27	66	16:45	0	0	333	1278	205	770	538	2048
05:00	0	0	10		15		25		17:00	0	0	345		196		541	
05:15	0	0	9		35		44		17:15	0	0	353		212		565	
05:30	0	0	28		58		86		17:30	0	0	326		207		533	
05:45	0	0	32	79	49	157	81	236	17:45	0	0	270	1294	178	793	448	2087
06:00	0	0	26		49		75		18:00	0	0	243		144		387	
06:15	0	0	49		63		112		18:15	0	0	141		134		275	
06:30	0	0	65		97		162		18:30	0	0	127		134		261	
06:45	0	0	99	239	154	363	253	602	18:45	0	0	110	621	94	506	204	1127
07:00	0	0	140		132		272		19:00	0	0	105		101		206	
07:15	0	0	175		200		375		19:15	0	0	96		85		181	
07:30	0	0	256		228		484		19:30	0	0	74		57		131	
07:45	0	0	148	719	277	837	425	1556	19:45	0	0	63	338	57	300	120	638
08:00	0	0	98		194		292		20:00	0	0	59		60		119	
08:15	0	0	106		169		275		20:15	0	0	71		47		118	
08:30	0	0	110		157		267		20:30	0	0	79		42		121	
08:45	0	0	86	400	122	642	208	1042	20:45	0	0	71	280	47	196	118	476
09:00	0	0	92		122		214		21:00	0	0	57		43		100	
09:15	0	0	74		132		206		21:15	0	0	69		60		129	
09:30	0	0	82		94		176		21:30	0	0	50		37		87	
09:45	0	0	86	334	93	441	179	775	21:45	0	0	45	221	27	167	72	388
10:00	0	0	71		88		159		22:00	0	0	32		21		53	
10:15	0	0	69		103		172		22:15	0	0	27		20		47	
10:30	0	0	72		94		166		22:30	0	0	10		14		24	
10:45	0	0	115	327	86	371	201	698	22:45	0	0	14	83	14	69	28	152
11:00	0	0	140		110		250		23:00	0	0	12		10		22	
11:15	0	0	109		107		216		23:15	0	0	18		13		31	
11:30	0	0	91		99		190		23:30	0	0	11		12		23	
11:45	0	0	103	443	84	400	187	843	23:45	0	0	9	50	8	43	17	93
TOTALS				2612		3299		5911	TOTALS				7044		4888		11932
SPLIT %				44.2%		55.8%		33.1%	SPLIT %				59.0%		41.0%		66.9%

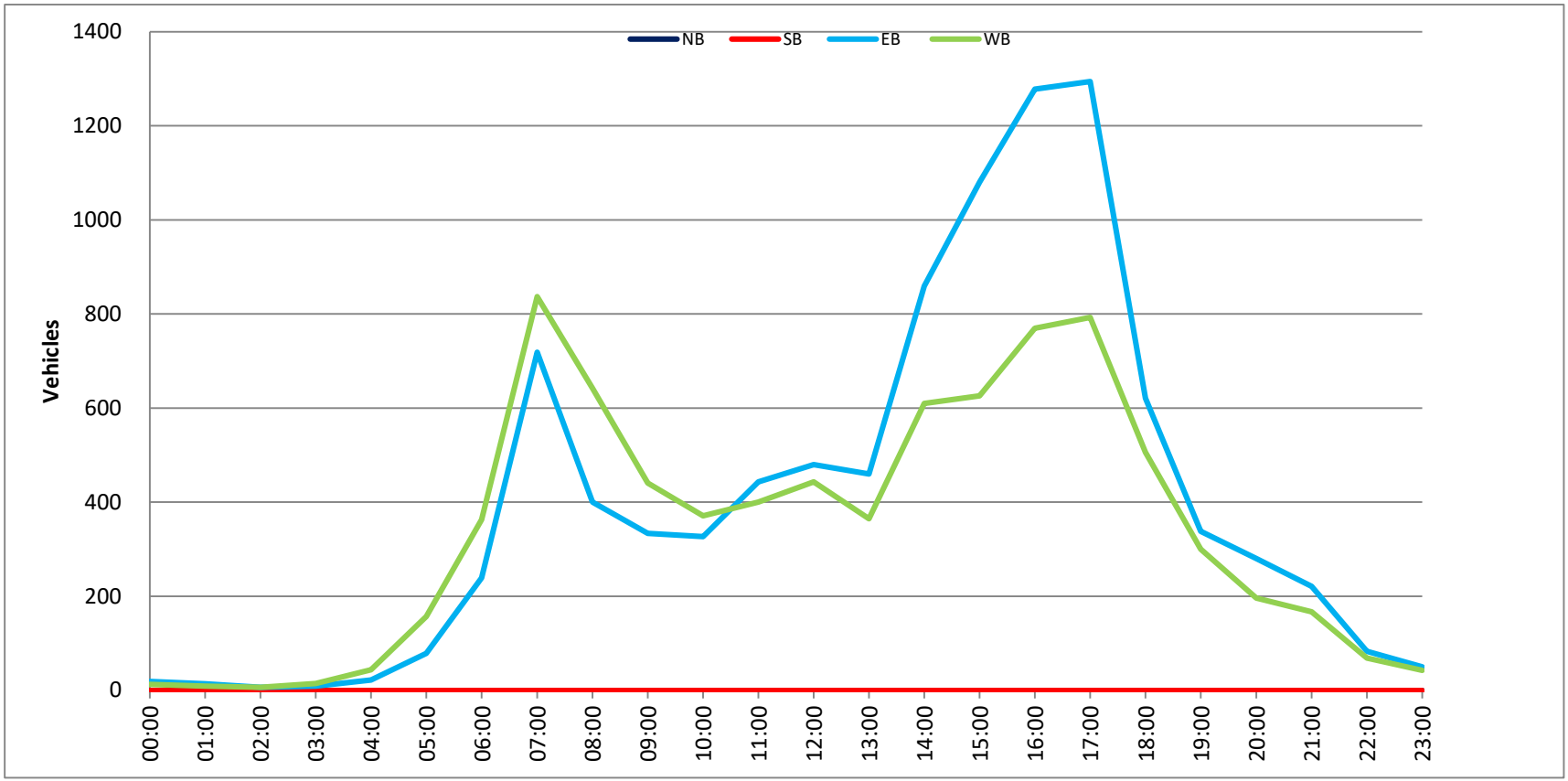
DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	9,656	8,187	17,843

AM Peak Hour			07:00		07:15		07:15		PM Peak Hour			16:45		16:45		16:45	
AM Pk Volume			719		899		1576		PM Pk Volume			1357		820		2177	
Pk Hr Factor			0.702		0.811		0.814		Pk Hr Factor			0.961		0.967		0.963	
7 - 9 Volume	0	0	1119		1479		2598		4 - 6 Volume	0	0	2572		1563		4135	
7 - 9 Peak Hour			07:00		07:15		07:15		4 - 6 Peak Hour			16:45		16:45		16:45	
7 - 9 Pk Volume	0	0	719		899		1576		4 - 6 Pk Volume	0	0	1357		820		2177	
Pk Hr Factor	0.000	0.000	0.702		0.811		0.814		Pk Hr Factor	0.000	0.000	0.961		0.967		0.963	

Prepared by NDS/ATD

Project #: CA20_4063_006 **City:** San Marcos

Location: W Mission Rd Bet. Palomar College & Comet **Date:** 3/3/2020



National Data & Surveying Services

Intersection Turning Movement Count

Location: N Las Posas Rd & W Mission Rd
City: San Marcos
Control: Signalized

Project ID: 20-04064-011
Date: 3/3/2020

Total

NS/EW Streets:	N Las Posas Rd				N Las Posas Rd				W Mission Rd				W Mission Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	2	0	2	3	0	0	1	2	1	0	2	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	9	69	44	0	19	125	13	0	25	91	10	0	58	60	11	0	534
7:15 AM	8	60	97	0	49	173	5	0	29	109	18	0	65	84	17	0	714
7:30 AM	8	73	84	0	65	163	7	0	45	166	14	0	105	79	28	0	837
7:45 AM	6	162	124	0	26	185	5	0	60	127	21	0	87	130	47	0	980
8:00 AM	7	111	85	0	11	145	18	0	43	127	19	0	81	86	43	0	776
8:15 AM	12	69	63	0	29	186	10	0	27	78	11	0	82	82	24	0	673
8:30 AM	10	61	54	0	21	125	10	0	32	69	19	0	61	80	35	0	577
8:45 AM	13	99	51	0	31	162	20	0	32	55	15	0	81	50	12	0	621
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	73	704	602	0	251	1264	88	0	293	822	127	0	620	651	217	0	5712
APPROACH %'s :	5.29%	51.05%	43.65%	0.00%	15.66%	78.85%	5.49%	0.00%	23.59%	66.18%	10.23%	0.00%	41.67%	43.75%	14.58%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	29	406	390	0	151	666	35	0	177	529	72	0	338	379	135	0	3307
PEAK HR FACTOR :	0.906	0.627	0.786	0.000	0.581	0.900	0.486	0.000	0.738	0.797	0.857	0.000	0.805	0.729	0.718	0.000	0.844
	0.706				0.906				0.864				0.807				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	2	0	2	3	0	0	1	2	1	0	2	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	22	131	116	0	28	142	19	0	36	192	18	0	92	98	24	0	918
4:15 PM	31	168	128	0	24	128	19	0	43	175	20	0	82	122	34	0	974
4:30 PM	28	155	125	0	30	143	22	0	41	170	13	0	81	100	21	0	929
4:45 PM	29	159	110	0	30	126	16	0	49	185	22	0	100	102	33	0	961
5:00 PM	30	224	154	0	17	147	27	0	50	201	15	0	67	114	17	0	1063
5:15 PM	28	180	162	0	24	148	14	0	50	200	21	0	93	113	28	0	1061
5:30 PM	18	245	147	0	23	126	22	0	51	191	28	0	89	95	31	0	1066
5:45 PM	25	205	121	0	18	110	26	0	50	179	24	0	93	94	31	0	976
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	211	1467	1063	0	194	1070	165	0	370	1493	161	0	697	838	219	0	7948
APPROACH %'s :	7.70%	53.52%	38.78%	0.00%	13.58%	74.88%	11.55%	0.00%	18.28%	73.76%	7.95%	0.00%	39.74%	47.78%	12.49%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	101	854	584	0	82	531	89	0	201	771	88	0	342	416	107	0	4166
PEAK HR FACTOR :	0.842	0.871	0.901	0.000	0.854	0.897	0.824	0.000	0.985	0.959	0.786	0.000	0.919	0.912	0.863	0.000	0.977
	0.938				0.919				0.978				0.924				

National Data & Surveying Services

Intersection Turning Movement Count

Location: N Las Posas Rd & W Mission Rd
City: San Marcos
Control: Signalized

Project ID: 20-04064-011
Date: 3/3/2020

Bikes

NS/EW Streets:	N Las Posas Rd				N Las Posas Rd				W Mission Rd				W Mission Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	2	0	2	3	0	0	1	2	1	0	2	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	2	0	0	0	0	2	0	0	0	3	0	0	7
APPROACH %'s :					100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	0	0	0	0	2	0	0	0	0	1	0	0	0	1	0	0	4
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.250	0.000	0.000	1.000
					0.500				0.250				0.250				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	2	0	2	3	0	0	1	2	1	0	2	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	1	0	0	0	0	1	0	0	2	0	0	0	6	1	0	11
4:15 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
4:30 PM	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	2
4:45 PM	0	0	0	0	0	0	0	0	0	1	0	0	1	1	0	0	3
5:00 PM	0	0	0	0	0	1	0	0	0	1	0	0	0	2	1	0	5
5:15 PM	0	0	0	0	0	3	0	0	0	2	0	0	0	0	0	0	5
5:30 PM	1	1	0	0	1	0	0	0	0	2	0	0	0	0	1	0	6
5:45 PM	0	2	0	0	0	0	0	0	1	0	0	0	0	0	0	0	3
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	2	4	0	0	1	4	1	0	1	10	0	0	1	9	3	0	36
APPROACH %'s :	33.33%	66.67%	0.00%	0.00%	16.67%	66.67%	16.67%	0.00%	9.09%	90.91%	0.00%	0.00%	7.69%	69.23%	23.08%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	1	3	0	0	1	4	0	0	1	5	0	0	0	2	2	0	19
PEAK HR FACTOR :	0.25	0.375	0.000	0.000	0.250	0.333	0.000	0.000	0.250	0.625	0.000	0.000	0.000	0.250	0.500	0.000	0.792
			0.500				0.417				0.750				0.333		

National Data & Surveying Services

Intersection Turning Movement Count

Location: N Las Posas Rd & W Mission Rd **Project ID:** 20-04064-011
City: San Marcos **Date:** 3/3/2020

Pedestrians (Crosswalks)

NS/EW Streets:	N Las Posas Rd		N Las Posas Rd		W Mission Rd		W Mission Rd		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	0	2	0	1	2	0	0	5
7:15 AM	3	1	1	1	0	0	1	1	8
7:30 AM	2	3	0	0	3	1	1	0	10
7:45 AM	1	0	0	1	1	1	0	0	4
8:00 AM	0	1	1	0	0	0	0	0	2
8:15 AM	1	0	2	0	2	0	0	0	5
8:30 AM	1	0	1	0	2	0	0	0	4
8:45 AM	2	1	1	0	0	1	0	0	5
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	10	6	8	2	9	5	2	1	43
APPROACH %'s :	62.50%	37.50%	80.00%	20.00%	64.29%	35.71%	66.67%	33.33%	
PEAK HR :	07:15 AM - 08:15 AM								TOTAL
PEAK HR VOL :	6	5	2	2	4	2	2	1	24
PEAK HR FACTOR :	0.500	0.417	0.500	0.500	0.333	0.500	0.500	0.250	0.600
	0.550		0.500		0.375		0.375		

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	2	0	3	0	2	1	0	0	8
4:15 PM	1	0	4	0	1	2	0	0	8
4:30 PM	0	3	1	2	0	1	1	0	8
4:45 PM	2	0	1	0	1	0	0	0	4
5:00 PM	0	2	3	0	2	0	0	0	7
5:15 PM	0	1	0	1	1	0	0	0	3
5:30 PM	0	0	1	0	1	0	0	0	2
5:45 PM	0	1	0	1	0	0	0	0	2
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	5	7	13	4	8	4	1	0	42
APPROACH %'s :	41.67%	58.33%	76.47%	23.53%	66.67%	33.33%	100.00%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM								TOTAL
PEAK HR VOL :	0	4	4	2	4	0	0	0	14
PEAK HR FACTOR :		0.500	0.333	0.500	0.500				0.500
	0.500		0.500		0.500				

Prepared by National Data & Surveying Services

N Las Posas Rd & W Mission Rd

Peak Hour Turning Movement Count

ID: 20-04064-011
City: San Marcos

Day: Tuesday
Date: 03/03/2020

PEAK HOURS

AM: 07:15 AM - 08:15 AM
NOON: NONE
PM: 05:00 PM - 06:00 PM

COUNT PERIODS

AM: 07:00 AM - 09:00 AM
NOON: NONE
PM: 04:00 PM - 06:00 PM

N Las Posas Rd — SOUTHBOUND

AM	35	666	151	0	718	AM
NOON	0	0	0	0	0	NOON
PM	89	531	82	0	1162	PM

W Mission Rd — EASTBOUND

AM	NOON	PM	
443	0	606	
0	0	0	0
177	0	201	1
529	0	771	2
72	0	88	1

W Mission Rd — WESTBOUND

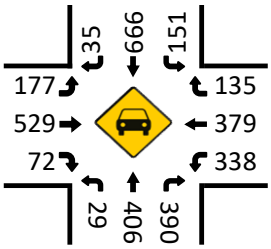
PM	NOON	AM	
107	0	135	0
416	0	379	2
342	0	338	2
0	0	0	0
1437	0	1070	

N Las Posas Rd — NORTHBOUND

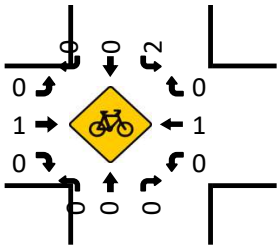
PM	961	0	101	854	584	PM
NOON	0	0	0	0	0	NOON
AM	1076	0	29	406	390	AM

CONTROL			
Signalized			
TEV	3307 AM	0 NOON	4166 PM
PHF	0.84		0.98

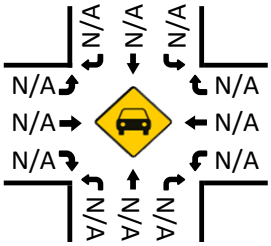
Total Vehicles (AM)



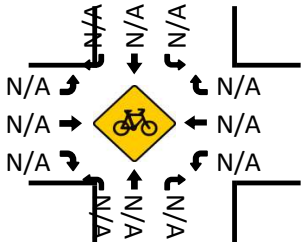
Bikes (AM)



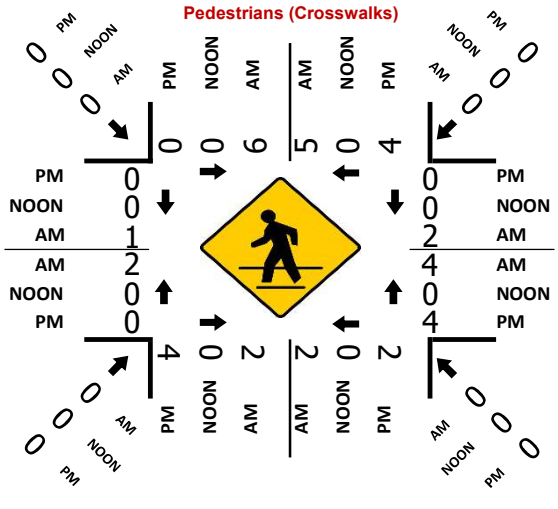
Total Vehicles (Noon)



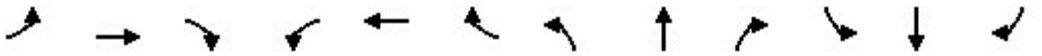
Bikes (NOON)



Pedestrians (Crosswalks)


0
0
9
5
0
4
0
0
1
2
4
0
2
4
0
0
4
2
2
0
0
0
0

Appendix E - LOS Calculation Worksheets – Existing Conditions



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	21	3	55	29	2	2	18	316	15	6	808	55
Future Volume (veh/h)	21	3	55	29	2	2	18	316	15	6	808	55
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.95	1.00		0.95	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	23	3	53	32	2	1	20	343	14	7	878	53
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	54	7	124	245	15	8	60	1561	63	26	1434	86
Arrive On Green	0.11	0.11	0.11	0.15	0.15	0.15	0.03	0.31	0.31	0.01	0.29	0.29
Sat Flow, veh/h	471	61	1085	1625	102	51	1781	5023	203	1781	4912	296
Grp Volume(v), veh/h	79	0	0	35	0	0	20	231	126	7	608	323
Grp Sat Flow(s),veh/h/ln	1617	0	0	1777	0	0	1781	1702	1822	1781	1702	1803
Q Serve(g_s), s	2.5	0.0	0.0	0.9	0.0	0.0	0.6	2.8	2.8	0.2	8.5	8.5
Cycle Q Clear(g_c), s	2.5	0.0	0.0	0.9	0.0	0.0	0.6	2.8	2.8	0.2	8.5	8.5
Prop In Lane	0.29		0.67	0.91		0.03	1.00		0.11	1.00		0.16
Lane Grp Cap(c), veh/h	185	0	0	268	0	0	60	1058	566	26	994	527
V/C Ratio(X)	0.43	0.00	0.00	0.13	0.00	0.00	0.34	0.22	0.22	0.27	0.61	0.61
Avail Cap(c_a), veh/h	275	0	0	1235	0	0	271	1331	712	258	1307	692
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.8	0.0	0.0	20.3	0.0	0.0	26.1	14.1	14.1	26.9	16.9	16.9
Incr Delay (d2), s/veh	1.6	0.0	0.0	0.2	0.0	0.0	3.3	0.1	0.3	5.3	0.9	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	0.0	0.4	0.0	0.0	0.3	1.0	1.1	0.1	2.8	3.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.3	0.0	0.0	20.5	0.0	0.0	29.3	14.2	14.4	32.2	17.7	18.5
LnGrp LOS	C	A	A	C	A	A	C	B	B	C	B	B
Approach Vol, veh/h		79			35			377			938	
Approach Delay, s/veh		24.3			20.5			15.1			18.1	
Approach LOS		C			C			B			B	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		11.9	6.4	22.9		13.9	5.4	24.0				
Change Period (Y+Rc), s		5.6	4.6	6.8		5.6	4.6	6.8				
Max Green Setting (Gmax), s		9.4	8.4	21.2		38.4	8.0	21.6				
Max Q Clear Time (g_c+I1), s		4.5	2.6	10.5		2.9	2.2	4.8				
Green Ext Time (p_c), s		0.1	0.0	5.3		0.1	0.0	2.7				

Intersection Summary	
HCM 6th Ctrl Delay	17.7
HCM 6th LOS	B

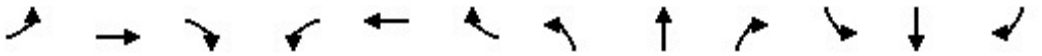
Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	17	778	441	2	0	45
Future Vol, veh/h	17	778	441	2	0	45
Conflicting Peds, #/hr	6	0	0	6	0	6
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	125	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	18	846	479	2	0	49

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	487	0	-	0	-	253
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	4.14	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	2.22	-	-	-	-	3.32
Pot Cap-1 Maneuver	1072	-	-	-	0	746
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1066	-	-	-	-	737
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	10.2
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1066	-	-	-	737
HCM Lane V/C Ratio	0.017	-	-	-	0.066
HCM Control Delay (s)	8.4	-	-	-	10.2
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.2



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	177	529	72	338	379	139	29	412	390	168	689	35
Future Volume (veh/h)	177	529	72	338	379	139	29	412	390	168	689	35
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.98	1.00		0.95	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	211	630	68	402	451	148	35	490	325	200	820	37
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	230	798	441	439	588	191	111	1079	1160	344	1707	77
Arrive On Green	0.13	0.22	0.22	0.13	0.22	0.22	0.06	0.30	0.30	0.10	0.34	0.34
Sat Flow, veh/h	1781	3554	1526	3456	2619	851	1781	3554	2652	3456	5003	225
Grp Volume(v), veh/h	211	630	68	402	305	294	35	490	325	200	557	300
Grp Sat Flow(s),veh/h/ln	1781	1777	1526	1728	1777	1694	1781	1777	1326	1728	1702	1824
Q Serve(g_s), s	11.7	16.7	3.3	11.5	16.0	16.3	1.9	11.1	8.0	5.5	12.9	13.0
Cycle Q Clear(g_c), s	11.7	16.7	3.3	11.5	16.0	16.3	1.9	11.1	8.0	5.5	12.9	13.0
Prop In Lane	1.00		1.00	1.00		0.50	1.00		1.00	1.00		0.12
Lane Grp Cap(c), veh/h	230	798	441	439	399	380	111	1079	1160	344	1161	622
V/C Ratio(X)	0.92	0.79	0.15	0.92	0.76	0.77	0.32	0.45	0.28	0.58	0.48	0.48
Avail Cap(c_a), veh/h	230	1020	537	439	496	473	230	1079	1160	446	1161	622
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95
Uniform Delay (d), s/veh	43.0	36.5	26.6	43.1	36.3	36.4	44.9	28.1	18.5	43.0	25.9	26.0
Incr Delay (d2), s/veh	37.2	3.3	0.2	23.8	6.4	7.2	1.6	1.4	0.6	0.6	1.3	2.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.4	7.3	1.2	6.2	7.3	7.2	0.9	4.7	2.4	2.3	5.1	5.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	80.2	39.8	26.8	66.9	42.7	43.6	46.5	29.5	19.1	43.6	27.3	28.5
LnGrp LOS	F	D	C	E	D	D	D	C	B	D	C	C
Approach Vol, veh/h		909			1001			850			1057	
Approach Delay, s/veh		48.2			52.7			26.2			30.7	
Approach LOS		D			D			C			C	

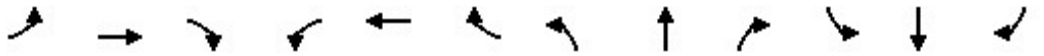
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.1	37.2	19.0	28.8	11.3	40.9	19.0	28.8
Change Period (Y+Rc), s	5.1	6.8	6.3	6.3	5.1	6.8	* 6.1	* 6.3
Max Green Setting (Gmax), s	12.9	21.2	12.7	28.7	12.9	21.2	* 13	* 28
Max Q Clear Time (g_c+I1), s	7.5	13.1	13.5	18.7	3.9	15.0	13.7	18.3
Green Ext Time (p_c), s	0.2	3.6	0.0	3.0	0.0	3.3	0.0	3.1

Intersection Summary	
HCM 6th Ctrl Delay	39.6
HCM 6th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	5	66	14	1	5	59	1020	22	0	640	66
Future Volume (veh/h)	90	5	66	14	1	5	59	1020	22	0	640	66
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.95	1.00		0.97	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	98	5	64	15	1	4	64	1109	22	0	696	64
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	148	8	97	134	9	36	141	2181	43	3	1241	113
Arrive On Green	0.15	0.15	0.15	0.10	0.10	0.10	0.08	0.42	0.42	0.00	0.26	0.26
Sat Flow, veh/h	991	51	647	1293	86	345	1781	5150	102	1781	4742	432
Grp Volume(v), veh/h	167	0	0	20	0	0	64	733	398	0	498	262
Grp Sat Flow(s),veh/h/ln	1688	0	0	1724	0	0	1781	1702	1848	1781	1702	1770
Q Serve(g_s), s	5.2	0.0	0.0	0.6	0.0	0.0	1.9	8.8	8.8	0.0	7.0	7.1
Cycle Q Clear(g_c), s	5.2	0.0	0.0	0.6	0.0	0.0	1.9	8.8	8.8	0.0	7.0	7.1
Prop In Lane	0.59		0.38	0.75		0.20	1.00		0.06	1.00		0.24
Lane Grp Cap(c), veh/h	252	0	0	179	0	0	141	1442	782	3	891	463
V/C Ratio(X)	0.66	0.00	0.00	0.11	0.00	0.00	0.45	0.51	0.51	0.00	0.56	0.57
Avail Cap(c_a), veh/h	273	0	0	1183	0	0	256	1442	782	256	1358	706
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	22.3	0.0	0.0	22.6	0.0	0.0	24.5	11.8	11.8	0.0	17.8	17.8
Incr Delay (d2), s/veh	5.3	0.0	0.0	0.3	0.0	0.0	2.3	0.4	0.8	0.0	0.8	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	0.0	0.0	0.2	0.0	0.0	0.8	2.9	3.2	0.0	2.4	2.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.6	0.0	0.0	22.9	0.0	0.0	26.8	12.2	12.5	0.0	18.5	19.3
LnGrp LOS	C	A	A	C	A	A	C	B	B	A	B	B
Approach Vol, veh/h		167			20			1195			760	
Approach Delay, s/veh		27.6			22.9			13.1			18.8	
Approach LOS		C			C			B			B	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		13.9	9.0	21.4		11.4	0.0	30.4				
Change Period (Y+Rc), s		5.6	4.6	6.8		5.6	4.6	6.8				
Max Green Setting (Gmax), s		9.0	8.0	22.2		38.2	8.0	22.2				
Max Q Clear Time (g_c+I1), s		7.2	3.9	9.1		2.6	0.0	10.8				
Green Ext Time (p_c), s		0.1	0.0	4.9		0.1	0.0	7.0				

Intersection Summary												
HCM 6th Ctrl Delay			16.3									
HCM 6th LOS			B									

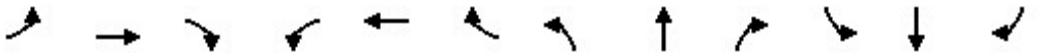
Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	87	1060	577	29	0	59
Future Vol, veh/h	87	1060	577	29	0	59
Conflicting Peds, #/hr	4	0	0	4	0	4
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	125	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	95	1152	627	32	0	64

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	663	0	-	0	-	338
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	4.14	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	2.22	-	-	-	-	3.32
Pot Cap-1 Maneuver	922	-	-	-	0	658
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	918	-	-	-	-	653
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0.7	0	11.1
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	918	-	-	-	653
HCM Lane V/C Ratio	0.103	-	-	-	0.098
HCM Control Delay (s)	9.4	-	-	-	11.1
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.3	-	-	-	0.3



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	201	771	88	342	416	126	101	879	584	90	541	89
Future Volume (veh/h)	201	771	88	342	416	126	101	879	584	90	541	89
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.96	1.00		0.94	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	205	787	72	349	424	116	103	897	417	92	552	82
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	234	910	531	418	677	183	155	1119	1163	295	1404	205
Arrive On Green	0.13	0.26	0.26	0.12	0.25	0.25	0.09	0.31	0.31	0.09	0.31	0.31
Sat Flow, veh/h	1781	3554	1536	3456	2738	741	1781	3554	2623	3456	4483	654
Grp Volume(v), veh/h	205	787	72	349	273	267	103	897	417	92	417	217
Grp Sat Flow(s),veh/h/ln	1781	1777	1536	1728	1777	1702	1781	1777	1311	1728	1702	1733
Q Serve(g_s), s	12.4	23.3	3.6	10.9	15.1	15.4	6.2	25.4	11.7	2.8	10.5	10.8
Cycle Q Clear(g_c), s	12.4	23.3	3.6	10.9	15.1	15.4	6.2	25.4	11.7	2.8	10.5	10.8
Prop In Lane	1.00		1.00	1.00		0.44	1.00		1.00	1.00		0.38
Lane Grp Cap(c), veh/h	234	910	531	418	439	421	155	1119	1163	295	1066	543
V/C Ratio(X)	0.88	0.87	0.14	0.83	0.62	0.63	0.66	0.80	0.36	0.31	0.39	0.40
Avail Cap(c_a), veh/h	274	992	566	525	467	447	241	1119	1163	468	1066	543
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.93	0.93	0.93
Uniform Delay (d), s/veh	46.9	39.1	24.9	47.3	36.8	36.9	48.7	34.5	20.8	47.3	29.6	29.7
Incr Delay (d2), s/veh	21.1	7.6	0.1	9.2	2.8	3.2	4.8	6.1	0.9	0.2	1.0	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.7	10.8	1.3	5.1	6.6	6.5	2.9	11.4	3.5	1.2	4.3	4.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	67.9	46.7	25.0	56.4	39.7	40.1	53.5	40.6	21.7	47.5	30.6	31.7
LnGrp LOS	E	D	C	E	D	D	D	D	C	D	C	C
Approach Vol, veh/h		1064			889			1417			726	
Approach Delay, s/veh		49.3			46.4			36.0			33.0	
Approach LOS		D			D			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.5	41.4	19.6	34.5	14.7	41.3	20.6	33.5
Change Period (Y+Rc), s	5.1	6.8	6.3	6.3	5.1	6.8	* 6.1	* 6.3
Max Green Setting (Gmax), s	14.9	23.2	16.7	30.7	14.9	23.2	* 17	* 29
Max Q Clear Time (g_c+I1), s	4.8	27.4	12.9	25.3	8.2	12.8	14.4	17.4
Green Ext Time (p_c), s	0.1	0.0	0.5	2.5	0.1	3.6	0.1	3.1

Intersection Summary	
HCM 6th Ctrl Delay	41.2
HCM 6th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Appendix F - Cumulative Project Information

4 PROJECT TRAFFIC

This section describes the proposed project, forecast trip generation, trip distribution, and assignment of trips on the adjacent roadway network.

4.1 Project Description

The project proposes to construct 89 single-family dwelling units on the 92-acre vacant undeveloped site. Approximately 28 acres will be developed to construct the proposed project, and the remaining 64 acres will remain undeveloped.

The project will take primary access from an internal private street (Street "A") that will intersect with Las Posas Road. Gated secondary access for emergency vehicles will be provided from Las Posas Road north of Street "A".

4.2 Project Trip Generation

Trip generation rates published by the SANDAG *Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region*, April 2002 were applied to the proposed project to determine the traffic generation characteristics of the site.

Table 4-1 summarizes the vehicular trip generation for the project site. As shown in the table, the project would generate approximately 890 average weekday trips, including 71 AM peak hour trips and 89 PM peak hour trips.

Table 4-1
Trip Generation Summary

TRIP GENERATION RATES												
Land Use	Rate				AM PEAK HOUR % of ADT	AM PEAK HOUR In:Out Ratio			PM PEAK HOUR % of ADT	PM PEAK HOUR In:Out Ratio		
Single-Family DU	10	trips	/	du	8%	0.30	:	0.70	10%	0.70	:	0.30

TRIP GENERATION CALCULATIONS									
Land Use	Amount		ADT	AM PEAK HOUR Total	AM PEAK HOUR In	AM PEAK HOUR Out	PM PEAK HOUR Total	PM PEAK HOUR In	PM PEAK HOUR Out
Single-Family DU	89	du	890	71	21	50	89	62	27

Notes: DU = dwelling unit
The trip rates for the proposed uses are based on *SANDAG's Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region, April 2002*.

4.3 Project Trip Distribution

The proposed Murai Subdivision project is located immediately south of the approved San Marcos Highlands project, and is also proposing the same land use as San Marcos Highlands (single-family dwelling units). Therefore, the trip distribution that was developed for approved *San Marcos Highlands Traffic Impact Analysis Report* (RBF Consulting, February 2015) is used to distribute trips generated by the proposed Murai Subdivision project. This methodology to use the San Marcos Highland trip distribution was approved by City of San Marcos staff.

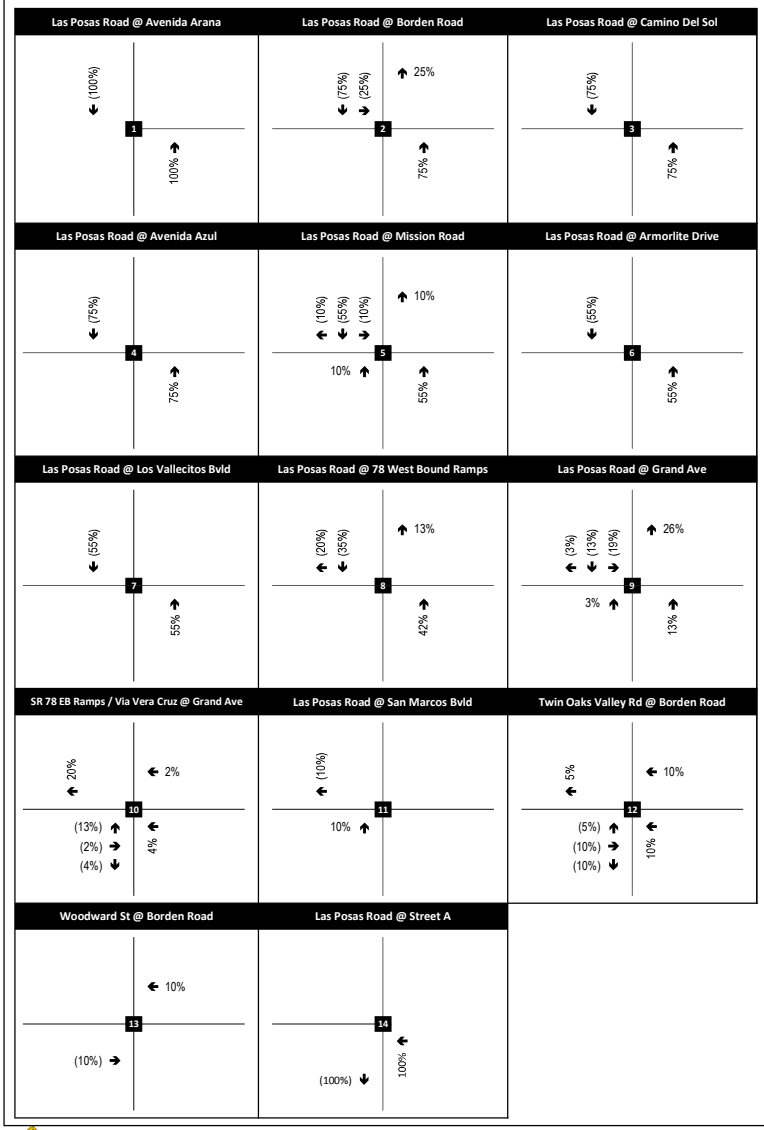
Consistent with the approved *San Marcos Highlands Traffic Impact Analysis Report*, different trip distribution patterns are assumed between near-term (existing/existing plus cumulative) conditions and Horizon Year 2035 conditions due to the future extension of Las Posas Road to Buena Creek Road. The future Las Posas Road extension to Buena Creek Road is included in both the City's General Plan Mobility Element and the County of San Diego General Plan Circulation Element.

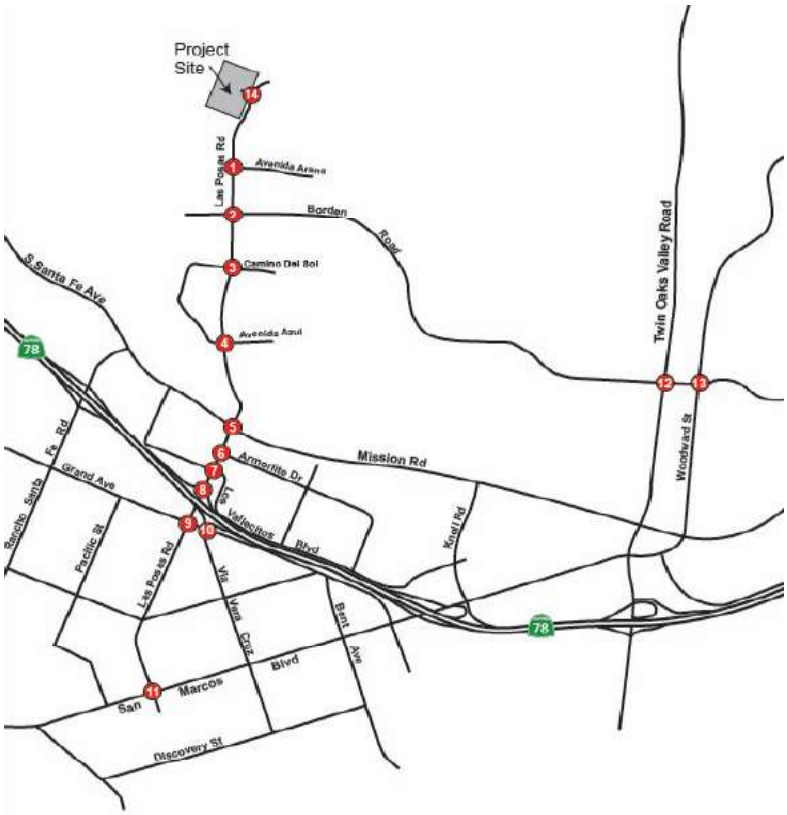
Exhibit 4-1 displays the near-term conditions trip distribution patterns at the intersections and along the roadway segments in the study area. Horizon Year 2035 trip distribution patterns in the study area are illustrated in **Exhibit 4-2**.

4.4 Project Trip Assignment

Based on the near-term conditions project trip distribution, project trips were assigned to the study intersections and roadway segments as displayed in **Exhibit 4-3** and **Exhibit 4-4**, respectively.

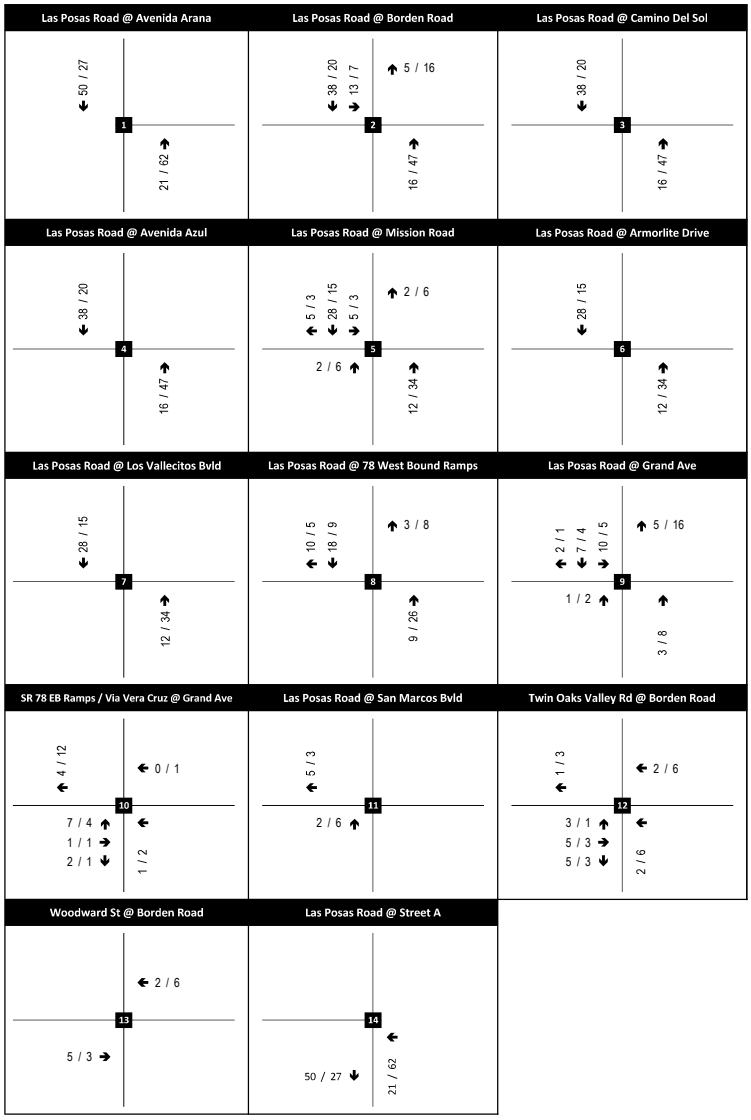
The assignment of project trips based on the Horizon Year 2035 trip distribution is shown in **Exhibit 4-5** and **Exhibit 4-6** for the study intersections and roadway segments, respectively.

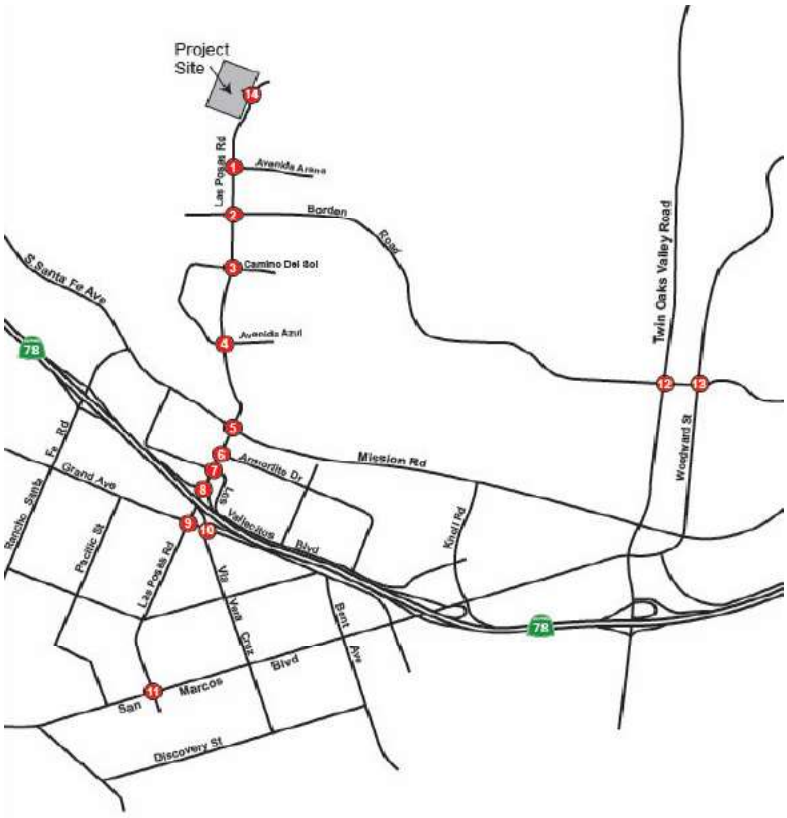




Legend:
xx% = Inbound Trip Distribution
(yy%) = Outbound Trip Distribution

Exhibit 4-1
Project Trip Distribution: Near-Term Conditions





Legend:
xx / yy = AM / PM Peak-Hour Project Trips

Exhibit 4-3
Peak Hour Project Trip Assignment: Near-Term Conditions

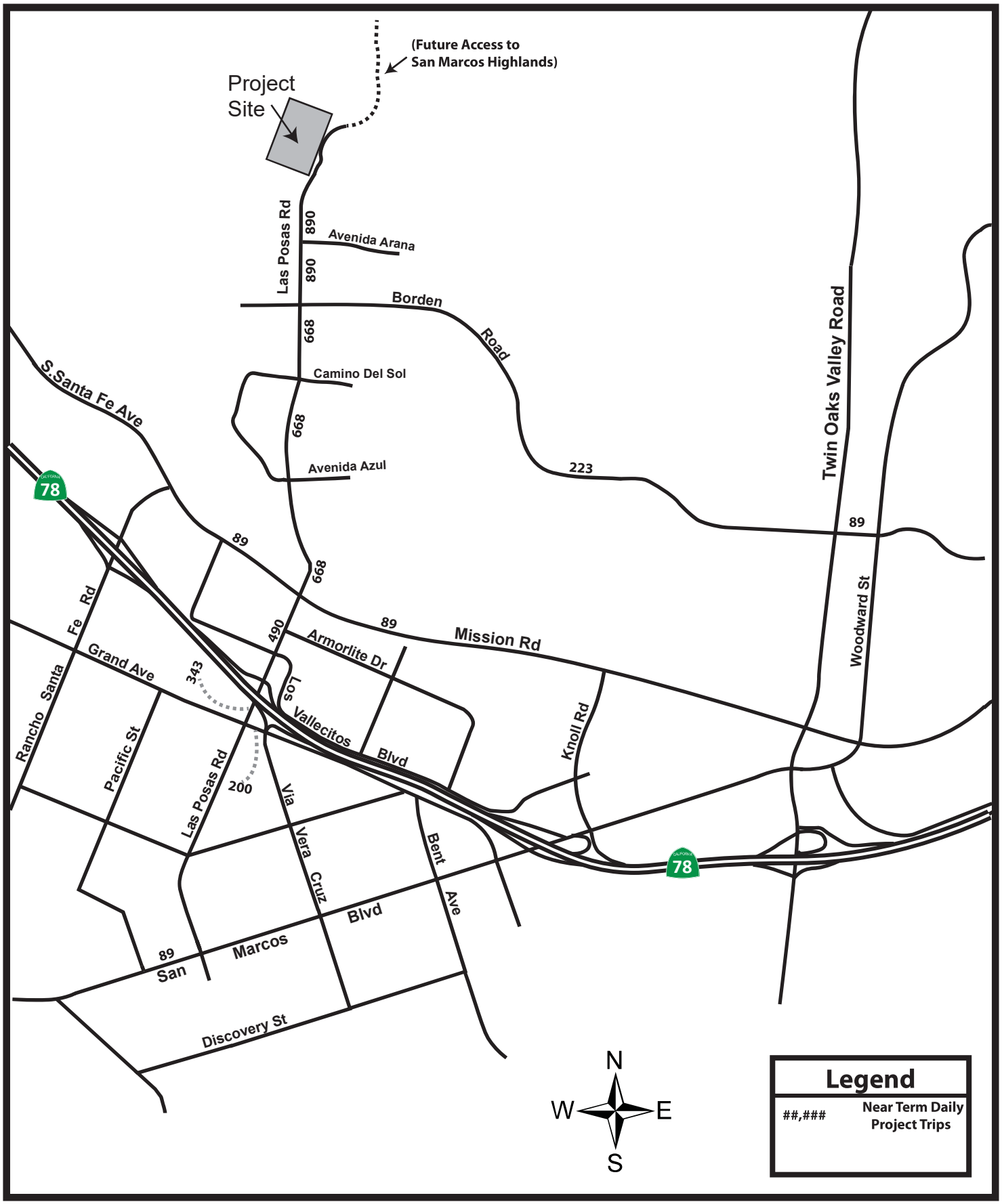


Exhibit 4-4

Daily Project Trip Assignment: Near-Term Conditions

TRAFFIC

PROPOSED PROJECT

The project is located on a site within both the City of San Marcos and unincorporated San Diego County. All areas proposed to be developed on the site are planned to be annexed into the City of San Marcos. The portions of the project site that will be maintained as open space will remain within unincorporated San Diego County. The proposed project will consist of 189 single-family dwelling units and a 22-acre passive park use. The project will extend Las Posas Road as a two-lane roadway through the project site and will take access from two internal streets intersecting with Las Posas Road (Street "A" and Street "D").

Project Trip Generation

To determine the trips forecast to be generated by the proposed project, *April 2002 SANDAG Trip Generation* rates were utilized in accordance with the City of San Marcos and SANTEC/ITE Traffic Study Guidelines. The SANDAG *(Not So) Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region* (April 2002) showing the trip generation rate for the proposed land use is provided in Appendix D. Table 5 summarizes the project trip generation. As summarized in Table 5, the proposed project will generate a net increase of approximately 1,998 trips per day, which includes approximately 165 a.m. peak hour trips and approximately 199 p.m. peak hour trips.

Table 5
Proposed Project Trip Generation

Trip Generation Rates

Land Use	Unit	Daily (per unit)	AM Peak			PM Peak		
			Total	In	Out	Total	In	Out
Single Family Residential	DU	10	8%	30%	70%	10%	70%	30%
Passive Park	acre	5	13%	50%	50%	9%	50%	50%

Forecast Project Generated Trips

Land Use	Size	Unit	Daily Trips	AM Peak			PM Peak		
				Total	In	Out	Total	In	Out
Single Family Residential	189	DU	1,890	151	45	106	189	132	57
Passive Park	21.68	acre	108	14	7	7	10	5	5
Total Project Trips			**1,998**	**165**	**52**	**113**	**199**	**137**	**62**

Source: SANDAG (Not So) Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region (April 2002).

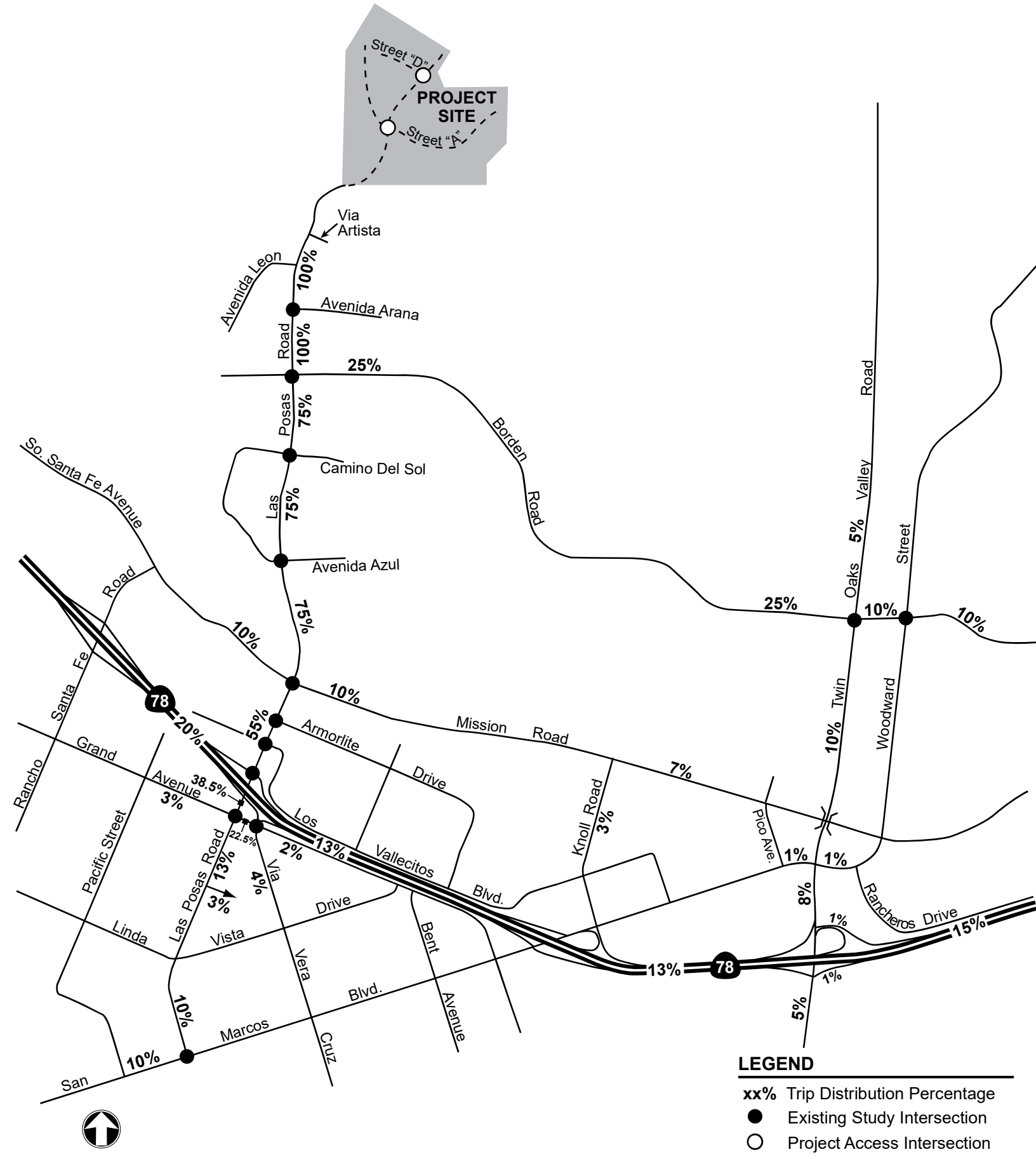
Project Trip Distribution and Assignment

The project trip distribution was developed based on the initial 2001 traffic impact analysis for the San Marcos Highlands project, but adjusted to account for the SR-78/Las Posas Road interchange and Borden Road extension that exists under the current 2014 conditions. By 2035 it is assumed that Las Posas Road is extended to Buena Creek Road based on the build-out of the County of San Diego Circulation Element. Therefore, two project trip distributions were developed for the project based on the roadway network changes from existing to year 2035 conditions.

Exhibit 7 illustrates the project trip distribution under near term future conditions. The Horizon Year 2035 Conditions project trip distribution, which assumes the Las Posas Road extension to Buena Creek Road, is illustrated in **Exhibit 8**.

Utilizing the project trip distributions shown in Exhibits 7 and 8, the forecast project-generated trips were assigned to the roadway network. The following exhibits illustrate the peak hour and daily project trip assignment for near term and Horizon Year 2035 Conditions:

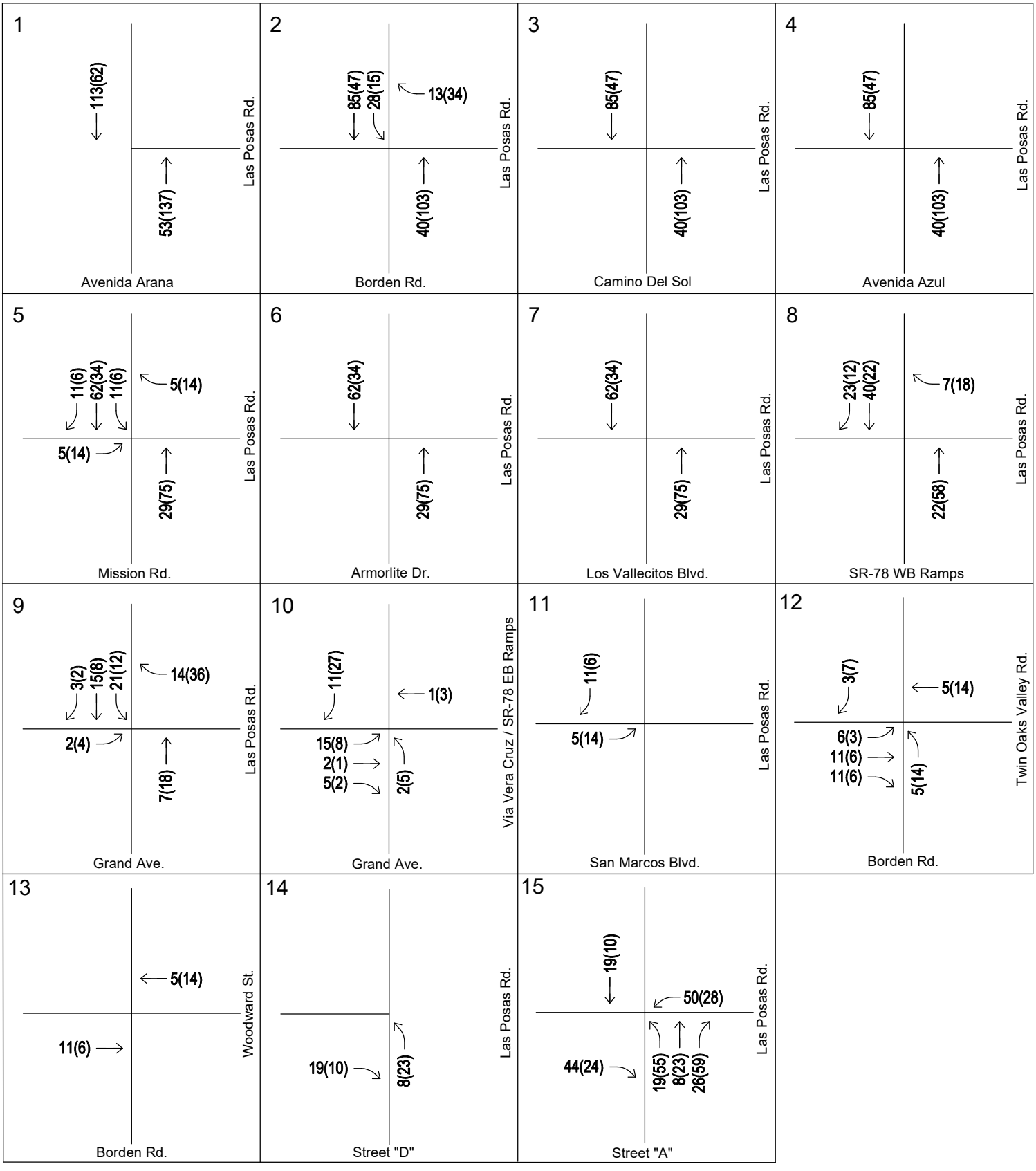
- **Exhibit 9:** Near Term Conditions Peak Hour Project Trip Assignment
- **Exhibit 10:** Near Term Conditions Daily Project Trip Assignment
- **Exhibit 11:** Horizon Year 2035 Conditions Peak Hour Project Trip Assignment
- **Exhibit 12:** Horizon Year 2035 Conditions Daily Project Trip Assignment



PROJECT TRIP DISTRIBUTION - NEAR TERM CONDITIONS

141047 - FEBRUARY 2015

Exhibit 7



LEGEND

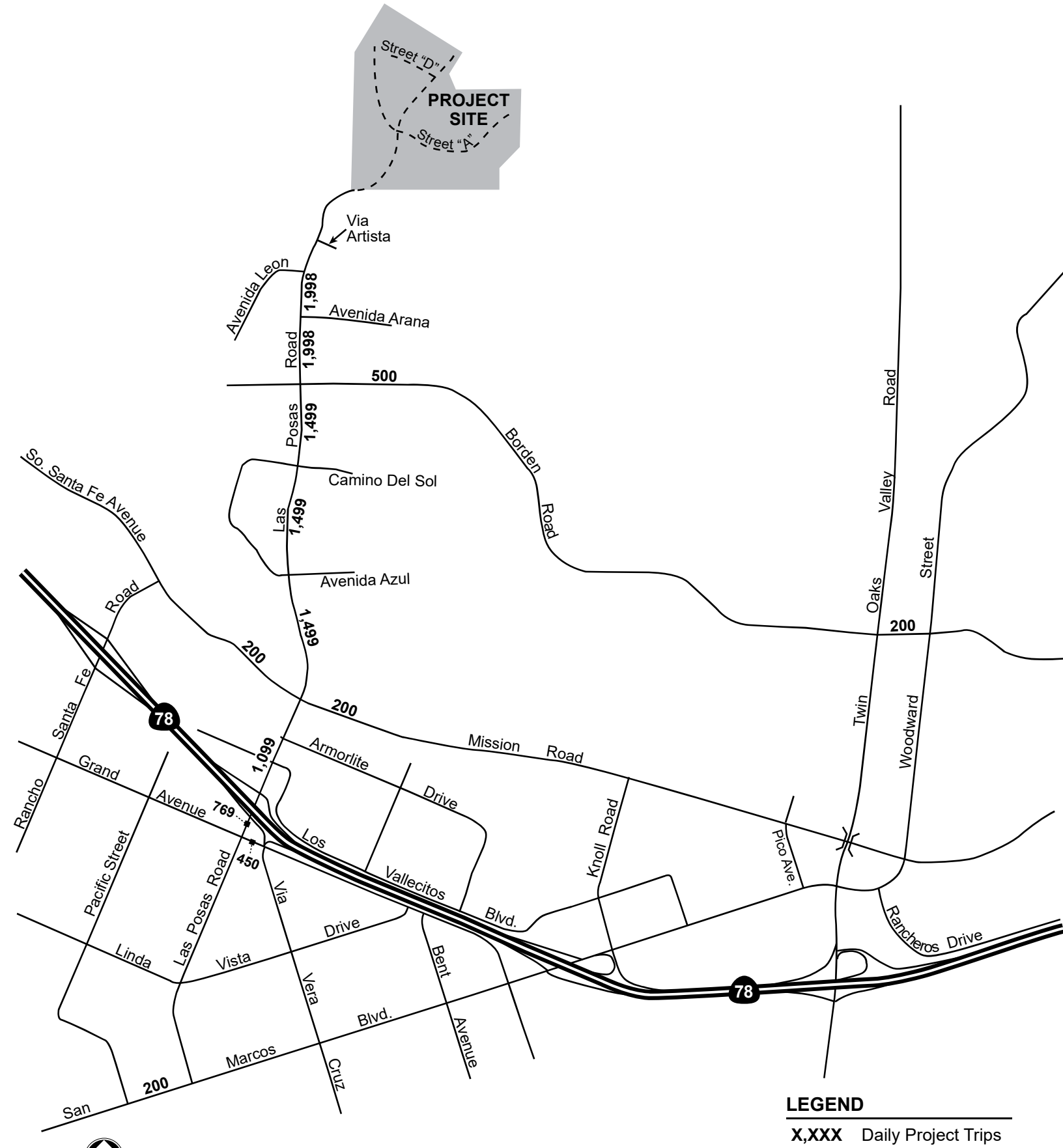
XX(XX) AM/PM PEAK HOUR VOLUME

RBF

NEAR TERM CONDITIONS PEAK HOUR TRIP ASSIGNMENT

JN 141047 JULY 2014

EXHIBIT 9



DAILY PROJECT TRIP ASSIGNMENT - NEAR TERM CONDITIONS

141047 - FEBRUARY 2015

Exhibit 10

Peak Hour Intersection Levels of Service

Table 6-1 summarizes the peak intersection operations for existing conditions. As seen in ***Table 6-1 (above)***, the following study intersection is calculated to currently operate at LOS F:

- San Marcos Boulevard / Knoll Road (LOS F during the PM peak hour).

Appendix C contains the existing intersection analysis worksheets.

Daily Street Segment Levels of Service

Table 6-2 summarizes the existing roadway segment operations. As seen in *Table 6-2*, all of the study segments are calculated to currently operate at LOS C or better.

TABLE 6–2
EXISTING STREET SEGMENT OPERATIONS

Street Segment	Classification	Capacity (LOS E) [a]	ADT [b]	LOS [c]	V/C [d]
W. Mission Road					
Knoll Rd to Pico Ave	4-lane Major Arterial	40,000	15,280	0.382	B
Pico Ave to Woodward St	4-lane Major Arterial	40,000	13,800	0.345	B
Knoll Road					
W. Mission Rd to Furniture Row	4-lane Secondary Arterial	30,000	8,980	0.299	B
Furniture Row to San Marcos Blvd	4-lane Secondary Arterial	30,000	17,070	0.569	C
San Marcos Boulevard					
Knoll Rd to Twin Oaks Valley Rd	4-lane Major Arterial	40,000	23,030	0.576	C
Twin Oaks Valley Rd to Rancheros Dr	4-lane Major Arterial	40,000	23,720	0.593	C
Pico Avenue					
Mission Rd to San Marcos Blvd	Collector	15,000	5,765	0.384	B

Footnotes:

a. Capacities based on SANTEC/ITE Guidelines. b. Average Daily Traffic Volumes.

c. Level of Service.

d. Volume to Capacity.

Trip Generation

The trip generation rates for the project are based on the rates outlined in SANDAG's *(Not So) Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region, April 2002*. The proposed project is planned to develop 120 residential apartments, a 1,850 square-foot community center, a 1,000 square-foot laundry facility and approximately 7,000 square feet of neighborhood retail space.

A 10% mixed-use percentage reduction was applied to the project since a portion of the trips will not have origins/destinations outside of the development but will instead match between residential and commercial uses. A 5% transit/pedestrian reduction was also applied since the project site offers transit opportunities within walking distance to the site.

In addition, to accurately estimate trips generated by a retail type development, it is important to separate total trips into primary trips and pass-by trips. Primary trips are defined as trips that return to their place of origin, such as home-to-grocery-to-home. Pass-by trips are trips attracted from traffic already on the street system passing near the site while going from one location to another such as work-to-shopping center-to-home. These trips are not new traffic to the surrounding street system. Based on SANDAG's *(Not So) Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region, April 2002,* a 10% pass-by reduction was applied. As shown in ***Table 8–1***, the project is expected to generate approximately 430 new ADT with the addition of 23 trips during the AM peak hour (2 entering and 21 exiting) and 49 trips during the PM peak hour (30 entering and 19 exiting).

TABLE 8–1

PROJECT TRIP GENERATION

Land Use	Size	Daily Trip Ends (ADTs)		AM Peak Hour				PM Peak Hour			
		Rate[a]	Volume	% of ADT	In:Out Split	Volume In	Volume Out	% of ADT	In:Out Split	Volume In	Volume Out
Proposed Land Uses											
Apartment	120 DU	6/DU	720	8%	2:8	12	46	9%	7:3	46	19
Neighborhood Retail	7,000 SF	120/SF	840	4%	6:4	20	14	10%	5:5	42	42
Community Center	1,850 SF	30/SF	60	6%	6:4	2	2	9%	6:4	3	2
Laundry Facility	1,000SF	40/SF	40	3%	6:4	1	0	9%	5:5	2	2
Subtotal			1,660			35	62			93	65
Mixed-Use Reduction [b]			(170)			(4)	(6)			(9)	(7)
Transit / Pedestrian Reduction [c]			(80)			(2)	(3)			(5)	(3)
Net Project Total			1,410			29	53			79	55
Pass-By Reduction [d]			(80)			(2)	(1)			(4)	(4)
Existing Land Uses											
Apartment	29 DU	6/DU	(180)	8%	2:8	(3)	(11)	9%	7:3	(11)	(5)
Specialty Retail / Strip Commercial	8,000 SF	40/SF	(320)	3%	6:4	(6)	(4)	9%	5:5	(15)	(14)
Sit-Down, High Turnover Restaurant	2,500 SF	160/SF	(400)	8%	5:5	(16)	(16)	8%	6:4	(19)	(13)
Total New Trips		—	430	—	—	2	21	—	—	30	19

Footnotes:

a. Rate is based on SANDAG's (Not So) Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region, April 2002. b. A 10% mixed-use reduction was applied.

c. A 5% transit / pedestrian reduction was applied. d. A 10% pass-by trips reduction was applied.

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment? Less Than Significant Impact

As identified above, the project includes private recreation space including a community building (2,960 s.f.), a pool and pool deck with shade trellises, and a barbeque area. The project also includes four tot lots distributed throughout the project area. These recreational amenities are included as part of the project description and within the footprint of the proposed project. Any impacts associated with the construction of these amenities are analyzed within this environmental document. Impacts would be less than significant.

XVI. TRANSPORTATION/TRAFFIC

a) Conflict with the applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit? Less Than Significant Impact

The project would generate increased traffic through the introduction of 60 additional multi-family residential units on the site.

In accordance with the San Diego Traffic Engineers Council/Institute of Traffic Engineers (SANTEC/ITE) Guidelines for Traffic Impact Studies in the San Diego Region (March 2000), all road segments where 50 or more project-generated trips peak hour trips are forecast to be added should be addressed in a traffic impact analysis. A traffic impact study was not prepared for the project since it will not generate 50 or more peak hour trips to any road segment or intersection.

As shown in **Table 15**, the project would generate 360 additional ADT, including 29 in the AM Peak hour and 33 in the PM peak hour.

The project site is accessed from Richmar Avenue, which runs from San Marcos Middle School in the west to Twin Oaks Valley Road in the east through a primarily residential area. Mission Road is the closest major roadway to the project site and is located south of the project running parallel to Richmar Avenue. The Mobility Element of the City's General Plan (Figure 3-1) classifies the segment of Mission Road in the project vicinity (between Las Posas Road and Twin Oaks Valley Road) as a 4-Lane Major Arterial with enhanced bicycle and pedestrian facilities.

Based upon information from the City's Public Works Department (Transportation Engineering Division) existing average daily traffic (ADT) along the segments of Mission Road closest to the projects site are presented in **Table 16**.

As shown in Table 16, ADTs range from 16,716 to 19,542 along the segments of Mission Road closest to the project.

Table 15. Project Trip Generation

TRIP GENERATION RATES										
		AM PEAK HOUR				PM PEAK HOUR				
Land Use	Rate	% of ADT	In: Out Ratio			% of ADT	In: Out Ratio			
Multi-Family (greater than 20 du/acre)	6 trips/du	8%	0.20	:	0.80	9%	0.70	:	0.30	

TRIP GENERATION CALCULATIONS									
				AM PEAK HOUR			PM PEAK HOUR		
Land Use	Amount		ADT	Total	In	Out	Total	In	Out
Multi-Family (greater than 20 du/acre)	60	DU	360	29	6	23	33	23	10

Source: SANDAG 2002.
Note: DU = dwelling unit.

Table 16. Average Daily Traffic (ADT) for Select Mission Road Segments

Mission Road Segment	ADT(1)
Las Posas Road to Palomar College Entrance	18,394
Palomar College Entrance to Knoll Road	19,542
Knoll Road to Pico Avenue	15,924
Pico Avenue to Woodward Street/San Marcos Boulevard	16,716

Source: (1) City of San Marcos Traffic Counts ADT Table[1]

The City of San Marcos Urban Street Design Criteria identifies level of service (LOS) capacity for different types of roadways. For a 4-Lane Major Arterial, the capacity at LOS C is 28,000 ADT, the capacity at LOS D is 35,000 ADT, and the capacity at LOS E is 40,000 ADT.

Based upon the information presented in Table 16, all segments of Mission Road between Las Posas Road and Woodward Street/San Marcos Boulevard would operate at LOS C or better, since the ADTs are below the 28,000 ADT level. Even with the addition of project trips (up to 360 ADT), the combined ADT along these segments would still be operating at LOS C or better.

The City has established LOS D as the standard for acceptable intersection and roadway segment operations, except for roadways where the City's flexible LOS policy is implemented. Since Mission Road is operating at a minimum of LOS C and the project would not add traffic at a level that would result in a reduction from LOS C, impacts were determined to be less than significant.

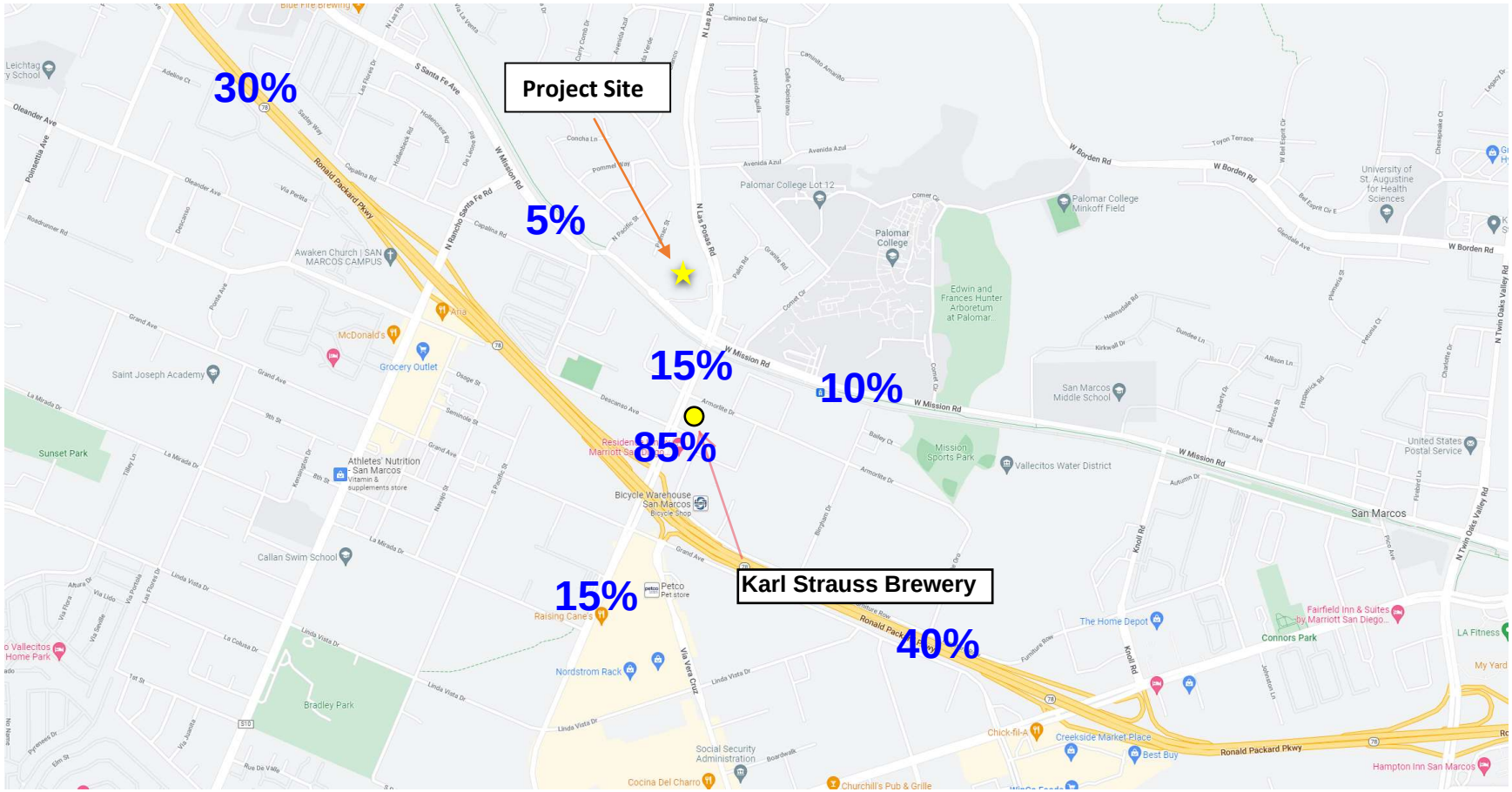
[1] http://www.san-marcos.net/departments/public-works/transportation-engineering/traffic-counts-adt-table

							AM						PM					
Cumulative Project	Land Use	Units	Type	Trip Rate	Per	ADT	%	Trips	Split			In	Out	%	Trips	Split		In	Out
Pacific Commercial	LODGING [58:38:4] - Business Hotel	122.0	DU	7	Units	854	8%	69	4	:	6	**28**	**41**	9%	77	6	: 4	**46**	**31**
El Dorado II SP	RESIDENTIAL [86:11:3] - Multi-Family Units (More Than 20 DU/Acre)	72.0	DU	6	Units	432	8%	35	2	:	8	**7**	**28**	9%	39	7	: 3	**27**	**12**
	COMMERCIAL/RETAILS - Specialty Retail/Strip Commercial	2,000.0	KSF	40	KSF	80	3%	3	6	:	4	**2**	**1**	9%	8	5	: 5	**4**	**4**
Villa Serena	RESIDENTIAL [86:11:3] - Multi-Family (6-20 DU/Acre)	12.0	DU	8	Units	96	8%	8	2	:	8	**2**	**6**	10%	10	7	: 3	**7**	**3**
Mariposa - Phase 1	RESIDENTIAL [86:11:3] - Multi-Family Units (More Than 20 DU/Acre)	60.0	DU	6	Units	360	8%	29	2	:	8	**6**	**23**	9%	33	7	: 3	**23**	**10**
Pacifica San Marcos	RESIDENTIAL [86:11:3] - Multi-Family Units (More Than 20 DU/Acre)	31.0	DU	6	Units	186	8%	15	2	:	8	**3**	**12**	9%	17	7	: 3	**12**	**5**
	COMMERCIAL/RETAILS - Specialty Retail/Strip Commercial	4,375.0	KSF	40	KSF	175	3%	6	6	:	4	**4**	**2**	9%	16	5	: 5	**8**	**8**
Karl Strauss Brewery	RESTAURANTS [51:37:12] - Sit-down - high turnover	10,528.0	KSF	160	KSF	1685	8%	135	5	:	5	**68**	**67**	8%	135	6	: 4	**81**	**54**
					Total	3868		300				120	180		335			208	127

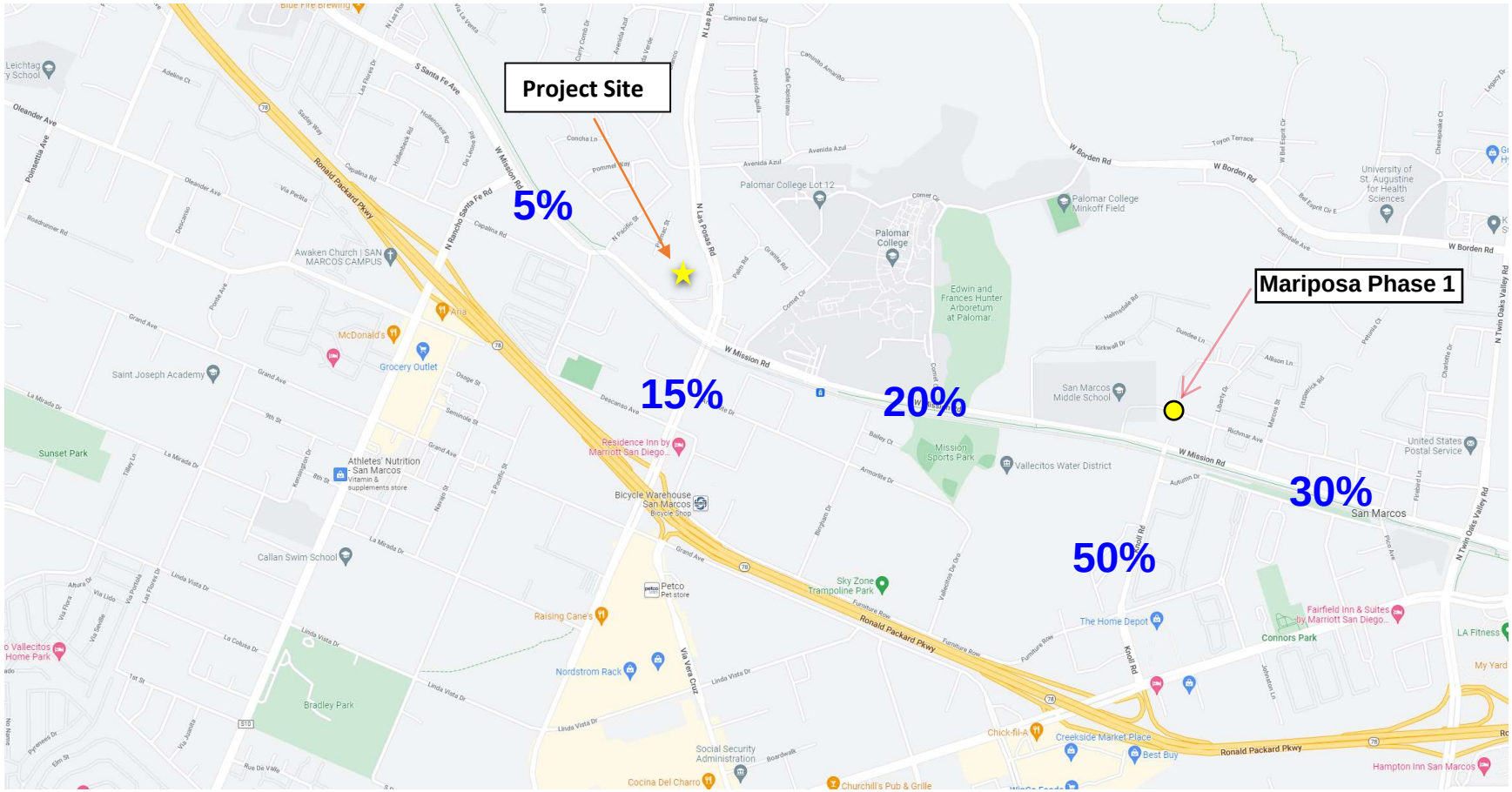
El Dorado II - Trip Distribution (72 MF DU & 2,000 SF Retail)



Karl Strauss Brewery - Trip Distribution (10,528 SF Restaurant)



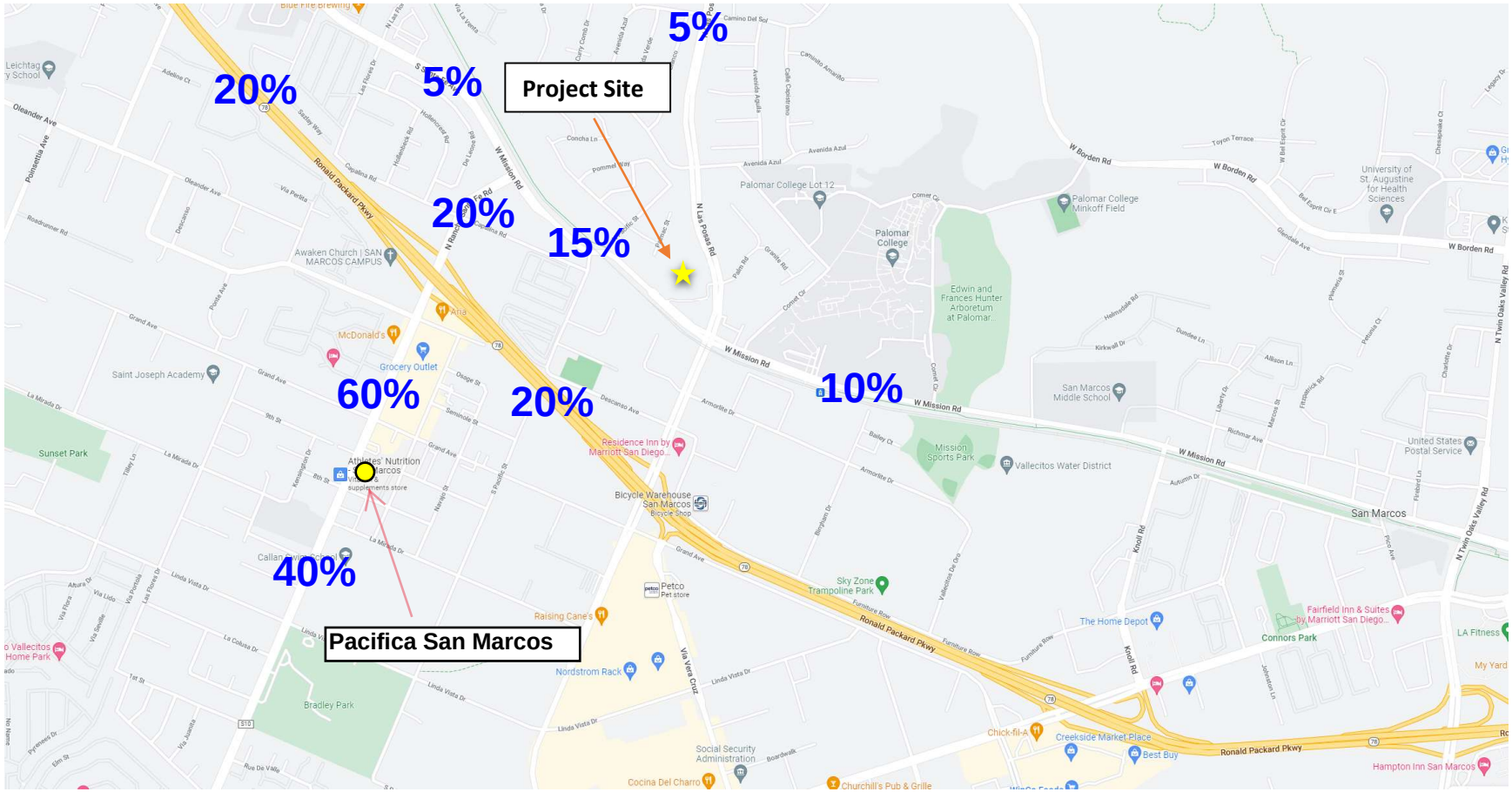
Mariposa Phase 1 - Trip Distribution (60 MF DU)



Pacific Commercial Hotel - Trip Distribution (122 Room Hotel)



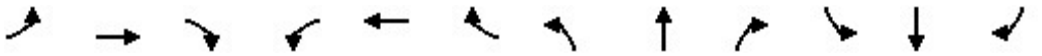
Pacifica San Marcos - Trip Distribution (31 MF DU & 4,375 Commercial)



Villa Serena - Trip Distribution (12 MF DU)



Appendix G - LOS Calculation Worksheets – Near-Term Year 2024 Base Conditions



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	21	3	55	29	2	2	18	383	15	6	936	55
Future Volume (veh/h)	21	3	55	29	2	2	18	383	15	6	936	55
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.95	1.00		0.95	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	23	3	53	32	2	1	20	416	14	7	1017	53
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	53	7	122	243	15	8	59	1659	55	26	1532	80
Arrive On Green	0.11	0.11	0.11	0.15	0.15	0.15	0.03	0.33	0.33	0.01	0.31	0.31
Sat Flow, veh/h	471	61	1085	1624	102	51	1781	5065	169	1781	4958	258
Grp Volume(v), veh/h	79	0	0	35	0	0	20	279	151	7	698	372
Grp Sat Flow(s),veh/h/ln	1617	0	0	1777	0	0	1781	1702	1830	1781	1702	1812
Q Serve(g_s), s	2.6	0.0	0.0	1.0	0.0	0.0	0.6	3.4	3.5	0.2	10.2	10.2
Cycle Q Clear(g_c), s	2.6	0.0	0.0	1.0	0.0	0.0	0.6	3.4	3.5	0.2	10.2	10.2
Prop In Lane	0.29		0.67	0.91		0.03	1.00		0.09	1.00		0.14
Lane Grp Cap(c), veh/h	182	0	0	266	0	0	59	1115	600	26	1052	560
V/C Ratio(X)	0.43	0.00	0.00	0.13	0.00	0.00	0.34	0.25	0.25	0.27	0.66	0.66
Avail Cap(c_a), veh/h	266	0	0	1193	0	0	262	1286	691	249	1262	672
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.7	0.0	0.0	21.1	0.0	0.0	27.0	14.1	14.1	27.9	17.2	17.2
Incr Delay (d2), s/veh	1.6	0.0	0.0	0.2	0.0	0.0	3.3	0.2	0.3	5.3	1.3	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	0.0	0.4	0.0	0.0	0.3	1.2	1.3	0.1	3.4	3.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.3	0.0	0.0	21.3	0.0	0.0	30.3	14.2	14.4	33.2	18.4	19.6
LnGrp LOS	C	A	A	C	A	A	C	B	B	C	B	B
Approach Vol, veh/h		79			35			450			1077	
Approach Delay, s/veh		25.3			21.3			15.0			18.9	
Approach LOS		C			C			B			B	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		12.0	6.5	24.5		14.2	5.4	25.5				
Change Period (Y+Rc), s		5.6	4.6	6.8		5.6	4.6	6.8				
Max Green Setting (Gmax), s		9.4	8.4	21.2		38.4	8.0	21.6				
Max Q Clear Time (g_c+I1), s		4.6	2.6	12.2		3.0	2.2	5.5				
Green Ext Time (p_c), s		0.1	0.0	5.3		0.1	0.0	3.3				

Intersection Summary												
HCM 6th Ctrl Delay			18.2									
HCM 6th LOS			B									

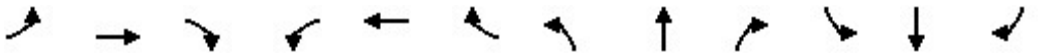
Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	17	806	475	2	0	45
Future Vol, veh/h	17	806	475	2	0	45
Conflicting Peds, #/hr	6	0	0	6	0	6
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	125	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	18	876	516	2	0	49

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	524	0	-	0	-	271
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	4.14	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	2.22	-	-	-	-	3.32
Pot Cap-1 Maneuver	1039	-	-	-	0	727
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1033	-	-	-	-	719
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	10.4
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1033	-	-	-	719
HCM Lane V/C Ratio	0.018	-	-	-	0.068
HCM Control Delay (s)	8.5	-	-	-	10.4
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.2



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	196	531	79	361	384	147	37	453	405	184	779	57
Future Volume (veh/h)	196	531	79	361	384	147	37	453	405	184	779	57
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.98	1.00		0.95	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	233	632	76	430	457	158	44	539	337	219	927	61
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	230	801	456	439	581	199	126	1077	1158	345	1624	107
Arrive On Green	0.13	0.23	0.23	0.13	0.23	0.23	0.07	0.30	0.30	0.10	0.33	0.33
Sat Flow, veh/h	1781	3554	1526	3456	2580	884	1781	3554	2652	3456	4888	321
Grp Volume(v), veh/h	233	632	76	430	313	302	44	539	337	219	645	343
Grp Sat Flow(s),veh/h/ln	1781	1777	1526	1728	1777	1687	1781	1777	1326	1728	1702	1805
Q Serve(g_s), s	12.9	16.8	3.7	12.4	16.6	16.9	2.4	12.5	8.3	6.1	15.6	15.7
Cycle Q Clear(g_c), s	12.9	16.8	3.7	12.4	16.6	16.9	2.4	12.5	8.3	6.1	15.6	15.7
Prop In Lane	1.00		1.00	1.00		0.52	1.00		1.00	1.00		0.18
Lane Grp Cap(c), veh/h	230	801	456	439	400	380	126	1077	1158	345	1131	599
V/C Ratio(X)	1.01	0.79	0.17	0.98	0.78	0.79	0.35	0.50	0.29	0.64	0.57	0.57
Avail Cap(c_a), veh/h	230	1020	550	439	496	471	230	1077	1158	446	1131	599
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.93	0.93	0.93
Uniform Delay (d), s/veh	43.5	36.5	26.1	43.5	36.4	36.5	44.3	28.6	18.6	43.3	27.5	27.5
Incr Delay (d2), s/veh	63.0	3.3	0.2	37.5	7.4	8.4	1.7	1.7	0.6	0.7	1.9	3.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.5	7.3	1.3	7.4	7.6	7.5	1.1	5.3	0.1	2.5	6.3	7.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	106.6	39.8	26.3	81.1	43.8	44.9	45.9	30.3	19.3	43.9	29.5	31.2
LnGrp LOS	F	D	C	F	D	D	D	C	B	D	C	C
Approach Vol, veh/h		941			1045			920			1207	
Approach Delay, s/veh		55.2			59.5			27.0			32.6	
Approach LOS		E			E			C			C	

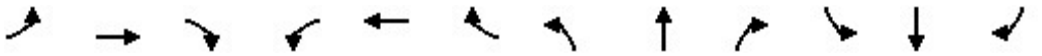
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.1	37.1	19.0	28.8	12.2	40.0	19.0	28.8
Change Period (Y+Rc), s	5.1	6.8	6.3	6.3	5.1	6.8	* 6.1	* 6.3
Max Green Setting (Gmax), s	12.9	21.2	12.7	28.7	12.9	21.2	* 13	* 28
Max Q Clear Time (g_c+I1), s	8.1	14.5	14.4	18.8	4.4	17.7	14.9	18.9
Green Ext Time (p_c), s	0.2	3.4	0.0	3.0	0.0	2.3	0.0	3.1

Intersection Summary	
HCM 6th Ctrl Delay	43.3
HCM 6th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	5	66	14	1	5	59	1180	22	0	725	66
Future Volume (veh/h)	90	5	66	14	1	5	59	1180	22	0	725	66
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.95	1.00		0.97	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	98	5	64	15	1	4	64	1283	22	0	788	64
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	145	7	95	133	9	36	139	2250	39	3	1328	107
Arrive On Green	0.15	0.15	0.15	0.10	0.10	0.10	0.08	0.44	0.44	0.00	0.28	0.28
Sat Flow, veh/h	991	51	647	1293	86	345	1781	5166	89	1781	4798	387
Grp Volume(v), veh/h	167	0	0	20	0	0	64	845	460	0	558	294
Grp Sat Flow(s),veh/h/ln	1688	0	0	1724	0	0	1781	1702	1851	1781	1702	1781
Q Serve(g_s), s	5.4	0.0	0.0	0.6	0.0	0.0	2.0	10.7	10.7	0.0	8.1	8.2
Cycle Q Clear(g_c), s	5.4	0.0	0.0	0.6	0.0	0.0	2.0	10.7	10.7	0.0	8.1	8.2
Prop In Lane	0.59		0.38	0.75		0.20	1.00		0.05	1.00		0.22
Lane Grp Cap(c), veh/h	247	0	0	178	0	0	139	1482	806	3	942	493
V/C Ratio(X)	0.68	0.00	0.00	0.11	0.00	0.00	0.46	0.57	0.57	0.00	0.59	0.60
Avail Cap(c_a), veh/h	266	0	0	1152	0	0	249	1482	806	249	1322	692
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	23.1	0.0	0.0	23.3	0.0	0.0	25.2	12.1	12.1	0.0	17.9	17.9
Incr Delay (d2), s/veh	6.1	0.0	0.0	0.3	0.0	0.0	2.4	0.7	1.2	0.0	0.8	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	0.0	0.0	0.2	0.0	0.0	0.9	3.6	4.0	0.0	2.8	3.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.2	0.0	0.0	23.5	0.0	0.0	27.5	12.8	13.3	0.0	18.7	19.6
LnGrp LOS	C	A	A	C	A	A	C	B	B	A	B	B
Approach Vol, veh/h		167			20			1369			852	
Approach Delay, s/veh		29.2			23.5			13.6			19.0	
Approach LOS		C			C			B			B	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		14.0	9.1	22.6		11.5	0.0	31.7				
Change Period (Y+Rc), s		5.6	4.6	6.8		5.6	4.6	6.8				
Max Green Setting (Gmax), s		9.0	8.0	22.2		38.2	8.0	22.2				
Max Q Clear Time (g_c+I1), s		7.4	4.0	10.2		2.6	0.0	12.7				
Green Ext Time (p_c), s		0.1	0.0	5.3		0.1	0.0	6.8				

Intersection Summary												
HCM 6th Ctrl Delay			16.7									
HCM 6th LOS			B									

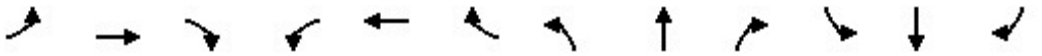
Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	87	1106	615	29	0	59
Future Vol, veh/h	87	1106	615	29	0	59
Conflicting Peds, #/hr	4	0	0	4	0	4
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	125	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	95	1202	668	32	0	64

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	704	0	-	0	-	358
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	4.14	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	2.22	-	-	-	-	3.32
Pot Cap-1 Maneuver	890	-	-	-	0	638
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	887	-	-	-	-	633
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0.7	0	11.3
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	887	-	-	-	633
HCM Lane V/C Ratio	0.107	-	-	-	0.101
HCM Control Delay (s)	9.5	-	-	-	11.3
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.4	-	-	-	0.3



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	231	776	98	363	421	147	109	988	607	101	590	114
Future Volume (veh/h)	231	776	98	363	421	147	109	988	607	101	590	114
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.96	1.00		0.94	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	236	792	80	370	430	135	111	1008	433	103	602	104
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	264	913	534	438	626	194	156	1089	1157	301	1338	227
Arrive On Green	0.15	0.26	0.26	0.13	0.24	0.24	0.09	0.31	0.31	0.09	0.31	0.31
Sat Flow, veh/h	1781	3554	1536	3456	2641	819	1781	3554	2620	3456	4376	743
Grp Volume(v), veh/h	236	792	80	370	288	277	111	1008	433	103	466	240
Grp Sat Flow(s),veh/h/ln	1781	1777	1536	1728	1777	1683	1781	1777	1310	1728	1702	1714
Q Serve(g_s), s	14.3	23.4	4.0	11.5	16.2	16.6	6.7	30.2	12.3	3.1	12.1	12.4
Cycle Q Clear(g_c), s	14.3	23.4	4.0	11.5	16.2	16.6	6.7	30.2	12.3	3.1	12.1	12.4
Prop In Lane	1.00		1.00	1.00		0.49	1.00		1.00	1.00		0.43
Lane Grp Cap(c), veh/h	264	913	534	438	421	399	156	1089	1157	301	1041	524
V/C Ratio(X)	0.89	0.87	0.15	0.85	0.68	0.69	0.71	0.93	0.37	0.34	0.45	0.46
Avail Cap(c_a), veh/h	274	992	568	525	467	442	241	1089	1157	468	1041	524
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	0.91
Uniform Delay (d), s/veh	46.0	39.1	24.9	47.0	38.2	38.3	48.8	36.9	21.2	47.3	30.7	30.8
Incr Delay (d2), s/veh	27.2	7.8	0.1	10.5	4.2	4.8	5.8	14.3	0.9	0.2	1.3	2.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.2	10.9	1.4	5.4	7.3	7.1	3.1	14.6	3.7	1.3	4.9	5.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	73.1	46.9	25.0	57.5	42.4	43.1	54.6	51.3	22.1	47.5	32.0	33.4
LnGrp LOS	E	D	C	E	D	D	D	D	C	D	C	C
Approach Vol, veh/h		1108			935			1552			809	
Approach Delay, s/veh		50.9			48.6			43.4			34.4	
Approach LOS		D			D			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.7	40.5	20.2	34.6	14.8	40.4	22.4	32.4
Change Period (Y+Rc), s	5.1	6.8	6.3	6.3	5.1	6.8	* 6.1	* 6.3
Max Green Setting (Gmax), s	14.9	23.2	16.7	30.7	14.9	23.2	* 17	* 29
Max Q Clear Time (g_c+I1), s	5.1	32.2	13.5	25.4	8.7	14.4	16.3	18.6
Green Ext Time (p_c), s	0.1	0.0	0.4	2.4	0.1	3.6	0.0	3.1

Intersection Summary	
HCM 6th Ctrl Delay	44.7
HCM 6th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Appendix H - LOS Calculation Worksheets – Near-Term Year 2024 Base with Project Conditions

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	27	3	98	29	2	2	28	383	15	6	936	57
Future Volume (veh/h)	27	3	98	29	2	2	28	383	15	6	936	57
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.95	1.00		0.95	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	29	3	96	32	2	1	30	416	14	7	1017	55
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	48	5	158	241	15	8	82	1674	56	26	1481	80
Arrive On Green	0.13	0.13	0.13	0.15	0.15	0.15	0.05	0.33	0.33	0.01	0.30	0.30
Sat Flow, veh/h	362	37	1198	1624	102	51	1781	5065	169	1781	4947	267
Grp Volume(v), veh/h	128	0	0	35	0	0	30	279	151	7	699	373
Grp Sat Flow(s),veh/h/ln	1597	0	0	1777	0	0	1781	1702	1830	1781	1702	1810
Q Serve(g_s), s	4.6	0.0	0.0	1.0	0.0	0.0	1.0	3.6	3.6	0.2	10.9	11.0
Cycle Q Clear(g_c), s	4.6	0.0	0.0	1.0	0.0	0.0	1.0	3.6	3.6	0.2	10.9	11.0
Prop In Lane	0.23		0.75	0.91		0.03	1.00		0.09	1.00		0.15
Lane Grp Cap(c), veh/h	210	0	0	263	0	0	82	1125	605	26	1019	542
V/C Ratio(X)	0.61	0.00	0.00	0.13	0.00	0.00	0.37	0.25	0.25	0.27	0.69	0.69
Avail Cap(c_a), veh/h	249	0	0	1131	0	0	248	1219	655	236	1197	636
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.7	0.0	0.0	22.3	0.0	0.0	27.9	14.7	14.7	29.4	18.6	18.6
Incr Delay (d2), s/veh	3.1	0.0	0.0	0.2	0.0	0.0	2.7	0.2	0.3	5.4	1.6	3.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	0.0	0.0	0.4	0.0	0.0	0.5	1.3	1.4	0.1	3.8	4.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.8	0.0	0.0	22.5	0.0	0.0	30.7	14.9	15.0	34.7	20.2	21.7
LnGrp LOS	C	A	A	C	A	A	C	B	B	C	C	C
Approach Vol, veh/h		128			35			460			1079	
Approach Delay, s/veh		27.8			22.5			16.0			20.8	
Approach LOS		C			C			B			C	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		13.5	7.4	24.9		14.5	5.5	26.7				
Change Period (Y+Rc), s		5.6	4.6	6.8		5.6	4.6	6.8				
Max Green Setting (Gmax), s		9.4	8.4	21.2		38.4	8.0	21.6				
Max Q Clear Time (g_c+I1), s		6.6	3.0	13.0		3.0	2.2	5.6				
Green Ext Time (p_c), s		0.2	0.0	4.9		0.1	0.0	3.2				

Intersection Summary												
HCM 6th Ctrl Delay			20.1									
HCM 6th LOS			C									

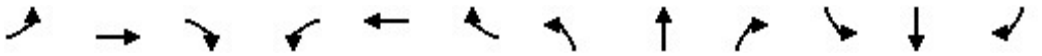
Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	20	806	475	2	0	58
Future Vol, veh/h	20	806	475	2	0	58
Conflicting Peds, #/hr	6	0	0	6	0	6
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	125	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	22	876	516	2	0	63

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	524	0	-	0	-	271
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	4.14	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	2.22	-	-	-	-	3.32
Pot Cap-1 Maneuver	1039	-	-	-	0	727
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1033	-	-	-	-	719
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	10.5
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1033	-	-	-	719
HCM Lane V/C Ratio	0.021	-	-	-	0.088
HCM Control Delay (s)	8.6	-	-	-	10.5
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.3



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	196	531	79	361	384	152	37	458	405	203	803	57
Future Volume (veh/h)	196	531	79	361	384	152	37	458	405	203	803	57
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.98	1.00		0.95	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	233	632	75	430	457	163	44	545	347	242	956	61
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	230	803	457	439	578	204	126	1074	1155	345	1624	103
Arrive On Green	0.13	0.23	0.23	0.13	0.23	0.23	0.07	0.30	0.30	0.10	0.33	0.33
Sat Flow, veh/h	1781	3554	1527	3456	2556	903	1781	3554	2652	3456	4899	312
Grp Volume(v), veh/h	233	632	75	430	316	304	44	545	347	242	664	353
Grp Sat Flow(s),veh/h/ln	1781	1777	1527	1728	1777	1683	1781	1777	1326	1728	1702	1807
Q Serve(g_s), s	12.9	16.7	3.6	12.4	16.8	17.0	2.4	12.6	8.6	6.8	16.2	16.3
Cycle Q Clear(g_c), s	12.9	16.7	3.6	12.4	16.8	17.0	2.4	12.6	8.6	6.8	16.2	16.3
Prop In Lane	1.00		1.00	1.00		0.54	1.00		1.00	1.00		0.17
Lane Grp Cap(c), veh/h	230	803	457	439	402	380	126	1074	1155	345	1128	599
V/C Ratio(X)	1.01	0.79	0.16	0.98	0.79	0.80	0.35	0.51	0.30	0.70	0.59	0.59
Avail Cap(c_a), veh/h	230	1020	550	439	496	470	230	1074	1155	446	1128	599
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	0.90	0.90
Uniform Delay (d), s/veh	43.5	36.4	26.0	43.5	36.4	36.5	44.3	28.8	18.7	43.6	27.8	27.8
Incr Delay (d2), s/veh	63.0	3.2	0.2	37.5	7.7	8.7	1.7	1.7	0.7	1.7	2.0	3.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.5	7.3	1.3	7.4	7.8	7.6	1.1	5.3	2.6	2.9	6.5	7.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	106.6	39.7	26.2	81.1	44.1	45.3	45.9	30.5	19.4	45.3	29.8	31.6
LnGrp LOS	F	D	C	F	D	D	D	C	B	D	C	C
Approach Vol, veh/h		940			1050			936			1259	
Approach Delay, s/veh		55.2			59.6			27.1			33.3	
Approach LOS		E			E			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.1	37.0	19.0	28.9	12.2	39.9	19.0	28.9
Change Period (Y+Rc), s	5.1	6.8	6.3	6.3	5.1	6.8	* 6.1	* 6.3
Max Green Setting (Gmax), s	12.9	21.2	12.7	28.7	12.9	21.2	* 13	* 28
Max Q Clear Time (g_c+I1), s	8.8	14.6	14.4	18.7	4.4	18.3	14.9	19.0
Green Ext Time (p_c), s	0.2	3.3	0.0	3.0	0.0	2.0	0.0	3.1

Intersection Summary	
HCM 6th Ctrl Delay	43.4
HCM 6th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	93	5	86	14	1	5	106	1180	22	0	725	73
Future Volume (veh/h)	93	5	86	14	1	5	106	1180	22	0	725	73
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.95	1.00		0.97	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	101	5	83	15	1	4	115	1283	22	0	788	71
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	129	6	106	133	9	35	178	2324	40	3	1294	116
Arrive On Green	0.14	0.14	0.14	0.10	0.10	0.10	0.10	0.45	0.45	0.00	0.27	0.27
Sat Flow, veh/h	895	44	735	1292	86	345	1781	5166	89	1781	4751	425
Grp Volume(v), veh/h	189	0	0	20	0	0	115	845	460	0	563	296
Grp Sat Flow(s),veh/h/ln	1674	0	0	1723	0	0	1781	1702	1851	1781	1702	1772
Q Serve(g_s), s	6.5	0.0	0.0	0.6	0.0	0.0	3.7	10.8	10.8	0.0	8.6	8.7
Cycle Q Clear(g_c), s	6.5	0.0	0.0	0.6	0.0	0.0	3.7	10.8	10.8	0.0	8.6	8.7
Prop In Lane	0.53		0.44	0.75		0.20	1.00		0.05	1.00		0.24
Lane Grp Cap(c), veh/h	242	0	0	177	0	0	178	1531	833	3	927	483
V/C Ratio(X)	0.78	0.00	0.00	0.11	0.00	0.00	0.64	0.55	0.55	0.00	0.61	0.61
Avail Cap(c_a), veh/h	253	0	0	1107	0	0	240	1531	833	240	1271	662
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	24.5	0.0	0.0	24.2	0.0	0.0	25.7	12.0	12.0	0.0	18.9	18.9
Incr Delay (d2), s/veh	13.9	0.0	0.0	0.3	0.0	0.0	3.9	0.5	1.0	0.0	0.9	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.3	0.0	0.0	0.3	0.0	0.0	1.7	3.6	4.0	0.0	3.0	3.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.4	0.0	0.0	24.5	0.0	0.0	29.6	12.5	13.0	0.0	19.8	20.7
LnGrp LOS	D	A	A	C	A	A	C	B	B	A	B	C
Approach Vol, veh/h		189			20			1420			859	
Approach Delay, s/veh		38.4			24.5			14.1			20.1	
Approach LOS		D			C			B			C	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		14.2	10.6	23.0		11.7	0.0	33.6				
Change Period (Y+Rc), s		5.6	4.6	6.8		5.6	4.6	6.8				
Max Green Setting (Gmax), s		9.0	8.0	22.2		38.2	8.0	22.2				
Max Q Clear Time (g_c+I1), s		8.5	5.7	10.7		2.6	0.0	12.8				
Green Ext Time (p_c), s		0.1	0.1	5.2		0.1	0.0	6.7				

Intersection Summary												
HCM 6th Ctrl Delay			18.1									
HCM 6th LOS			B									

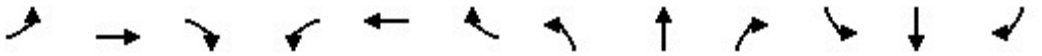
Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	100	1106	615	29	0	65
Future Vol, veh/h	100	1106	615	29	0	65
Conflicting Peds, #/hr	4	0	0	4	0	4
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	125	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	109	1202	668	32	0	71

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	704	0	-	0	-	358
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	4.14	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	2.22	-	-	-	-	3.32
Pot Cap-1 Maneuver	890	-	-	-	0	638
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	887	-	-	-	-	633
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0.8	0	11.4
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	887	-	-	-	633
HCM Lane V/C Ratio	0.123	-	-	-	0.112
HCM Control Delay (s)	9.6	-	-	-	11.4
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.4	-	-	-	0.4



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	231	776	98	363	421	168	109	1014	607	110	601	114
Future Volume (veh/h)	231	776	98	363	421	168	109	1014	607	110	601	114
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.96	1.00		0.94	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	236	792	81	370	430	154	111	1035	433	112	613	104
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	264	913	534	438	603	213	156	1086	1154	304	1342	224
Arrive On Green	0.15	0.26	0.26	0.13	0.24	0.24	0.09	0.31	0.31	0.09	0.31	0.31
Sat Flow, veh/h	1781	3554	1536	3456	2542	899	1781	3554	2619	3456	4388	732
Grp Volume(v), veh/h	236	792	81	370	299	285	111	1035	433	112	473	244
Grp Sat Flow(s),veh/h/ln	1781	1777	1536	1728	1777	1665	1781	1777	1310	1728	1702	1717
Q Serve(g_s), s	14.3	23.4	4.0	11.5	17.0	17.3	6.7	31.4	12.4	3.4	12.3	12.6
Cycle Q Clear(g_c), s	14.3	23.4	4.0	11.5	17.0	17.3	6.7	31.4	12.4	3.4	12.3	12.6
Prop In Lane	1.00		1.00	1.00		0.54	1.00		1.00	1.00		0.43
Lane Grp Cap(c), veh/h	264	913	534	438	421	395	156	1086	1154	304	1041	525
V/C Ratio(X)	0.89	0.87	0.15	0.85	0.71	0.72	0.71	0.95	0.38	0.37	0.45	0.46
Avail Cap(c_a), veh/h	274	992	568	525	467	437	241	1086	1154	468	1041	525
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.79	0.79	0.79
Uniform Delay (d), s/veh	46.0	39.1	24.9	47.0	38.5	38.6	48.8	37.4	21.2	47.3	30.8	30.9
Incr Delay (d2), s/veh	27.2	7.8	0.1	10.5	5.0	5.9	5.8	18.1	0.9	0.2	1.1	2.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.2	10.9	1.4	5.4	7.7	7.4	3.1	15.6	3.7	1.4	5.0	5.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	73.1	46.9	25.1	57.5	43.5	44.5	54.6	55.5	22.2	47.5	31.9	33.2
LnGrp LOS	E	D	C	E	D	D	D	E	C	D	C	C
Approach Vol, veh/h		1109			954			1579			829	
Approach Delay, s/veh		50.9			49.2			46.3			34.4	
Approach LOS		D			D			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.8	40.4	20.2	34.6	14.8	40.4	22.4	32.4
Change Period (Y+Rc), s	5.1	6.8	6.3	6.3	5.1	6.8	* 6.1	* 6.3
Max Green Setting (Gmax), s	14.9	23.2	16.7	30.7	14.9	23.2	* 17	* 29
Max Q Clear Time (g_c+I1), s	5.4	33.4	13.5	25.4	8.7	14.6	16.3	19.3
Green Ext Time (p_c), s	0.1	0.0	0.4	2.4	0.1	3.5	0.0	3.1

Intersection Summary	
HCM 6th Ctrl Delay	45.9
HCM 6th LOS	D

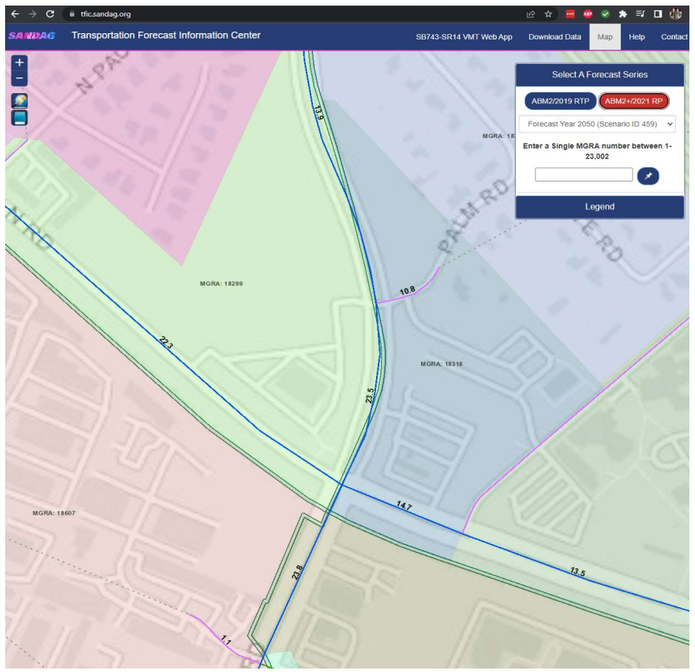
Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Appendix I - Transportation Forecast Information Center (TFIC) Volumes and Horizon Year 2050 Volume Development

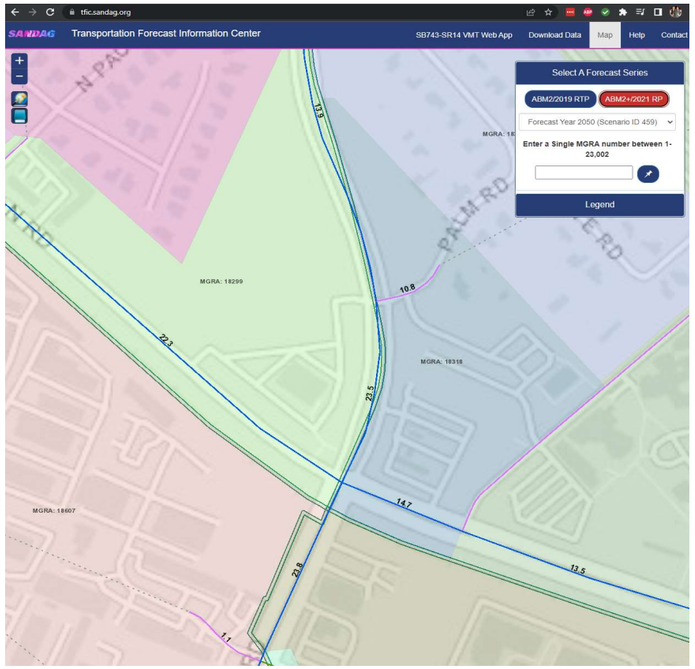
Existing Volumes	Existing Movement Volume												Directional volume (Leg)				Existing ADT				Future ADT				Leg Growth				Future Directional Volume				Future Directional Growth				Movement Growth												Future Movement											
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	N	S	E	W	N Leg	S Leg	E Leg	W Leg	N Leg	S Leg	E Leg	W Leg	N Leg	S Leg	E Leg	W Leg	N	S	E	W	N	S	E	W	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
1: N. Las Posas Rd & Project Drwy #1/Palm Rd	18	316	15	6	808	55	21	3	55	29	2	2	869	349	33	79	17,900	17,900			13,900	23,500	10,800		110%	131%	110%	110%	956	458	36	87	87	109	3	8	36	36	36	27	33	27	3	3	3	1	1	1	54	352	51	33	841	82	24	6	58	30	3	3
2: Project Drwy #2 & W. Mission Rd						45	17	778			441	2	45	0	443	795			17,800	17,800		-	22,300	22,300	110%		125%	125%	50		555	996	5		112	201				3		3	94	107			60	52	0	0	0	0	0	48	111	885	0	0	501	54
3: N. Las Posas Rd & W. Mission Rd	29	412	390	168	689	35	177	529	72	338	379	139	892	831	856	778	17,900	22,000	17,800	17,800	23,500	23,800	31,800	22,300	131%	108%	179%	125%	1171	899	1529	975	279	68	673	197	20	21	28	121	73	85	62	84	51	200	231	242	49	433	418	289	762	120	239	613	123	538	610	381



Turning Movement Count (Unbalanced)
60 Minute Counts

DATE	TIME	INTID	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
		1: N. Las Posas Rd & Project Drwy #1/Palm Rd	60	360	60	40	850	90	30	10	60	30	10	10
		2: Project Drwy #2 & W. Mission Rd	0	0	0	0	0	50	120	890	0	0	510	60
		3: N. Las Posas Rd & W. Mission Rd	50	440	420	290	770	120	240	620	130	540	610	390

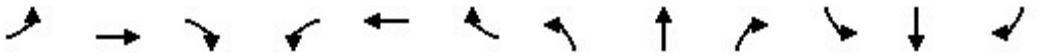
Existing Volumes	Existing Movement Volume												Directional volume (Leg)				Existing ADT				Future ADT				Leg Growth				Future Directional Volume				Future Directional Growth				Movement Growth												Future Movement											
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	N	S	E	W	N Leg	S Leg	E Leg	W Leg	N Leg	S Leg	E Leg	W Leg	N Leg	S Leg	E Leg	W Leg	N	S	E	W	N	S	E	W	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
1: N. Las Posas Rd & Project Drwy #1/Palm Rd	59	1020	22	0	640	66	90	5	66	14	1	5	706	1101	20	161	17,900	17,900			13,900	23,500	10,800		110%	131%	110%	110%	777	1445	22	177	71	344	2	16	115	115	115	22	27	22	5	5	6	1	1	1	174	1135	137	0	667	88	95	10	72	15	2	6
2: Project Drwy #2 & W. Mission Rd						59	87	1060			577	29	59	0	606	1147		-	17,800	17,800		-	22,300	22,300	110%		125%	125%	65		759	1437	6		153	290				3		3	136	154			81	72	0	0	0	0	0	62	223	1214	0	0	658	101
3: N. Las Posas Rd & W. Mission Rd	101	879	584	90	541	89	201	771	88	342	416	126	720	1564	884	1060	17,900	22,000	17,800	17,800	23,500	23,800	31,800	22,300	131%	108%	179%	125%	945	1692	1579	1328	225	128	695	268	37	39	53	98	59	68	84	115	69	206	239	250	138	918	637	188	600	157	285	886	157	548	655	376



Turning Movement Count (Unbalanced)
60 Minute Counts

DATE	TIME	INTID	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
		1: N. Las Posas Rd & Project Drwy #1/Palm Rd	180	1140	140	0	670	90	100	10	80	20	10	10
		2: Project Drwy #2 & W. Mission Rd	0	0	0	0	0	70	230	1220	0	0	660	110
		3: N. Las Posas Rd & W. Mission Rd	140	920	640	190	600	160	290	890	160	550	660	380

Appendix J - LOS Calculation Worksheets – Horizon Year 2050 Conditions



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	10	70	40	10	10	50	410	50	30	970	70
Future Volume (veh/h)	30	10	70	40	10	10	50	410	50	30	970	70
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.95	1.00		0.95	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	32	11	67	42	11	10	53	432	48	32	1021	67
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	57	19	118	198	52	47	118	1447	157	96	1461	96
Arrive On Green	0.12	0.12	0.12	0.17	0.17	0.17	0.07	0.31	0.31	0.05	0.30	0.30
Sat Flow, veh/h	475	163	995	1164	305	277	1781	4648	505	1781	4882	320
Grp Volume(v), veh/h	110	0	0	63	0	0	53	314	166	32	711	377
Grp Sat Flow(s),veh/h/ln	1633	0	0	1746	0	0	1781	1702	1749	1781	1702	1798
Q Serve(g_s), s	4.2	0.0	0.0	2.0	0.0	0.0	1.9	4.6	4.7	1.1	12.1	12.1
Cycle Q Clear(g_c), s	4.2	0.0	0.0	2.0	0.0	0.0	1.9	4.6	4.7	1.1	12.1	12.1
Prop In Lane	0.29		0.61	0.67		0.16	1.00		0.29	1.00		0.18
Lane Grp Cap(c), veh/h	194	0	0	297	0	0	118	1060	545	96	1018	538
V/C Ratio(X)	0.57	0.00	0.00	0.21	0.00	0.00	0.45	0.30	0.31	0.33	0.70	0.70
Avail Cap(c_a), veh/h	225	0	0	1020	0	0	191	1156	594	218	1208	638
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.2	0.0	0.0	23.4	0.0	0.0	29.4	17.1	17.1	29.8	20.3	20.3
Incr Delay (d2), s/veh	2.6	0.0	0.0	0.4	0.0	0.0	2.7	0.2	0.4	2.0	1.7	3.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	0.0	0.0	0.8	0.0	0.0	0.9	1.7	1.8	0.5	4.4	4.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.8	0.0	0.0	23.7	0.0	0.0	32.0	17.3	17.6	31.8	22.0	23.6
LnGrp LOS	C	A	A	C	A	A	C	B	B	C	C	C
Approach Vol, veh/h		110			63			533			1120	
Approach Delay, s/veh		29.8			23.7			18.8			22.8	
Approach LOS		C			C			B			C	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		13.4	8.9	26.4		16.7	8.1	27.2				
Change Period (Y+Rc), s		5.6	4.6	6.8		5.6	4.6	6.8				
Max Green Setting (Gmax), s		9.0	7.0	23.2		38.2	8.0	22.2				
Max Q Clear Time (g_c+I1), s		6.2	3.9	14.1		4.0	3.1	6.7				
Green Ext Time (p_c), s		0.1	0.0	5.4		0.3	0.0	3.6				

Intersection Summary												
HCM 6th Ctrl Delay			22.1									
HCM 6th LOS			C									

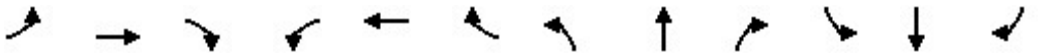
Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	40	890	510	20	0	70
Future Vol, veh/h	40	890	510	20	0	70
Conflicting Peds, #/hr	6	0	0	6	0	6
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	125	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	42	937	537	21	0	74

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	564	0	-	0	-	291
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	4.14	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	2.22	-	-	-	-	3.32
Pot Cap-1 Maneuver	1004	-	-	-	0	706
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	998	-	-	-	-	698
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0.4	0	10.8
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	998	-	-	-	698
HCM Lane V/C Ratio	0.042	-	-	-	0.106
HCM Control Delay (s)	8.8	-	-	-	10.8
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.4



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	220	570	100	400	410	190	50	480	420	210	800	70
Future Volume (veh/h)	220	570	100	400	410	190	50	480	420	210	800	70
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.98	1.00		0.96	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	232	600	84	421	432	180	53	505	309	221	842	67
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	257	815	454	476	546	225	117	1300	1359	272	1825	145
Arrive On Green	0.14	0.23	0.23	0.14	0.22	0.22	0.07	0.37	0.37	0.08	0.38	0.38
Sat Flow, veh/h	1781	3554	1527	3456	2435	1003	1781	3554	2666	3456	4815	382
Grp Volume(v), veh/h	232	600	84	421	314	298	53	505	309	221	594	315
Grp Sat Flow(s),veh/h/ln	1781	1777	1527	1728	1777	1662	1781	1777	1333	1728	1702	1793
Q Serve(g_s), s	16.7	20.4	5.3	15.6	21.6	22.1	3.7	13.7	8.5	8.2	17.1	17.2
Cycle Q Clear(g_c), s	16.7	20.4	5.3	15.6	21.6	22.1	3.7	13.7	8.5	8.2	17.1	17.2
Prop In Lane	1.00		1.00	1.00		0.60	1.00		1.00	1.00		0.21
Lane Grp Cap(c), veh/h	257	815	454	476	398	372	117	1300	1359	272	1290	679
V/C Ratio(X)	0.90	0.74	0.19	0.88	0.79	0.80	0.45	0.39	0.23	0.81	0.46	0.46
Avail Cap(c_a), veh/h	314	1115	583	524	519	486	138	1300	1359	316	1290	679
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.87	0.87	0.87
Uniform Delay (d), s/veh	54.7	46.5	34.2	55.0	47.5	47.7	58.5	30.5	18.1	58.9	30.4	30.4
Incr Delay (d2), s/veh	22.2	1.7	0.2	15.5	7.1	8.3	2.7	0.9	0.4	9.9	1.0	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.9	9.0	2.0	7.6	10.1	9.7	1.7	5.8	2.6	3.9	7.0	7.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	76.9	48.1	34.4	70.5	54.6	56.0	61.2	31.4	18.5	68.8	31.4	32.4
LnGrp LOS	E	D	C	E	D	E	E	C	B	E	C	C
Approach Vol, veh/h		916			1033			867			1130	
Approach Delay, s/veh		54.2			61.5			28.6			39.0	
Approach LOS		D			E			C			D	

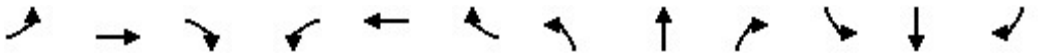
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.3	54.3	24.2	36.1	13.6	56.1	24.9	35.4
Change Period (Y+Rc), s	5.1	6.8	6.3	6.3	5.1	6.8	* 6.1	* 6.3
Max Green Setting (Gmax), s	11.9	33.1	19.7	40.8	10.1	34.9	* 23	* 38
Max Q Clear Time (g_c+I1), s	10.2	15.7	17.6	22.4	5.7	19.2	18.7	24.1
Green Ext Time (p_c), s	0.1	5.7	0.4	3.9	0.0	6.6	0.1	4.0

Intersection Summary	
HCM 6th Ctrl Delay	46.1
HCM 6th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	10	80	30	10	10	90	1240	70	20	790	90
Future Volume (veh/h)	110	10	80	30	10	10	90	1240	70	20	790	90
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.95	1.00		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	120	11	78	33	11	10	98	1348	68	22	859	88
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	144	13	94	144	48	44	148	1810	91	70	1504	153
Arrive On Green	0.15	0.15	0.15	0.14	0.14	0.14	0.08	0.36	0.36	0.04	0.32	0.32
Sat Flow, veh/h	971	89	631	1062	354	322	1781	4968	251	1781	4688	478
Grp Volume(v), veh/h	209	0	0	54	0	0	98	924	492	22	622	325
Grp Sat Flow(s),veh/h/ln	1692	0	0	1738	0	0	1781	1702	1814	1781	1702	1762
Q Serve(g_s), s	8.7	0.0	0.0	2.0	0.0	0.0	3.9	17.1	17.1	0.9	11.0	11.1
Cycle Q Clear(g_c), s	8.7	0.0	0.0	2.0	0.0	0.0	3.9	17.1	17.1	0.9	11.0	11.1
Prop In Lane	0.57		0.37	0.61		0.19	1.00		0.14	1.00		0.27
Lane Grp Cap(c), veh/h	251	0	0	236	0	0	148	1240	661	70	1092	565
V/C Ratio(X)	0.83	0.00	0.00	0.23	0.00	0.00	0.66	0.74	0.74	0.31	0.57	0.57
Avail Cap(c_a), veh/h	294	0	0	912	0	0	231	1353	721	197	1288	667
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.0	0.0	0.0	27.9	0.0	0.0	32.2	20.1	20.1	33.8	20.5	20.5
Incr Delay (d2), s/veh	16.1	0.0	0.0	0.5	0.0	0.0	5.0	2.3	4.3	2.5	0.7	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.5	0.0	0.0	0.8	0.0	0.0	1.8	6.7	7.5	0.4	3.9	4.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	46.1	0.0	0.0	28.4	0.0	0.0	37.2	22.4	24.4	36.3	21.1	21.8
LnGrp LOS	D	A	A	C	A	A	D	C	C	D	C	C
Approach Vol, veh/h		209			54			1514			969	
Approach Delay, s/veh		46.1			28.4			24.0			21.7	
Approach LOS		D			C			C			C	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		16.3	10.6	30.0		15.4	7.5	33.2				
Change Period (Y+Rc), s		5.6	4.6	6.8		5.6	4.6	6.8				
Max Green Setting (Gmax), s		12.6	9.4	27.4		38.0	8.0	28.8				
Max Q Clear Time (g_c+I1), s		10.7	5.9	13.1		4.0	2.9	19.1				
Green Ext Time (p_c), s		0.2	0.1	6.5		0.3	0.0	7.2				

Intersection Summary	
HCM 6th Ctrl Delay	25.0
HCM 6th LOS	C

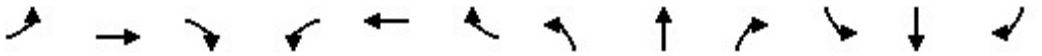
Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	120	1210	690	50	0	80
Future Vol, veh/h	120	1210	690	50	0	80
Conflicting Peds, #/hr	4	0	0	4	0	4
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	125	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	130	1315	750	54	0	87

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	808	0	-	0	-	410
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	4.14	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	2.22	-	-	-	-	3.32
Pot Cap-1 Maneuver	813	-	-	-	0	591
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	810	-	-	-	-	587
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0.9	0	12.2
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	810	-	-	-	587
HCM Lane V/C Ratio	0.161	-	-	-	0.148
HCM Control Delay (s)	10.3	-	-	-	12.2
HCM Lane LOS	B	-	-	-	B
HCM 95th %tile Q(veh)	0.6	-	-	-	0.5



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	260	820	130	430	470	220	130	1030	640	130	630	140
Future Volume (veh/h)	260	820	130	430	470	220	130	1030	640	130	630	140
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.96	1.00		0.94	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	265	837	106	439	480	202	133	1051	582	133	643	129
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	267	966	558	468	624	261	158	1166	1239	264	1344	265
Arrive On Green	0.15	0.27	0.27	0.14	0.26	0.26	0.09	0.33	0.33	0.08	0.32	0.32
Sat Flow, veh/h	1781	3554	1537	3456	2413	1007	1781	3554	2627	3456	4258	840
Grp Volume(v), veh/h	265	837	106	439	352	330	133	1051	582	133	512	260
Grp Sat Flow(s),veh/h/ln	1781	1777	1537	1728	1777	1643	1781	1777	1314	1728	1702	1694
Q Serve(g_s), s	19.3	29.2	6.2	16.4	23.8	24.2	9.6	36.7	19.9	4.8	15.7	16.1
Cycle Q Clear(g_c), s	19.3	29.2	6.2	16.4	23.8	24.2	9.6	36.7	19.9	4.8	15.7	16.1
Prop In Lane	1.00		1.00	1.00		0.61	1.00		1.00	1.00		0.50
Lane Grp Cap(c), veh/h	267	966	558	468	460	425	158	1166	1239	264	1075	535
V/C Ratio(X)	0.99	0.87	0.19	0.94	0.77	0.77	0.84	0.90	0.47	0.50	0.48	0.49
Avail Cap(c_a), veh/h	267	1080	608	468	519	480	185	1166	1239	266	1075	535
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.84	0.84	0.84
Uniform Delay (d), s/veh	55.2	45.1	28.6	55.7	44.5	44.7	58.3	41.7	24.0	57.7	35.8	36.0
Incr Delay (d2), s/veh	52.6	7.0	0.2	26.9	6.7	7.7	25.2	11.3	1.3	0.5	1.3	2.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.4	13.5	2.2	8.7	11.0	10.5	5.3	17.3	6.1	2.1	6.6	6.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	107.8	52.1	28.7	82.5	51.3	52.3	83.5	53.0	25.3	58.2	37.1	38.6
LnGrp LOS	F	D	C	F	D	D	F	D	C	E	D	D
Approach Vol, veh/h		1208			1121			1766			905	
Approach Delay, s/veh		62.3			63.8			46.2			40.6	
Approach LOS		E			E			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.0	49.4	23.9	41.6	16.6	47.8	25.6	39.9
Change Period (Y+Rc), s	5.1	6.8	6.3	6.3	5.1	6.8	* 6.1	* 6.3
Max Green Setting (Gmax), s	10.0	38.4	17.6	39.5	13.5	34.9	* 20	* 38
Max Q Clear Time (g_c+I1), s	6.8	38.7	18.4	31.2	11.6	18.1	21.3	26.2
Green Ext Time (p_c), s	0.1	0.0	0.0	3.6	0.1	5.8	0.0	4.2

Intersection Summary	
HCM 6th Ctrl Delay	53.0
HCM 6th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Appendix K - LOS Calculation Worksheets – Horizon Year 2050 with Project Conditions

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	36	10	113	40	10	10	60	410	50	30	970	72
Future Volume (veh/h)	36	10	113	40	10	10	60	410	50	30	970	72
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.95	1.00		0.95	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	38	11	106	42	11	10	63	432	48	32	1021	69
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	50	15	140	196	51	47	128	1458	158	95	1437	97
Arrive On Green	0.13	0.13	0.13	0.17	0.17	0.17	0.07	0.31	0.31	0.05	0.30	0.30
Sat Flow, veh/h	395	114	1103	1164	305	277	1781	4648	505	1781	4871	329
Grp Volume(v), veh/h	155	0	0	63	0	0	63	314	166	32	713	377
Grp Sat Flow(s),veh/h/ln	1613	0	0	1746	0	0	1781	1702	1749	1781	1702	1796
Q Serve(g_s), s	6.2	0.0	0.0	2.1	0.0	0.0	2.3	4.7	4.8	1.2	12.5	12.6
Cycle Q Clear(g_c), s	6.2	0.0	0.0	2.1	0.0	0.0	2.3	4.7	4.8	1.2	12.5	12.6
Prop In Lane	0.25		0.68	0.67		0.16	1.00		0.29	1.00		0.18
Lane Grp Cap(c), veh/h	205	0	0	294	0	0	128	1068	549	95	1004	530
V/C Ratio(X)	0.76	0.00	0.00	0.21	0.00	0.00	0.49	0.29	0.30	0.34	0.71	0.71
Avail Cap(c_a), veh/h	217	0	0	995	0	0	186	1128	580	213	1179	622
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.3	0.0	0.0	24.0	0.0	0.0	29.9	17.4	17.4	30.5	21.1	21.1
Incr Delay (d2), s/veh	13.5	0.0	0.0	0.4	0.0	0.0	2.9	0.2	0.4	2.0	2.0	3.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	0.0	0.0	0.9	0.0	0.0	1.0	1.7	1.9	0.5	4.6	5.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	41.8	0.0	0.0	24.4	0.0	0.0	32.8	17.6	17.9	32.6	23.0	24.8
LnGrp LOS	D	A	A	C	A	A	C	B	B	C	C	C
Approach Vol, veh/h		155			63			543			1122	
Approach Delay, s/veh		41.8			24.4			19.4			23.9	
Approach LOS		D			C			B			C	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		14.1	9.4	26.6		16.9	8.2	27.8				
Change Period (Y+Rc), s		5.6	4.6	6.8		5.6	4.6	6.8				
Max Green Setting (Gmax), s		9.0	7.0	23.2		38.2	8.0	22.2				
Max Q Clear Time (g_c+I1), s		8.2	4.3	14.6		4.1	3.2	6.8				
Green Ext Time (p_c), s		0.1	0.0	5.2		0.3	0.0	3.6				

Intersection Summary	
HCM 6th Ctrl Delay	24.1
HCM 6th LOS	C

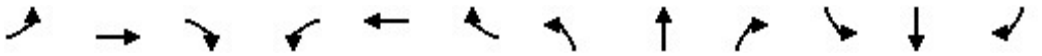
Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	43	890	510	20	0	83
Future Vol, veh/h	43	890	510	20	0	83
Conflicting Peds, #/hr	6	0	0	6	0	6
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	125	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	45	937	537	21	0	87

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	564	0	-	0	-	291
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	4.14	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	2.22	-	-	-	-	3.32
Pot Cap-1 Maneuver	1004	-	-	-	0	706
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	998	-	-	-	-	698
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0.4	0	10.9
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	998	-	-	-	698
HCM Lane V/C Ratio	0.045	-	-	-	0.125
HCM Control Delay (s)	8.8	-	-	-	10.9
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.4



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	220	570	100	400	410	195	50	485	420	229	824	70
Future Volume (veh/h)	220	570	100	400	410	195	50	485	420	229	824	70
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.98	1.00		0.96	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	232	600	84	421	432	184	53	511	309	241	867	67
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	257	819	456	476	545	229	117	1276	1341	292	1824	140
Arrive On Green	0.14	0.23	0.23	0.14	0.23	0.23	0.07	0.36	0.36	0.08	0.38	0.38
Sat Flow, veh/h	1781	3554	1527	3456	2418	1018	1781	3554	2664	3456	4827	372
Grp Volume(v), veh/h	232	600	84	421	316	300	53	511	309	241	610	324
Grp Sat Flow(s),veh/h/ln	1781	1777	1527	1728	1777	1659	1781	1777	1332	1728	1702	1795
Q Serve(g_s), s	16.7	20.3	5.3	15.6	21.8	22.2	3.7	14.0	8.6	8.9	17.7	17.8
Cycle Q Clear(g_c), s	16.7	20.3	5.3	15.6	21.8	22.2	3.7	14.0	8.6	8.9	17.7	17.8
Prop In Lane	1.00		1.00	1.00		0.61	1.00		1.00	1.00		0.21
Lane Grp Cap(c), veh/h	257	819	456	476	400	374	117	1276	1341	292	1286	678
V/C Ratio(X)	0.90	0.73	0.18	0.88	0.79	0.80	0.45	0.40	0.23	0.83	0.47	0.48
Avail Cap(c_a), veh/h	314	1115	583	524	519	485	138	1276	1341	316	1286	678
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.79	0.79	0.79
Uniform Delay (d), s/veh	54.7	46.3	34.1	55.0	47.5	47.6	58.5	31.2	18.6	58.6	30.7	30.7
Incr Delay (d2), s/veh	22.2	1.6	0.2	15.5	7.2	8.4	2.7	0.9	0.4	11.4	1.0	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.9	9.0	2.0	7.6	10.2	9.8	1.7	6.0	2.6	4.3	7.2	7.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	76.9	48.0	34.3	70.5	54.7	56.0	61.2	32.1	19.0	70.0	31.7	32.6
LnGrp LOS	E	D	C	E	D	E	E	C	B	E	C	C
Approach Vol, veh/h		916			1037			873			1175	
Approach Delay, s/veh		54.0			61.5			29.3			39.8	
Approach LOS		D			E			C			D	

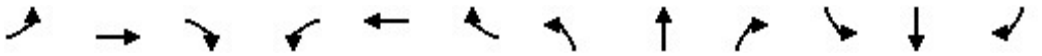
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.1	53.5	24.2	36.3	13.6	55.9	24.9	35.6
Change Period (Y+Rc), s	5.1	6.8	6.3	6.3	5.1	6.8	* 6.1	* 6.3
Max Green Setting (Gmax), s	11.9	33.1	19.7	40.8	10.1	34.9	* 23	* 38
Max Q Clear Time (g_c+I1), s	10.9	16.0	17.6	22.3	5.7	19.8	18.7	24.2
Green Ext Time (p_c), s	0.0	5.7	0.4	3.9	0.0	6.6	0.1	4.0

Intersection Summary	
HCM 6th Ctrl Delay	46.4
HCM 6th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	113	10	100	30	10	10	137	1240	70	20	790	97
Future Volume (veh/h)	113	10	100	30	10	10	137	1240	70	20	790	97
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.95	1.00		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	123	11	100	33	11	10	149	1348	68	22	859	95
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	143	13	116	143	48	43	186	1782	90	70	1365	150
Arrive On Green	0.16	0.16	0.16	0.13	0.13	0.13	0.10	0.36	0.36	0.04	0.29	0.29
Sat Flow, veh/h	883	79	718	1062	354	322	1781	4968	251	1781	4647	511
Grp Volume(v), veh/h	234	0	0	54	0	0	149	924	492	22	628	326
Grp Sat Flow(s),veh/h/ln	1679	0	0	1738	0	0	1781	1702	1814	1781	1702	1754
Q Serve(g_s), s	10.1	0.0	0.0	2.1	0.0	0.0	6.1	17.7	17.7	0.9	11.8	12.0
Cycle Q Clear(g_c), s	10.1	0.0	0.0	2.1	0.0	0.0	6.1	17.7	17.7	0.9	11.8	12.0
Prop In Lane	0.53		0.43	0.61		0.19	1.00		0.14	1.00		0.29
Lane Grp Cap(c), veh/h	273	0	0	234	0	0	186	1221	651	70	1000	515
V/C Ratio(X)	0.86	0.00	0.00	0.23	0.00	0.00	0.80	0.76	0.76	0.31	0.63	0.63
Avail Cap(c_a), veh/h	285	0	0	891	0	0	226	1322	705	192	1258	648
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.2	0.0	0.0	28.6	0.0	0.0	32.5	20.9	20.9	34.6	22.7	22.7
Incr Delay (d2), s/veh	21.5	0.0	0.0	0.5	0.0	0.0	15.6	2.6	4.8	2.5	0.9	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.5	0.0	0.0	0.9	0.0	0.0	3.3	7.0	7.8	0.4	4.4	4.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	51.7	0.0	0.0	29.1	0.0	0.0	48.0	23.5	25.7	37.2	23.6	24.6
LnGrp LOS	D	A	A	C	A	A	D	C	C	D	C	C
Approach Vol, veh/h		234			54			1565			976	
Approach Delay, s/veh		51.7			29.1			26.5			24.2	
Approach LOS		D			C			C			C	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		17.6	12.3	28.6		15.6	7.5	33.4				
Change Period (Y+Rc), s		5.6	4.6	6.8		5.6	4.6	6.8				
Max Green Setting (Gmax), s		12.6	9.4	27.4		38.0	8.0	28.8				
Max Q Clear Time (g_c+I1), s		12.1	8.1	14.0		4.1	2.9	19.7				
Green Ext Time (p_c), s		0.1	0.0	6.3		0.3	0.0	6.9				

Intersection Summary	
HCM 6th Ctrl Delay	27.9
HCM 6th LOS	C

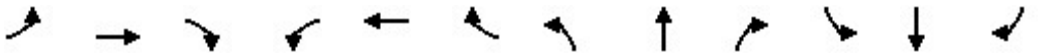
Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	133	1210	690	50	0	86
Future Vol, veh/h	133	1210	690	50	0	86
Conflicting Peds, #/hr	4	0	0	4	0	4
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	125	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	145	1315	750	54	0	93

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	808	0	-	0	-	410
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	4.14	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	2.22	-	-	-	-	3.32
Pot Cap-1 Maneuver	813	-	-	-	0	591
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	810	-	-	-	-	587
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	1	0	12.3
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	810	-	-	-	587
HCM Lane V/C Ratio	0.178	-	-	-	0.159
HCM Control Delay (s)	10.4	-	-	-	12.3
HCM Lane LOS	B	-	-	-	B
HCM 95th %tile Q(veh)	0.6	-	-	-	0.6



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	260	820	130	430	470	241	130	1056	640	139	641	140
Future Volume (veh/h)	260	820	130	430	470	241	130	1056	640	139	641	140
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.96	1.00		0.94	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	265	837	106	439	480	224	133	1078	582	142	654	129
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	267	966	558	468	602	279	158	1165	1239	264	1349	262
Arrive On Green	0.15	0.27	0.27	0.14	0.26	0.26	0.09	0.33	0.33	0.08	0.32	0.32
Sat Flow, veh/h	1781	3554	1537	3456	2327	1078	1781	3554	2627	3456	4272	829
Grp Volume(v), veh/h	265	837	106	439	366	338	133	1078	582	142	519	264
Grp Sat Flow(s),veh/h/ln	1781	1777	1537	1728	1777	1627	1781	1777	1314	1728	1702	1697
Q Serve(g_s), s	19.3	29.2	6.2	16.4	25.0	25.3	9.6	38.0	19.9	5.1	16.0	16.4
Cycle Q Clear(g_c), s	19.3	29.2	6.2	16.4	25.0	25.3	9.6	38.0	19.9	5.1	16.0	16.4
Prop In Lane	1.00		1.00	1.00		0.66	1.00		1.00	1.00		0.49
Lane Grp Cap(c), veh/h	267	966	558	468	460	421	158	1165	1239	264	1075	536
V/C Ratio(X)	0.99	0.87	0.19	0.94	0.80	0.80	0.84	0.93	0.47	0.54	0.48	0.49
Avail Cap(c_a), veh/h	267	1080	608	468	519	476	185	1165	1239	266	1075	536
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.75	0.75	0.75
Uniform Delay (d), s/veh	55.2	45.1	28.6	55.7	45.0	45.1	58.3	42.2	24.1	57.8	35.9	36.0
Incr Delay (d2), s/veh	52.6	7.0	0.2	26.9	8.2	9.5	25.2	13.6	1.3	0.8	1.2	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.4	13.5	2.2	8.7	11.7	11.0	5.3	18.2	6.1	2.2	6.7	7.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	107.8	52.1	28.7	82.5	53.2	54.6	83.5	55.8	25.3	58.7	37.1	38.5
LnGrp LOS	F	D	C	F	D	D	F	E	C	E	D	D
Approach Vol, veh/h		1208			1143			1793			925	
Approach Delay, s/veh		62.3			64.9			48.0			40.8	
Approach LOS		E			E			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.0	49.4	23.9	41.6	16.6	47.8	25.6	39.9
Change Period (Y+Rc), s	5.1	6.8	6.3	6.3	5.1	6.8	* 6.1	* 6.3
Max Green Setting (Gmax), s	10.0	38.4	17.6	39.5	13.5	34.9	* 20	* 38
Max Q Clear Time (g_c+I1), s	7.1	40.0	18.4	31.2	11.6	18.4	21.3	27.3
Green Ext Time (p_c), s	0.1	0.0	0.0	3.6	0.1	5.8	0.0	4.0

Intersection Summary	
HCM 6th Ctrl Delay	53.9
HCM 6th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Appendix L - Queueing Analysis Worksheets



Lane Group	EBT	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	139	36	30	432	7	1079
v/c Ratio	0.40	0.09	0.13	0.17	0.03	0.44
Control Delay	16.3	21.8	34.9	15.9	34.5	20.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	16.3	21.8	34.9	15.9	34.5	20.4
Queue Length 50th (ft)	10	10	9	35	2	104
Queue Length 95th (ft)	78	34	46	116	18	#347
Internal Link Dist (ft)	78	307		539		712
Turn Bay Length (ft)			150		130	
Base Capacity (vph)	354	1192	261	2623	248	2433
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.39	0.03	0.11	0.16	0.03	0.44

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBT	WBT	NBL	NBT	SBT
Lane Group Flow (vph)	199	21	115	1307	867
v/c Ratio	0.70	0.06	0.49	0.51	0.58
Control Delay	41.3	19.3	40.7	14.2	22.7
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	41.3	19.3	40.7	14.2	22.7
Queue Length 50th (ft)	47	4	32	69	73
Queue Length 95th (ft)	#262	22	#168	313	232
Internal Link Dist (ft)	78	307		539	712
Turn Bay Length (ft)			150		
Base Capacity (vph)	285	1120	239	2586	1884
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.70	0.02	0.48	0.51	0.46

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Near-Term Year 2024 with Project

Queuing Analysis Results

AM Peak Hour

HCM 6th LANE	EBL	EBT	WBT	WBR	SBLn1
Capacity (vph)	1033	-	-	-	719
HCM Lane V/C Ratio	0.021	-	-	-	0.088
HCM Control Delay (s)	8.56	-	-	-	10.5
HCM Lane LOS	A	-	-	-	B
HCM 95th Percentile Queue (veh)	0.1	-	-	-	0.3

PM Peak Hour

HCM 6th LANE	EBL	EBT	WBT	WBR	SBLn1
Capacity (vph)	887	-	-	-	633
HCM Lane V/C Ratio	0.123	-	-	-	0.112
HCM Control Delay (s)	9.625	-	-	-	11.4
HCM Lane LOS	A	-	-	-	B
HCM 95th Percentile Queue (veh)	0.4	-	-	-	0.4



Lane Group	EBT	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	168	64	63	485	32	1097
v/c Ratio	0.56	0.19	0.34	0.24	0.15	0.58
Control Delay	25.2	22.2	40.7	18.2	36.5	23.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	25.2	22.2	40.7	18.2	36.5	23.4
Queue Length 50th (ft)	29	21	26	39	13	146
Queue Length 95th (ft)	#138	49	#84	126	49	#331
Internal Link Dist (ft)	78	307		539		712
Turn Bay Length (ft)			150		130	
Base Capacity (vph)	299	1000	184	2011	210	1886
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.56	0.06	0.34	0.24	0.15	0.58

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBT	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	243	55	149	1424	22	964
v/c Ratio	0.77	0.17	0.56	0.63	0.11	0.66
Control Delay	48.8	25.3	43.4	22.6	41.2	29.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	48.8	25.3	43.4	22.6	41.2	29.2
Queue Length 50th (ft)	102	20	69	168	10	149
Queue Length 95th (ft)	#334	50	#173	#500	40	#325
Internal Link Dist (ft)	78	307		539		712
Turn Bay Length (ft)			150		130	
Base Capacity (vph)	316	919	350	2272	194	1552
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.77	0.06	0.43	0.63	0.11	0.62

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Horizon Year 2050 with Project

Queuing Analysis Results

AM Peak Hour

HCM 6th LANE	EBL	EBT	WBT	WBR	SBLn1
Capacity (vph)	998	-	-	-	698
HCM Lane V/C Ratio	0.045	-	-	-	0.125
HCM Control Delay (s)	8.779	-	-	-	10.9
HCM Lane LOS	A	-	-	-	B
HCM 95th Percentile Queue (veh)	0.1	-	-	-	0.4

PM Peak Hour

HCM 6th LANE	EBL	EBT	WBT	WBR	SBLn1
Capacity (vph)	810	-	-	-	587
HCM Lane V/C Ratio	0.178	-	-	-	0.159
HCM Control Delay (s)	10.407	-	-	-	12.3
HCM Lane LOS	B	-	-	-	B
HCM 95th Percentile Queue (veh)	0.6	-	-	-	0.6

Appendix L
Water Sewer Study

VALLECITOS WATER DISTRICT

LAS POSAS MERITAGE HOMES WATER AND SEWER STUDY

WORK ORDER # 249106

FINAL TECHNICAL MEMORANDUM

March 23, 2022

Prepared By: Elizabeth Lopez, Senior Engineer, and Lisa Whitesell

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INTRODUCTION

The proposed Las Posas Meritage Homes Project is a 120-unit multi-family residential development on 7.54-acres, located on the northwest corner of Las Posas Road and Mission Avenue (APN 219-121-15 & 219-121-16).

The Project property is located within VWD's boundaries for water and wastewater service. The property does not need to annex, both water and wastewater services can be provided by the Vallecitos Water District (VWD).

All new projects undergo evaluation by VWD to determine if the current water and sewer infrastructure is sufficient to accommodate the proposed water demands and sewage generation.

This study projects water demand and sewage generation increases due to the Project densification. It analyzes the following aspects of VWD's infrastructure and makes recommendations for capital improvements for impacts that are created due to the land use change:

- Water distribution system, including the need to upsize pipelines, install new pipelines, or install flow control facilities.
- Water storage, including the need for additional storage and the adequacy of existing storage tanks and reservoirs to serve the proposed development.
- Water pump stations, including the need to install new pump stations or upsize existing pump stations to serve the proposed development.
- Wastewater collection system, including the need to upsize pipelines and manholes, or the need to install new pipelines and manholes.
- Wastewater lift stations, including the need to install new lift stations or upsize existing lift stations to serve the proposed development.
- Wastewater land outfall, including the need to construct a parallel land outfall to serve this and other proposed developments.

- Wastewater treatment facilities, including the need for obtaining additional capacity at the Encina Water Pollution Control Facility (EWPCF) or for expanding the Meadowlark Water Reclamation Facility (MRF).
- Existing VWD water and/or sewer facilities not being utilized for proposed development will need to be abandoned per VWD Standards and Specifications. Asbestos cement pipe shall be properly removed and legally disposed of by Developer.

WATER SYSTEM ANALYSIS

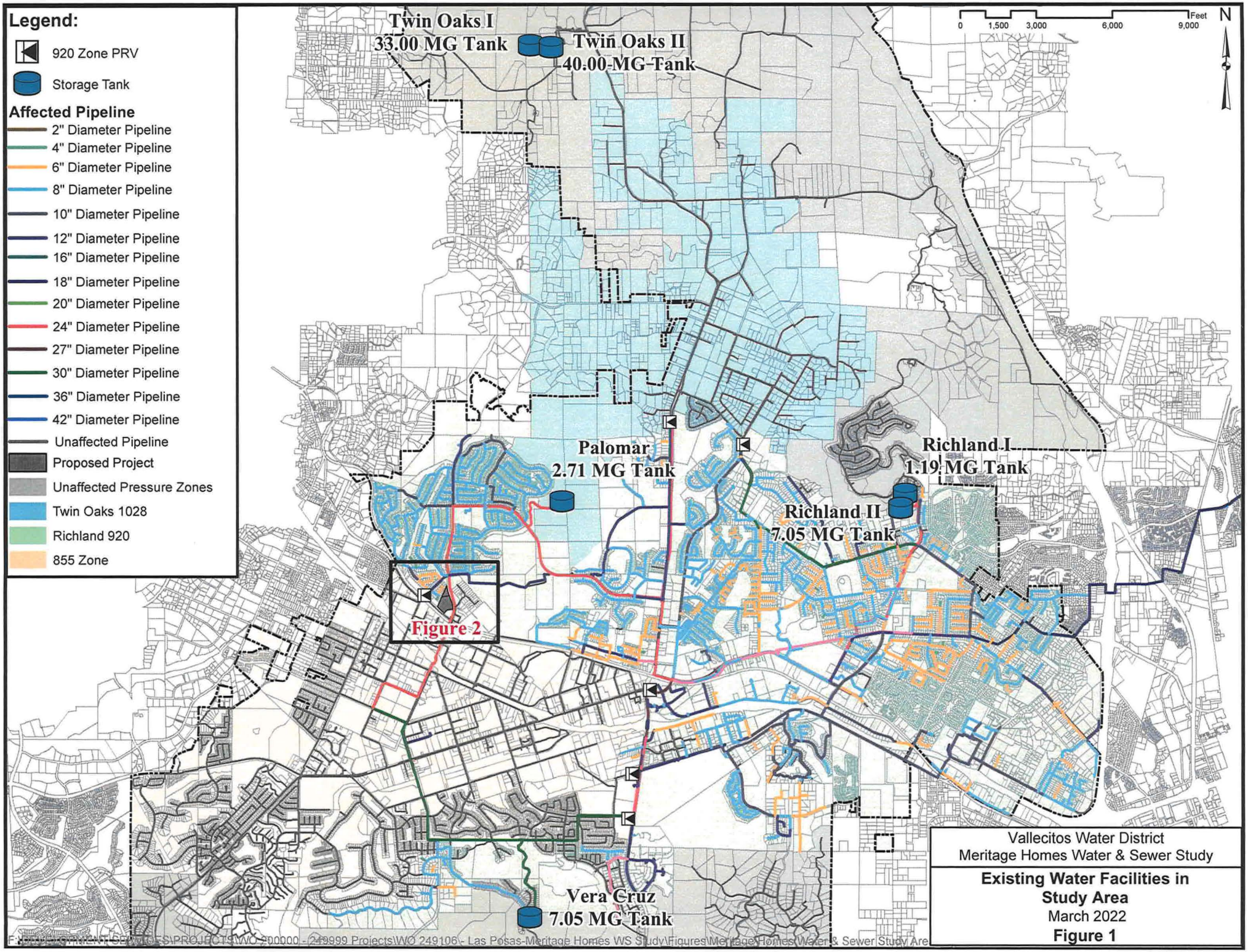
The proposed 7.54-acre Project lies completely within VWD's 855 Pressure Zone. Figures 1 and 2 show the development's location in relation to pressure zone boundaries, identify pipelines within the vicinity of the development, and identify storage reservoirs that supply the development area.

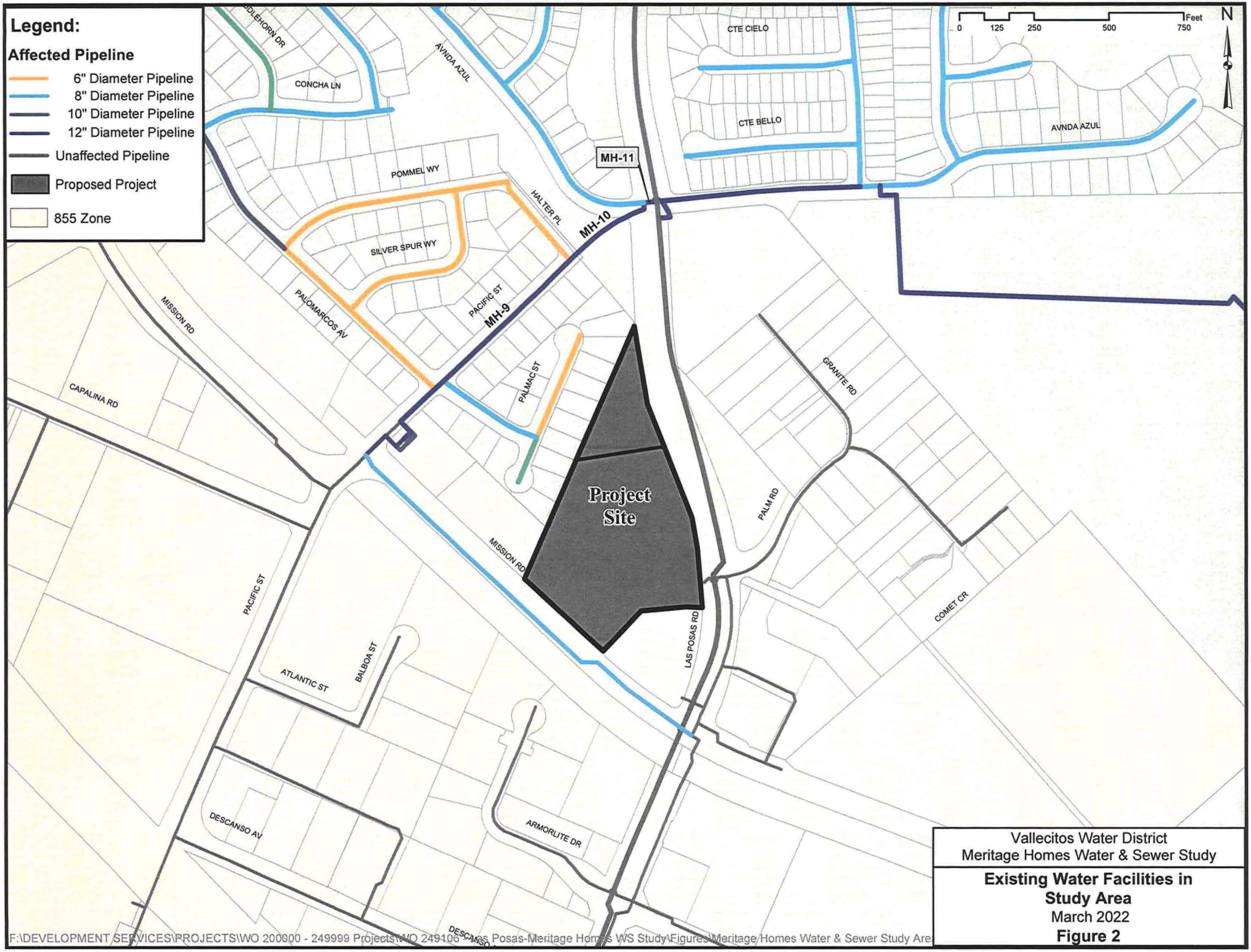
Water Demand Projections

The Project property's City of San Marcos approved land use designation for the proposed Project is Commercial. The 2018 Master Plan based its ultimate water demand on the same land use. Table 1 provides the average water demand generated both under the density planned for the 2018 Master Plan and with the proposed Project. The table shows that Las Posas Meritage Homes will increase the projected average water demand from the 2018 Master Plan land use by 26,390 gallons per day.

Table 1 – Project Estimated Water Demands for Las Posas Meritage Homes

Land Use Type	Area (acres)	Residential Units	Duty Factor (gpd/ac)	Water Demand (gpd)
2018 Master Plan Land Use Demand				
Commercial	7.54		1,500	11,310
Total	**7.54**			**11,310**
Proposed Project Demand				
Residential (15-20 du/ac)	7.54	120	5,000	37,700
Total	**7.54**			**37,700**
Water Demand Increase				**26,390**


Legend:
920 Zone PRV
Storage Tank
Affected Pipeline
2" Diameter Pipeline
4" Diameter Pipeline
6" Diameter Pipeline
8" Diameter Pipeline
10" Diameter Pipeline
12" Diameter Pipeline
16" Diameter Pipeline
18" Diameter Pipeline
20" Diameter Pipeline
24" Diameter Pipeline
27" Diameter Pipeline
30" Diameter Pipeline
36" Diameter Pipeline
42" Diameter Pipeline
Unaffected Pipeline
Proposed Project
Unaffected Pressure Zones
Twin Oaks 1028
Richland 920
855 Zone
Twin Oaks I
33.00 MG Tank
Twin Oaks II
40.00 MG Tank
Palomar
2.71 MG Tank
Richland I
1.19 MG Tank
Richland II
7.05 MG Tank
Figure 2
Vera Cruz
7.05 MG Tank
0
1,500
3,000
6,000
9,000
Feet
N
Vallecitos Water District
Meritage Homes Water & Sewer Study
Existing Water Facilities in Study Area
March 2022
Figure 1



Vallecitos Water District
Meritage Homes Water & Sewer Study

Existing Water Facilities in Study Area
March 2022
Figure 2

F:\DEVELOPMENT SERVICES\PROJECTS\WO 200000 - 249999 Projects\WO 249106 - Las Posas-Meritage Homes WS Study\Figures\Meritage Homes Water & Sewer Study Are

Water Distribution System Analysis

The 2018 Master Plan water system distribution and pressure criteria are as follows:

Water Distribution Infrastructure Criteria

The water service pressure criteria to be met by this development are as follows:

- Minimum allowable pressure at peak hour demand: 40 psi
- Minimum allowable pressure at max day plus fire demand: 20 psi
- Maximum allowable pressure: 150 psi

The City of San Marcos Fire Marshall has set the required fire demand at 1,850 gpm for the Project.

To avoid excessive velocity and headloss within the distribution system, the following pipeline design criteria was also utilized:

- Maximum allowable velocity: 7 feet per second
- Maximum allowable headloss gradient: 15 feet per 1,000 feet
- Hazen-Williams C-factor: 130

Water Model Scenarios

The following scenarios were modeled to identify system impacts that may be created by the proposed water demands, and to recommend any improvements required to provide service to the Project:

- Average Day Demand with existing demands at the Project site
- Average Day Demand with the proposed Project
- Maximum Day Demand with existing demands at the Project site
- Maximum Day Demand with the proposed Project
- Peak Hour Demand with existing demands at the Project site
- Peak Hour Demand with the proposed Project
- Maximum Day Demand plus Fire Flow with existing demands at the Project site
- Maximum Day Demand plus Fire Flow with the proposed Project

Per the 2018 Master Plan, maximum day demands for this project are 300% those of average day demands, and peak hour demands are 620% those of average day demands.

Water Model Results

Modeling focused on the infrastructure in the direct vicinity of the Project and did not create distribution system deficiencies under average day demand or maximum day plus fire flow demand.

Water Storage Analysis

The 2018 Master Plan outlines VWD's potable water storage reservoirs for each pressure zone as follows:

> 1.5 times ADD (operational storage) + 3.0 times ADD (emergency storage) + fire flow demand = 4.5 times ADD + fire flow demand
>
> OR
>
> 5.0 times ADD, whichever is greater.

The Project is located entirely within the VWD 855 pressure zone. Water storage for this zone is located within the 920 zone and 1028 Twin Oaks pressure zones, as shown in Figure 1. Table 2 shows the required storage in the 855, 920, and 1028 Twin Oaks pressure zones for existing and ultimate build-out (Master Plan) conditions relative to the existing storage provided within each zone.

Table 2 – Existing Reservoir Storage Capacity and Requirements

Pressure Zone	Existing ADD (MGD)	Existing Storage Requirement (MG)	Ultimate ADD (MGD)	Ultimate Storage Requirement (MG)	Existing Storage Available (MG)
855	3.74	50.05	6.79	101.25	0
920 Richland	5.61		10.40		18
1028 Twin Oaks	0.66		3.06		73
Totals	10.01	**50.05**	20.25	**101.25**	**91**

The Project will increase the projected average water demand by approximately 26,390 gallons per day as shown in Table 1.

The amount of additional reservoir storage required is 500% of the development's average day demand or:

26,390 gallons * 500% = 131,950 gallons

The analysis finds that water storage capacity is currently available to serve the Project's increased storage requirements. Master Plan projects address and accommodate the ultimate build-out storage deficiency and Water Capital Facility Fees paid by this project will be used for the increase in storage necessitated by the Project's demand calculated above.

Water Pump Station Analysis

Since the proposed Project is located in a pressure zone that is not served by pumping, there are no impacts to existing or proposed pump stations by this Project.

WASTEWATER SYSTEM ANALYSIS

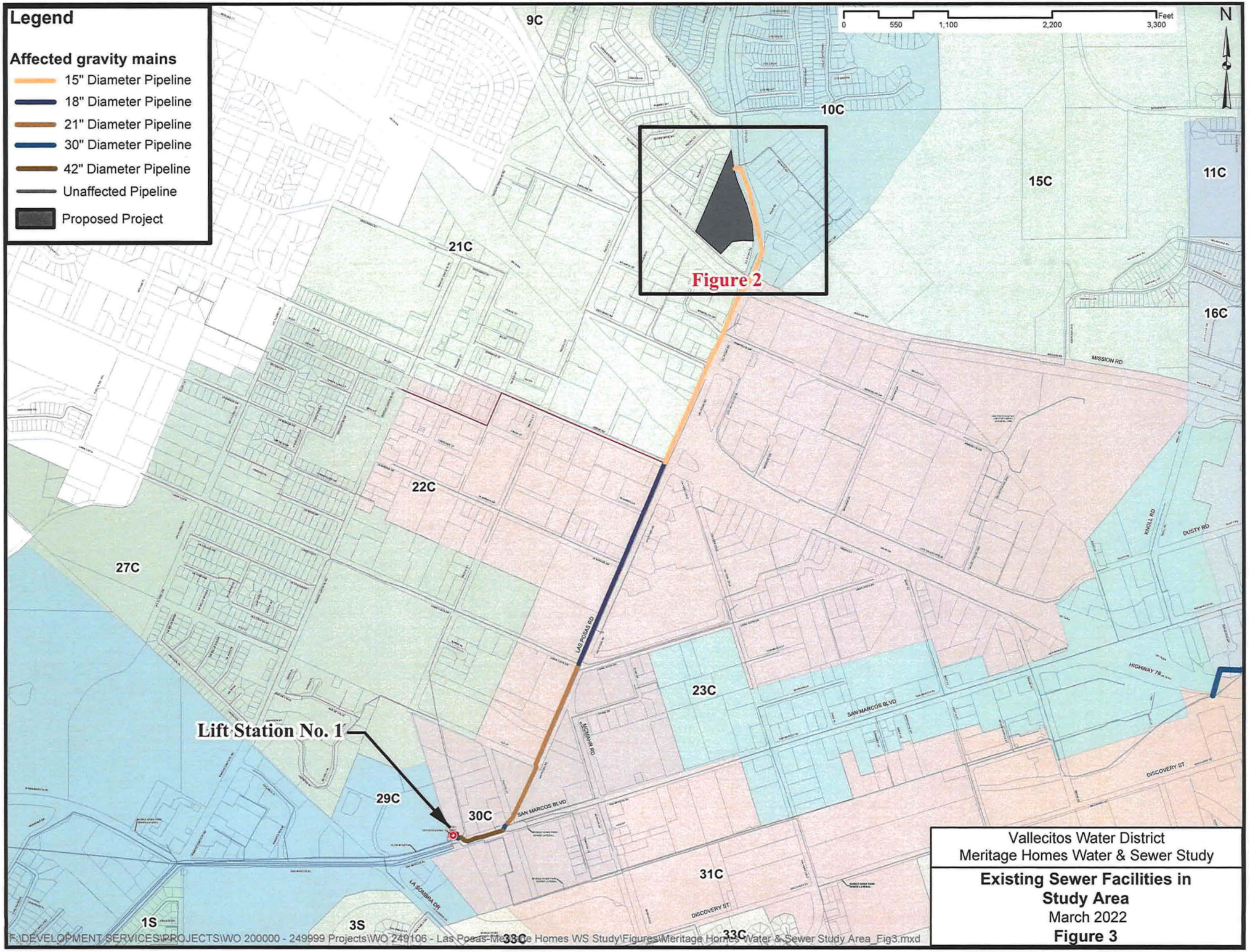
The proposed 7.54-acre Project lies completely within VWD sewer shed 21C. Figures 3 through 5 show the development's location in relation to sewer shed boundaries, identify wastewater infrastructure within the vicinity of the development, and identify the downstream collection infrastructure that will be impacted by the development.

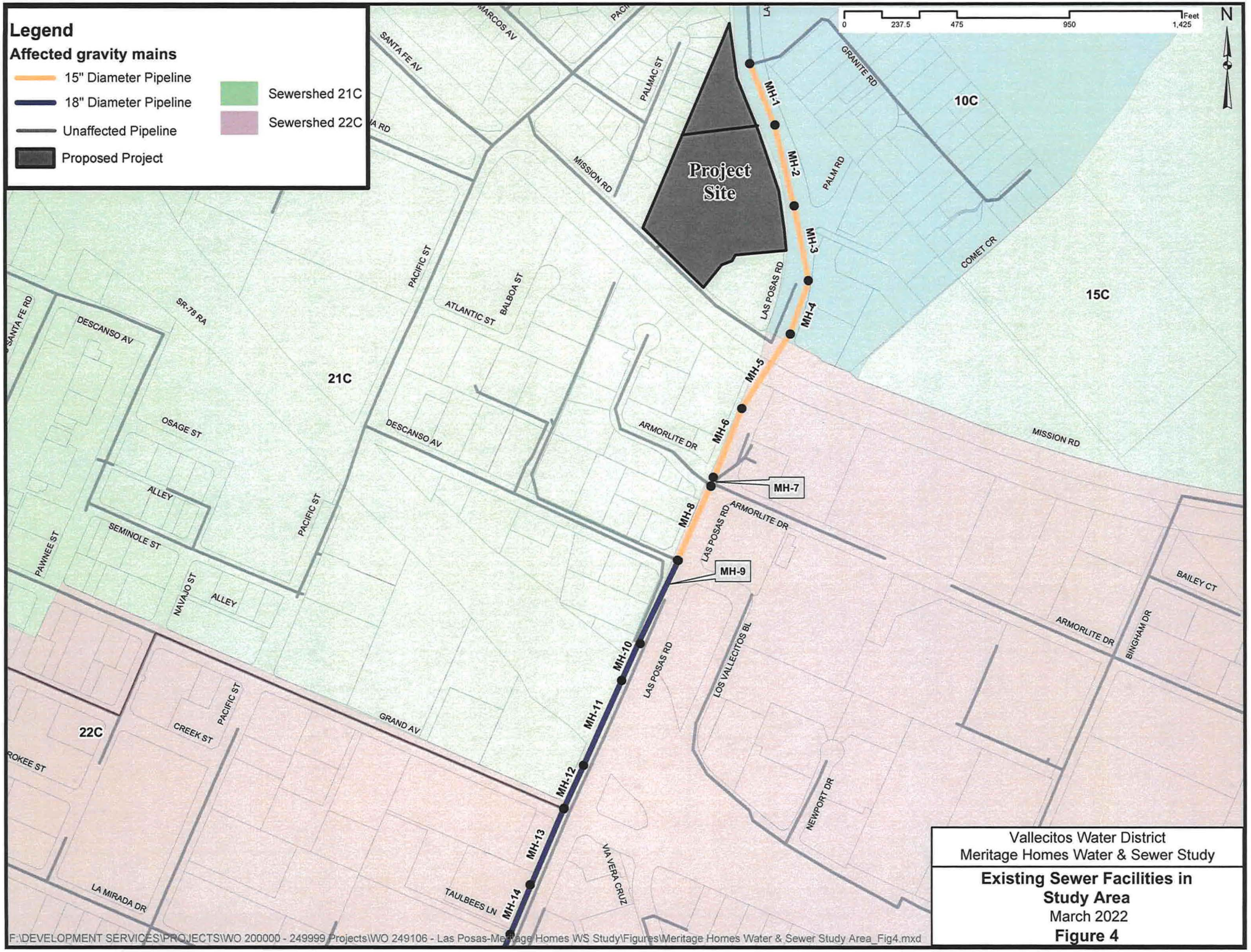
Wastewater Flow Projections

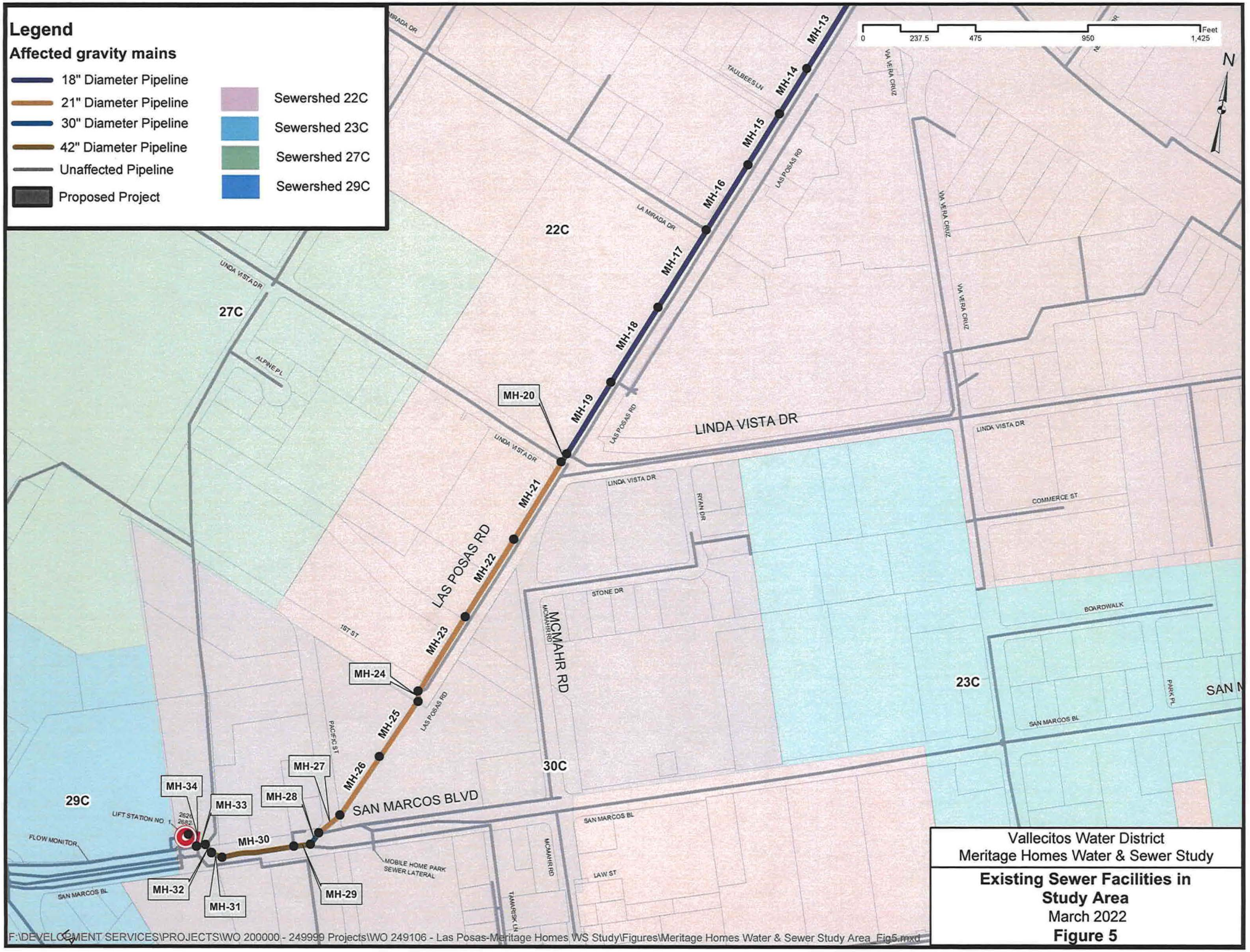
The Project's City of San Marcos approved land use designation for the proposed Project is Commercial. The 2018 Master Plan based its ultimate wastewater generation planning on this same land use. Table 3 provides the average wastewater flow generated both under the density planned for the 2018 Master Plan and with the proposed Project. The table shows that the Las Posas Meritage Homes project will increase the projected average wastewater generation from the 2018 Master Plan land use by 15,834 gallons per day.

Table 3 – Project Estimated Wastewater Flows for Las Posas Meritage Homes

Land Use Type	Area (acres)	Residential Units	Duty Factor (gpd/ac)	Wastewater Flow (gpd)
2018 Master Plan Land Use Flows				
Commercial	**7.54**		1,200	9,048
Total				**9,048**
Proposed Project Demand				
Residential (15-20 du/ac)	7.54	120	3,300	24,882
Total	**7.54**			**24,882**
Sewer Generation Increase				**15,834**


Legend
Affected gravity mains
15" Diameter Pipeline
18" Diameter Pipeline
21" Diameter Pipeline
30" Diameter Pipeline
42" Diameter Pipeline
Unaffected Pipeline
Proposed Project
0
550
1,100
2,200
3,300
Feet
N
Figure 2
Lift Station No. 1
9C
10C
11C
15C
16C
21C
22C
23C
27C
29C
30C
31C
33C
1S
3S
3S
MISSION RD
LAS POSAS RD
SAN MARCOS BLVD
MCMANUS RD
HIGHWAY 78
KNOLL RD
DUSTY RD
DISCOVERY ST
LA SOMBRA DR
Vallecitos Water District
Meritage Homes Water & Sewer Study
Existing Sewer Facilities in Study Area
March 2022
Figure 3
F:\DEVELOPMENT SERVICES\PROJECTS\WO 200000 - 249999 Projects\WO 249106 - Las Posas-Meritage Homes WS Study\Figures\Meritage Homes Water & Sewer Study Area_Fig3.mxd


Legend
Affected gravity mains
15" Diameter Pipeline
18" Diameter Pipeline
Unaffected Pipeline
Proposed Project
Sewershed 21C
Sewershed 22C
0
237.5
475
950
1,425
Feet
N
Project Site
MH-1
MH-2
MH-3
MH-4
MH-5
MH-6
MH-7
MH-8
MH-9
MH-10
MH-11
MH-12
MH-13
MH-14
10C
15C
21C
22C
SANTA FE AV
MARCOS AV
PALMAC ST
GRANITE RD
PALM RD
MISSION RD
COMET CR
LAS POSAS RD
PACIFIC ST
ATLANTIC ST
BALBOA ST
SR-78 RA
DESCANSO AV
OSAGE ST
ALLEY
SEMINOLE ST
PAWNEE ST
NAVAJO ST
ARMORLITE DR
BAILEY CT
BINGHAM DR
LOS VALLECITOS BL
NEWPORT DR
GRAND AV
CREEK ST
VIA VERA CRUZ
TAULBEES LN
LA MIRADA DR
Vallecitos Water District
Meritage Homes Water & Sewer Study
Existing Sewer Facilities in Study Area
March 2022
Figure 4
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Vallecitos Water District
Meritage Homes Water & Sewer Study

Existing Sewer Facilities in Study Area
March 2022
Figure 5

F:\DEVELOPMENT SERVICES\PROJECTS\WO 200000 - 249999 Projects\WO 249106 - Las Posas-Meritage Homes WS Study\Figures\Meritage Homes Water & Sewer Study Area_Fig5.mxd

Wastewater Collection System Analysis

The 2018 Master Plan outlines VWD's wastewater system design criteria which are as follows:

Wastewater Collection Infrastructure Criteria

The wastewater pipeline criteria to be met both within and downstream of the development are as follows:

- Pipes 12 inches in diameter and smaller: ½ full maximum at peak flow
- Pipes over 12 inches in diameter: ¾ full maximum at peak flow
- Minimum velocity: 2 feet per second
- Maximum velocity: 10 feet per second
- Manning's n for gravity pipes: .013
- Hazen-Williams C-factor for force mains/siphons: 120
- Slope for pipes 8 inches in diameter and smaller: 0.4% minimum
- Slope for pipes over 8 inches in diameter: to be determined by VWD

When flow depth in gravity pipes exceeds maximum levels as stated above, a pipe upsize will be specified.

Wastewater Model Scenarios

The following scenarios were modeled to identify system impacts that may be created by the proposed sewer generation, and to recommend any improvements required to provide service to the Project:

- Average Dry Weather Flow with existing flows at the Project site
- Average Dry Weather Flow with the proposed Project
- Peak Dry Weather Flow with existing flows at the Project site
- Peak Dry Weather Flow with the proposed Project
- Peak Wet Weather Flow with existing flows at the Project site
- Peak Wet Weather Flow with the proposed Project

The peak dry weather curve is:

$$\text{Peak Dry Weather Factor} = 2.16 \times (\text{Average Dry Weather Flow Rate})^{-0.1618}$$

The wet weather peak curve is:

$$\text{Peak Wet Weather Factor} = 2.78 \times (\text{Average Dry Weather Flow Rate})^{-0.087}$$

Wastewater Model Results

Modeling focused not only on the sewer collection infrastructure in the direct vicinity of the Project, but also on all downstream infrastructure from the development to Lift Station No. 1 on San Marcos Boulevard that would be impacted by the Project flows (see Figures 3 - 5).

Table 4 presents a summary of the modeling results from this analysis. The modeling results showed that no deficiencies have been identified under the currently approved density under peak wet weather flows during ultimate build-out conditions.

Las Posas Meritage Homes Table 4 - Wastewater Model Results and Recommended Gravity Main Improvements

				Wastewater Flows with Existing Density				Wastewater Flows with Proposed Density			
Pipe ID Number	Length (ft)	Diameter (in)	Slope	Peak Wet Weather Flow (gpm)	PWWF Depth-to-Diamter Ratio	Replacement Diamater (in)	Replacement PWWF Depth-to-Diamater Ratio	Peak Wet Weather Flow (gpm)	PWWF Depth-to-Diamter Ratio		Replacement PWWF Depth-to-Diamater Ratio
MH-1	284	15	0.0040	1,460	0.68			1,500	0.69		
MH-2	344	15	0.0040	1,465	0.68			1,505	0.69		
MH-3	321	15	0.0040	1,474	0.68			1,514	0.70		
MH-4	239	15	0.0050	1,478	0.63			1,518	0.65		
MH-5	350	15	0.0170	1,480	0.44			1,520	0.45		
MH-6	320	15	0.0230	1,483	0.41			1,523	0.41		
MH-7	35	15	0.0140	1,486	0.47			1,526	0.47		
MH-8	367	15	0.0160	1,578	0.46			1,618	0.47		
MH-9	384	18	0.0100	1,590	0.41			1,630	0.41		
MH-10	180	18	0.0070	2,140	0.53			2,180	0.54		
MH-11	389	18	0.0080	2,143	0.51			2,183	0.52		
MH-12	204	18	0.0050	2,145	0.59			2,185	0.60		
MH-13	281	18	0.0060	2,207	0.57			2,247	0.57		
MH-14	280	18	0.0040	2,209	0.65			2,249	0.65		
MH-15	226	18	0.0040	2,211	0.65			2,251	0.65		
MH-16	363	18	0.0040	2,217	0.65			2,257	0.66		
MH-17	385	18	0.0080	2,218	0.52			2,258	0.53		
MH-18	380	18	0.0080	2,226	0.52			2,266	0.53		
MH-19	370	18	0.0080	2,226	0.52			2,266	0.53		
MH-20	13	18	0.0080	3,048	0.64			3,088	0.64		

Las Posas Meritage Homes Table 4 - Wastewater Model Results and Recommended Gravity Main Improvements

				Wastewater Flows with Existing Density				Wastewater Flows with Proposed Density			
Pipe ID Number	Length (ft)	Diameter (in)	Slope	Peak Wet Weather Flow (gpm)	PWWF Depth-to-Diamter Ratio	Replacement Diamater (in)	Replacement PWWF Depth-to-Diamater Ratio	Peak Wet Weather Flow (gpm)	PWWF Depth-to-Diamter Ratio	Replacement Diamater (in)	Replacement PWWF Depth-to-Diamater Ratio
MH-21	385	21	0.0050	3,593	0.63			3,633	0.63		
MH-22	312	21	0.0050	3,596	0.63			3,636	0.64		
MH-23	380	21	0.0050	3,599	0.63			3,639	0.64		
MH-24	33	21	0.0180	3,748	0.44			3,788	0.44		
MH-25	297	21	0.0050	3,750	0.65			3,790	0.65		
MH-26	295	21	0.0060	3,752	0.61			3,792	0.61		
MH-27	112	21	0.0140	3,758	0.47			3,798	0.48		
MH-28	15	42	0.0530	14,693	0.26			14,733	0.26		
MH-29	138	42	0.0030	14,697	0.56			14,737	0.56		
MH-30	347	42	0.0030	14,712	0.56			14,752	0.56		
MH-31	18	42	0.0030	14,707	0.56			14,747	0.56		
MH-32	10	42	0.0340	14,708	0.29			14,748	0.29		
MH-33	10	42	0.0100	14,903	0.40			14,943	0.40		
MH-34	73	42	0.004	15,628	0.53			15,668	0.53		

Wastewater Lift Station Analysis

Lift stations are sized for peak wet weather flow with manufacturer's recommended cycling times for pumping equipment. Since the proposed Project is not located in a sewer shed that is served by a lift station, there are no lift station upgrade requirements for this project.

Parallel Land Outfall Analysis

VWD's existing land outfall is shown in Figure 6. The outfall is approximately 8 miles in length and consists of 4 gravity pipeline sections and 3 siphon sections varying in diameter from 20 inches to 54 inches. VWD maintains the entire pipeline from Lift Station No. 1 to the Encina Water Pollution Control Facility (EWPCF). From Lift Station No. 1 to El Camino Real, VWD is the sole user of this pipeline. From El Camino Real to the EWPCF, the ownership capacity is as shown in Table 5 below:

Table 5 – Land Outfall Capacity Ownership by Agency

Agency	Ownership Percentage	Capacity (MGD)
Carlsbad	23.98%	5.00
Vista	17.99%	3.75
VWD	58.03%	12.10
Totals	**100.00%**	**20.85**

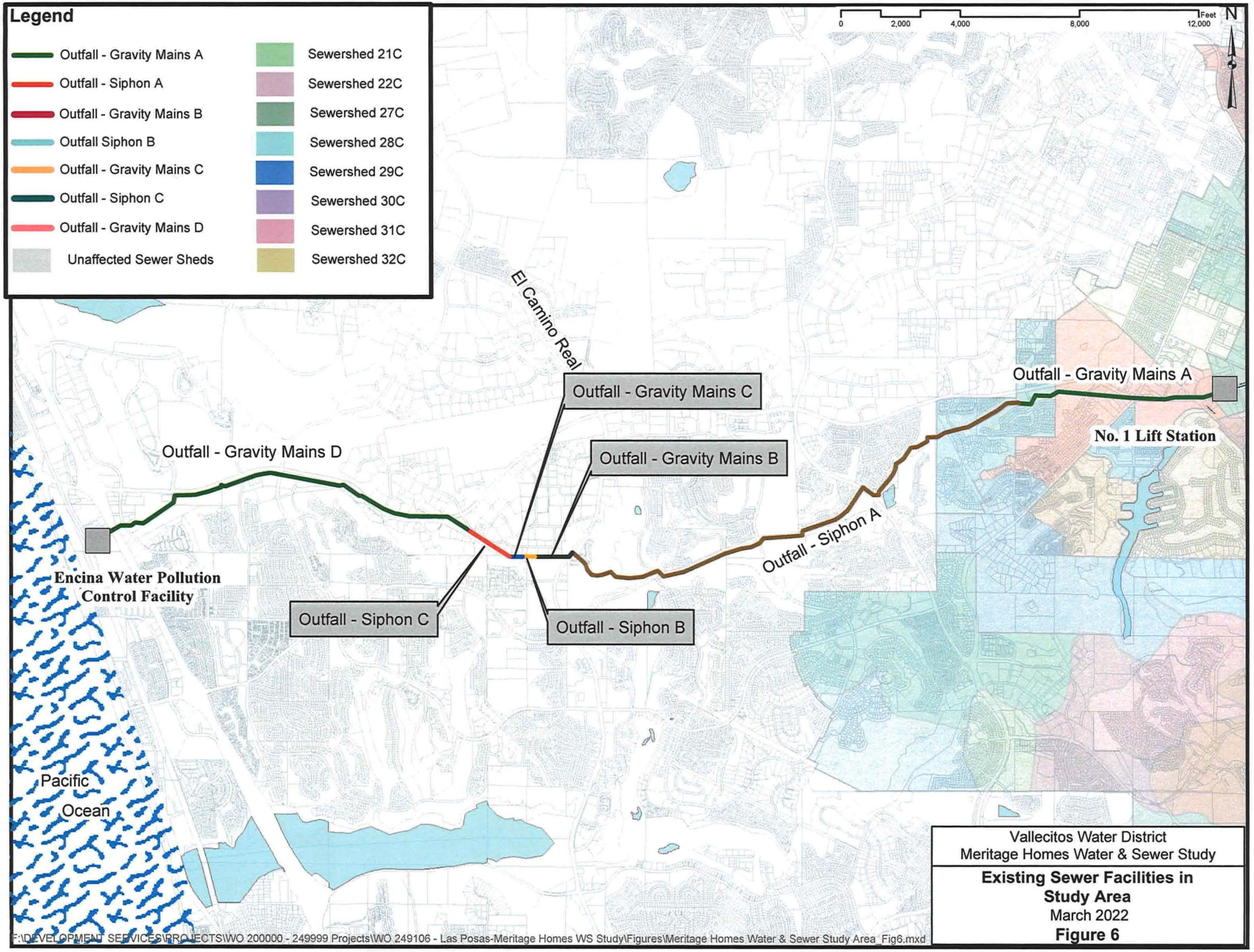
The Meadowlark Water Reclamation Facility (MRF) has a capacity of 5.0 MGD with a peak wet weather capacity of 8.0 MGD. Therefore, VWD has a combined peak wet weather wastewater collection capacity of 20.10 MGD (12.10 MGD + 8.0 MGD).

VWD's 2014 average daily wastewater flow through the land outfall was 7.5 MGD. This corresponds to a peak wet weather flow of 17.5 MGD, which falls within VWD's combined peak wet weather collection capacity.

The 2018 Master Plan estimated that, under approved land uses, VWD has an ultimate build-out average dry weather flow of 14.4 MGD. This corresponds to a peak wet weather flow of 31.7 MGD, which exceeds VWD's combined peak wet weather collection capacity. To accommodate additional wastewater flows from planned development, the 2018 Master Plan recommended conveyance of peak flows to the EWPCF through a parallel land outfall.

The Project proposes to generate 15,834 gallons per day of additional average wastewater flow that was not accounted for in the Land Outfall's capacity studied in the 2018 Master Plan.

The analysis finds that outfall capacity is currently available to serve the Project's proposed wastewater generation. Wastewater Capital Facility Fees paid by this Project will be used toward design and construction of a parallel land outfall to be sized to accommodate ultimate build-out wastewater flows.


Legend
Outfall - Gravity Mains A
Outfall - Siphon A
Outfall - Gravity Mains B
Outfall Siphon B
Outfall - Gravity Mains C
Outfall - Siphon C
Outfall - Gravity Mains D
Unaffected Sewer Sheds
Sewershed 21C
Sewershed 22C
Sewershed 27C
Sewershed 28C
Sewershed 29C
Sewershed 30C
Sewershed 31C
Sewershed 32C
0
2,000
4,000
8,000
12,000
Feet
N
El Camino Real
Outfall - Gravity Mains C
Outfall - Gravity Mains B
Outfall - Gravity Mains D
Outfall - Gravity Mains A
No. 1 Lift Station
Outfall - Siphon A
Encina Water Pollution Control Facility
Outfall - Siphon C
Outfall - Siphon B
Pacific Ocean
Vallecitos Water District
Meritage Homes Water & Sewer Study
Existing Sewer Facilities in Study Area
March 2022
Figure 6
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Wastewater Treatment Facility Analysis

VWD utilizes two wastewater treatment facilities to treat wastewater collected within its sewer service area.

- The Meadowlark Reclamation Facility (MRF) has liquids treatment capacity of up to 5.0 MGD with a peak wet weather capacity of 8.0 MGD. MRF does not have solids treatment capacity, and therefore all solids are treated at the Encina Water Pollution Control Facility (EWPCF).
- The EWPCF is located in the City of Carlsbad. This is a regional facility with treatment capacity of up to 40.51 MGD. VWD's current ownership capacity is noted below.

Solids Treatment Capacity
VWD currently owns 10.47 MGD of solids treatment capacity at EWPCF. VWD's 2014 average daily wastewater flow was 7.5 MGD. Therefore, the analysis finds that adequate solids treatment capacity exists at this time to serve the Project.

The ultimate average wastewater flow identified in the 2018 Master Plan is 14.4 MGD, resulting in a projected solids treatment capacity deficiency of 3.93 MGD. Wastewater Capital Facility Fees paid by this Project will be used towards the deficiency to accommodate the solid treatment capacity wastewater flow.

Liquids Treatment Capacity
VWD currently owns 7.67 MGD of liquids treatment capacity at the EWPCF in addition to the liquid's treatment capacity of 5.0 MGD at MRF for a total of 12.67 MGD of liquids treatment capacity. VWD's 2014 average daily wastewater flow was 7.5 MGD. Therefore, the analysis finds that adequate liquids treatment capacity exists at this time to serve the Project.

The ultimate average wastewater flow identified in the 2018 Master Plan is 14.4 MGD, resulting in a projected liquids treatment capacity deficiency of 1.73 MGD. Wastewater Capital Facility Fees paid by this Project will be used towards the deficiency to accommodate the ultimate average wastewater flow.

Ocean Disposal Capacity
VWD currently owns 10.47 MGD of ocean disposal capacity at the EWPCF. VWD's 2014 average daily wastewater flow was 7.5 MGD. Therefore, the analysis finds that adequate ocean disposal capacity exists at this time to serve the Project.

The ultimate average wastewater flow identified in the 2018 Master Plan is 14.4 MGD, resulting in an ocean disposal deficiency of 3.93 MGD. Wastewater Capital Facility Fees paid by this Project will be used towards the deficiency to accommodate the ocean disposal wastewater flow

The District has determined that adequate wastewater treatment and disposal capacity exists for the proposed Project at this time subject to the qualifications referenced in the Conclusions and Conditions.

CONCLUSION AND CONDITIONS

The proposed Las Posas Meritage Homes Project is expected to increase average daily water demands by 26,390 gallons per day and wastewater flows by 15,834 gallons per day over the ultimate flows projected in the 2018 Master Plan.

The study concludes that the proposed development will result in the following impacts:

- An increase of 26,390 gallons per day in water demand for proposed project.
- An increase of 131,950 gallons of potable water storage requirement.
- An increase of 15,834 gallons per day in solids handling, liquids handling and ocean disposal capacity requirements at Encina Water Pollution Control Facility.
- An increase of 15,834 gallons per day in the parallel land outfall's capacity requirement.

The following items are required for providing service to the proposed Project:

- Payment of all applicable Water and Wastewater Capital Facility Fees in affect at the time service is committed in accordance with District rules and regulations.
- Construction and acceptance of all on-site water and sewer facilities prior to service.

The District currently has water and sewer capacity available to serve the Project as proposed. However, the ability to provide water and sewer service in the future depends upon ultimate build-out of the Project and could change depending upon the timing of the build-out, as well as build-outs of other development projects, continued reliable water supplies from the San Diego County Water Authority, the District's treatment capacity at the EWPCF and other factors affecting growth in the District which may change over time.

This Study is based on the current adopted land use utilized in VWD's 2018 Master Plan. The study addresses the incremental facility impacts of this Project only and does not include or consider any additional projects within VWD's service area that have deviated from adopted Master Plan land uses. Any land use changes upstream and/or downstream of the Study area may necessitate a revision of any onsite and offsite studies. VWD shall determine if and when revisions to the Study are necessary. Costs for revising this Study shall be borne by the Developer. The results of this study are not the accepted conditions for the development, final conditions shall be part of the construction agreement process or issued separately by the District.

Appendix M
Gran Vista Specific Plan

Gran Vista
Specific Plan

City of San Marcos, California

September 2022



Gran Vista
Specific Plan

September 2022

SP 21-0003

Prepared for:
City of San Marcos
1 Civic Center Drive
San Marcos, CA 92069

Prepared By:
MLC Holdings
5 Peters Canyon Road, Suite 310
Irvine, CA 92606

List of Contributors

Applicant/Developer/Builder
MLC Holdings, LLC
5 Peters Canyon Road, Suite 310
Irvine, CA 92606
(949) 299-3852

Architect
Kevin L. Crook Architect, Inc.
1360 Reynolds Ave, Suite 110
Irvine, CA 92614
(949)660-1587

Planning Consultant
CCI Consultant Collaborative
160 Industrial Street
San Marcos, CA 92078
(760) 471-2365

Landscape Architects
GMP
3176 Lionshead Ave #102
Carlsbad, CA 92010
(858) 558-8977

Civil Engineer/Site Planning
Hunsaker & Associates San Diego
9707 Waples Street
San Diego, CA 92121
(858) 558-4500

Dry Utility Consultant
Utility Design Solutions, LLC
30211 Avenida de las Banderas, Suite 200
Rancho Santa Margarita, CA 92688
(949) 412-8466

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1 - Introduction

1.0. Introduction

The Gran Vista Specific Plan, hereafter also noted as “Specific Plan,” has been written with the intent to provide regulations for the development of an attractive, transit-oriented, urban residential community at the west corner of North Las Posas Road and Palm Road in the City of San Marcos, California. The following chapters will explain the vision for this community and the proposed development standards, design guidelines, utilities, infrastructure, and public services necessary to implement that vision and support future development.

1.1. Overview of the Specific Plan

The Gran Vista Specific Plan provides the City of San Marcos a comprehensive planning tool to help guide the orderly development of a new planned residential community in a High Quality Transit Area as identified in the City of San Marcos’ Transportation Impact Analysis Guidelines. Located just west of Palomar College, the 7.6-acre Specific Plan planning area, hereafter also noted as “planning area,” is conveniently situated adjacent to the Inland Rail Trail and Palomar College Station, which includes a Sprinter Hybrid Rail Station and a bus depot. Based on proximity to these mobility options, the area has been designated as a High Quality Transit Area as part of the implementation of Senate Bill 743 (SB 743). The site is also within walking distance of educational, retail, office, and industrial uses, making it an ideal location for a transit-oriented infill community. The Specific Plan envisions a high quality, urban living environment that provides strong pedestrian connectivity to surrounding and modern recreational amenities. The Specific Plan proposes up to 120 three-story for-sale townhomes units with a maximum permitted density of 15.8 dwelling units per acre. New homes will range in size from a minimum of approximately 1200 square feet to 1800 square feet with two (2) to three (3) bedrooms. Each home will include private open space in the form of a patio and/or deck with an average of 146 square feet. Common recreational spaces, consisting of approximately 92,645 square feet of open space, will be designed with urban-style amenities such as tot lots, an off-leash dog space, outdoor exercise equipment, a community garden, barbecue areas, and space for a variety of outdoor games. The new community will remain open to surrounding uses without gates and minimal walls. Architectural and landscape styles will reflect the urban setting. Buildings will be designed to engage and enhance an interconnected series of internal landscaped pathways and sidewalks along North Las Posas Road and West Mission Road to support convenient, safe, and efficient pedestrian movements that promote walkability and transit use.

1.2. Specific Plan Objectives

Specific Plans provide a tool for comprehensive and creative planning strategies that respond to the unique conditions of the site while implementing the goals and policies of the General Plan. The following objectives have been crafted to guide development that is consistent with the City of San Marcos General Plan:

1. Maximize residential densities, to the extent feasible, within proximity to major transit, education facilities, commercial uses, and trails to reduce reliance on automobiles and potentially minimize greenhouse gas (GHG) emissions.

2. Create a highly connected and efficient system of sidewalks and pathways supported by pedestrian friendly architecture and landscaping to promote walkability and connect people to surrounding transit and destinations.

3. Design a vehicular circulation system that adequately accommodates traffic and minimizes traffic impacts in and around the planning area.

4. Support the housing needs of the City of San Marcos and the region by developing high-quality, workforce housing that balances density with price-points and long-term maintenance costs, such that new homes remain financially attainable to entry-level home buyers.

5. Establish development standards and design guidelines that ensure distinctive architecture, landscaping and recreational amenities that complement and enhance the existing surrounding neighborhood while providing a desirable living environment.

6. Identify a program for the long-term maintenance of the community to ensure all facilities are adequately maintained to City standards.

7. Finance or contribute a fair share of funding to all community services and infrastructure needed to support development proposed by the Specific Plan to promote economic stability.

1.3. Specific Plan Authority and Purpose

California Government Code §65450 in conjunction with the City of San Marcos Zoning Ordinance Chapter 20.535, authorizes the City's legislative body to prepare and adopt Specific Plans. The Specific Plan will become the vehicle for the systematic implementation of the City's General Plan with a defined area covered under the governing authority of the General Plan.

The Gran Vista Specific Plan serves as both a policy document and a regulatory document for the systematic implementation of the policies and goals of the General Plan. As a policy document, the Specific Plan embodies the broad policy directives of the General Plan and applies those policies and goals to the establishment of specific objectives for the planning area. As a regulatory document, the Specific Plan provides direction for the assignment of land uses, development intensities, development regulation, architectural and landscape design guidelines, grading, infrastructure design, development phasing, and financing. The planning and review process established by the Specific Plan emphasizes the direct and comprehensive correlation between land use, transportation, public services, and infrastructure necessary to support the efficient development of the planning area. When implemented, these elements of the Specific Plan will form a cohesive and rational development that complements and enhances the unique characteristics of this area of the City.

All subsequent development plans, tentative parcel and/or tract map(s) and/or similar entitlements for projects within the planning area shall be consistent with the regulations set forth in the Specific Plan and with other applicable City of San Marcos regulations. Where the Specific Plan is silent, the San Marcos Municipal Code (SMMC) shall govern. Definitions of all terms within this Specific Plan shall also be consistent with the definitions provided in the SMMC unless otherwise specified. This Specific Plan shall be adopted by Ordinance by the City of San Marcos City Council.

1.4. Contents of the Specific Plan

Per California Government Code §65451, the Gran Vista Specific Plan shall contain the following written and graphic information:

- The Specific Plan shall include a statement of the relationship of the Specific Plan to the General Plan.
- The distribution, location, and extent of the uses of land, including open space, within the area covered by the plan.
- Standards and criteria by which development will proceed, and standards for the conservation, development, and utilization of natural resources, where applicable.
- The proposed distribution, location, and extent and intensity of major components of public and private transportation, sewage, water, drainage, solid waste disposal, energy, and other essential facilities proposed to be located within the area covered by the plan and needed to support the land uses described in the plan.
- A program of implementation measures including regulations, programs, public works projects, and financing measures necessary to carry out [all of the above].

To comply with these requirements, the Gran Vista Specific Plan includes the following information:

- An introduction that includes the planning objectives for the Specific Plan. The Specific Plan objectives encompass the goals of, and is consistent with, the General Plan regarding land use, circulation, resource management, community design, as well as public services and utilities. A discussion of the Specific Plan's relationship to each General Plan Element is also provided (Chapter 1).
- Written descriptions and graphic illustrations of proposed land uses within the planning area, including clearly identified specific development patterns, intensity, and development standards (Chapter 2).
- Written descriptions and graphic illustrations of proposed vehicular, pedestrian, and bicycle circulation systems for the planning area and the connections to adjacent public and private transportation (Chapter 5).
- A public service and facility plan that identifies the specific agencies and extent of public services, utilities, infrastructure, and facilities necessary to serve the planning area including sewage, water, drainage, solid waste disposal, energy, and other essential facilities (Chapter 6).
- A financing and phasing plan that provides the general outline for phasing of improvements, financing mechanisms for proposed improvements and long-term maintenance of infrastructure, and an implementation program that provides the mechanisms available for project review procedures and regulations for specific development within the planning area and any future amendments to the Specific Plan (Chapter 7).

1.5. Planning Area Description

1.5.1. Regional and local Setting

The Gran Vista Specific Plan planning area encompasses approximately 7.6 gross acres. As illustrated in Figure 1.1. Regional Vicinity Map, the planning area is situated in the northwest portion of the City of San Marcos, in an area defined as the College Area Neighborhood. The planning area is located approximately 0.4 miles from Highway 78, approximately five (5) miles from Interstate 15, and across the street from Palomar College.

As shown in Figure 1.2. Local Vicinity Map and Surrounding Uses, the planning area is situated on the northwest corner of North Las Posas Road and West Mission Road. A drainage channel forms the northwesterly boundary. North Las Posas Road serves as a major gateway into the Santa Fe Hills Neighborhood, a large single-family subdivision located immediately to the north. Older established single-family neighborhoods are located to the east and west. The commercial parcel immediately to the south, which is not part of the planning area, has been developed with a CVS drug store. The CVS property includes a single-story commercial building surrounded by surface parking. A pharmacy drive-through is located on the north side of the building, facing the planning area. Other nearby uses include a gas station to the east, and industrial, commercial uses, and mixed-use sites south of West Mission Road.

The planning area is designated as a High Quality Transit Area due to its proximity to transit and other facilities and services that support alternatives to vehicle use. Palomar College, a public community college consisting of a 200-acre campus, is located east of the planning area. Palomar College Transit Center, a North County Transit District hub, is located less than a quarter mile from the planning area. Palomar College Transit Center consists of a bus depot on the north side of West Mission Road, near the main entrance to Palomar College, and a train station on the south side of West Mission Road that serves the SPRINTER hybrid rail train. Rail service and bus transit service offered at the Transit Center provide local and regional connections to schools, employment, shopping, and entertainment options within the City of San Marcos, as well as San Diego and Riverside Counties. An existing bus turnout and stop are also located on West Mission Road in front of CVS. The Inland Rail Trail, a proposed 21-mile Class I bikeway, runs along the south side of West Mission Road and connects the Cities of Oceanside, Vista, San Marcos, and Escondido as well as areas of unincorporated San Diego County.

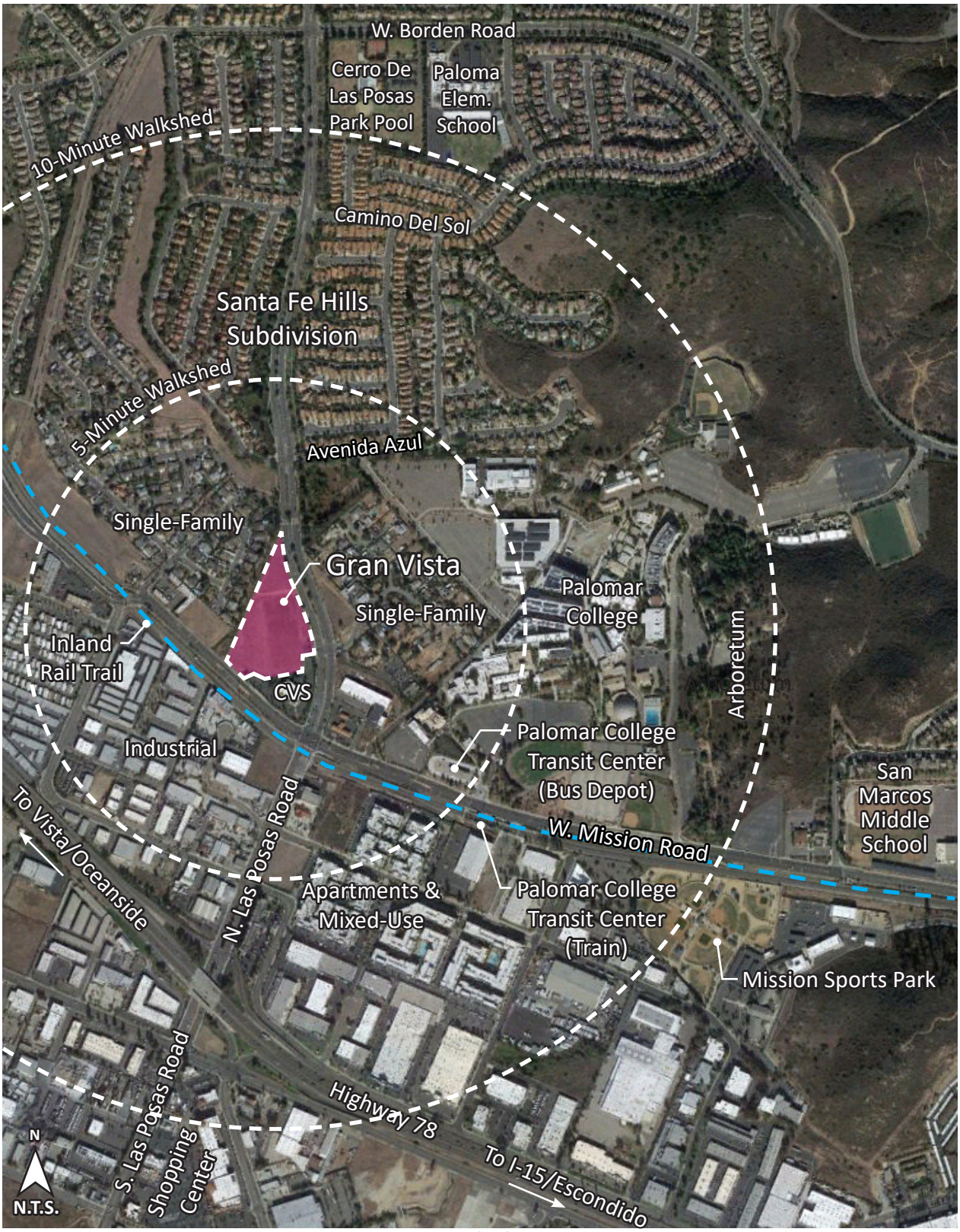
1.5.2. Site Characteristics

As Illustrated in Figure 1.3. Existing Conditions and shown in Figure 1.4. Existing Site Photographs, the planning area includes two (2) parcels (Assessor Parcel Numbers 219-121-15-00 and 219-121-16-00) located at the intersection of North Las Posas Road and West Mission Road. These parcels are bound by a drainage channel to the west, North Las Posas Road to the east, and West Mission Road and a commercial parcel to the south. Both North Las Posas Road and West Mission Road have been improved with sidewalks and Class II bike lanes along the planning area's frontage. A small segment of sidewalk along West Mission Road is currently missing and the sidewalk will be extended as part of this project to complete this frontage. The planning area was originally designated for commercial uses and was previously graded into two (2) separate development pads. The pad located in the northerly portion of the planning area is elevated above North Las Posas Road and is higher than the remaining portion of the planning area. The lower pad, located in the southerly portion of the site, is elevated above West Mission Road. The planning area was also temporarily used as overflow parking for Palomar Community College, which is located across North Las Posas Road.



Map data ©2021 Google

Figure 1.1. Regional Vicinity Map



Base Aeriel Image Source: Google Earth; Imagery Date 12/19/2021

Figure 1.2. Local Vicinity Map and Surrounding Uses

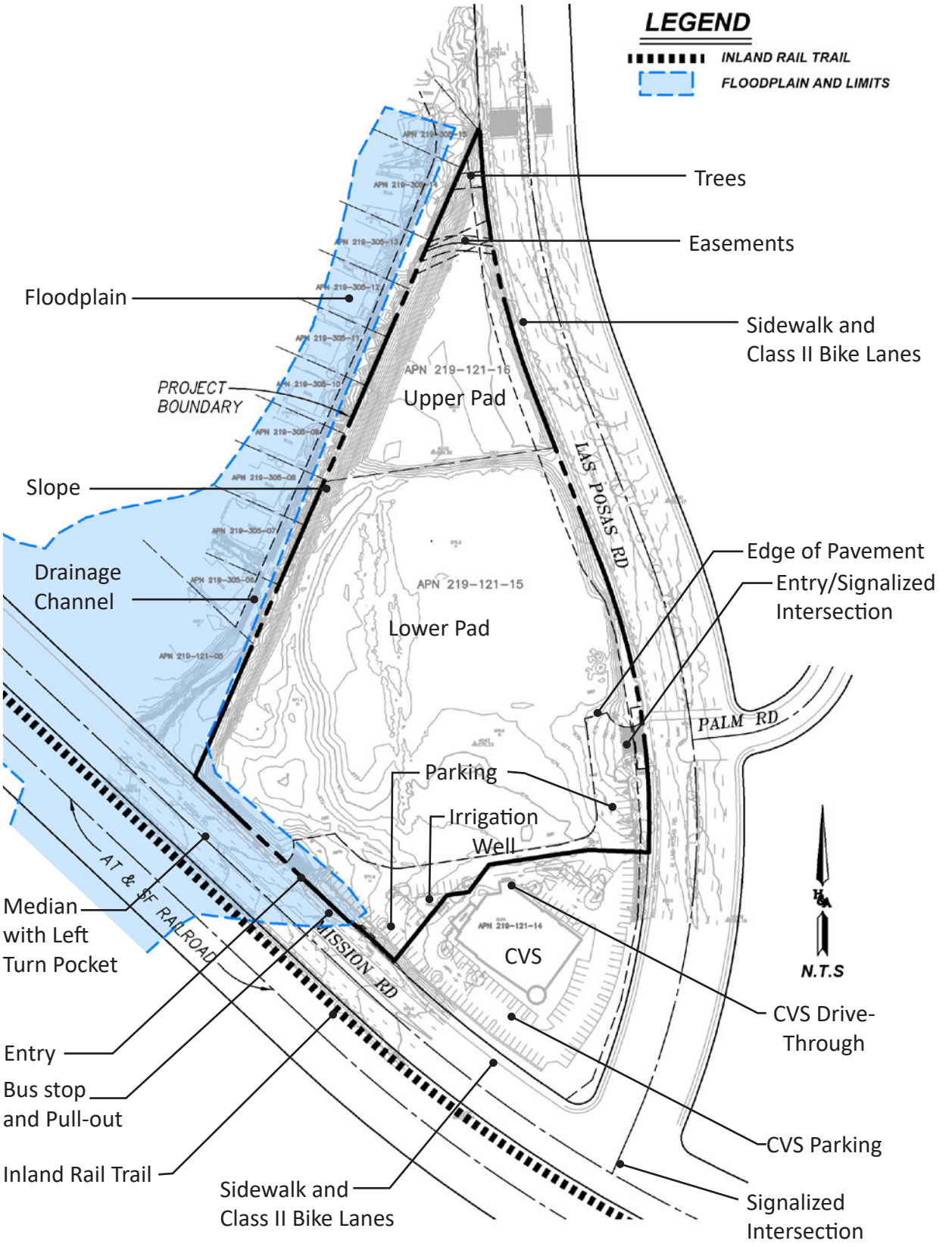


Figure 1.3. Existing Conditions



From south looking north



From northeast, adjacent to North Las Posas Road, looking south



From parking lot in south looking northwest



From northeast looking southwest



Existing Irrigation Well (left side of island)



From southwest looking northeast through parking lot towards CVS

Figure 1.4. Existing Site Photographs

Vegetation on the site is limited to grasses and small shrubs. A few trees are located along the periphery of the site, adjacent to the channel and North Las Posas Road.

The planning area and the CVS parcel share two (2) common access points: (1) a driveway at the signalized intersection of North Las Posas Road and Palm Road and (2) a driveway on West Mission Road that allows for left-turn in and right-in/right-out traffic movements. Both driveways have been improved with enhanced paving and landscaping. Shared use of these driveways is controlled through Covenant, Conditions, and Restriction (CC&Rs) that cover all three (3) properties. The CC&Rs also cover shared use of various utilities including storm drainage facilities.

The southerly portion of the planning area includes a paved parking lot. Spaces located within the planning area boundary were constructed to serve the future expansion of the commercial center and are not needed for the CVS building to meet the City's parking requirements. These spaces are considered shared spaces pursuant to the CC&Rs.

1.5.3. Regulatory Setting and Site History

Prior to the adoption of this Specific Plan, the planning area and the adjacent commercial parcel immediately to the south were designated as Commercial by the General Plan and the San Marcos Zoning Code. These three (3) parcels were previously designed and graded for a commercial center. In 2009, the southerly parcel was developed with the CVS pharmacy; however, due to changes in the market, the remaining two (2) parcels that make up the planning area are still undeveloped. Concurrent with this Specific Plan, a General Plan Amendment and Zone Change application were processed to redesignate the two (2) parcels that comprise the planning area to Specific Plan Area (SPA), thereby allowing for the development of the urban townhome community proposed herein.

Although previously designated as Commercial (C) by the General Plan, the residential development proposed by this Specific Plan implements AB 32, Strategy 3 of the San Marcos Climate Action Plan (CAP), SB 743, numerous General Plan goals, and various other state regulations related to reducing GHG emissions. In accordance with AB 32, the Global Warming Solution Act, the State adopted SB 97, which revised the California Environmental Quality Act (CEQA) Guidelines to require an analysis of GHG emissions as part of the CEQA process and established standards for the content and approval process of plans to reduce GHG. To comply with these requirements, the City of San Marcos adopted the Climate Action Plan (CAP) in 2013. A CAP is a long-range planning document that identified strategies to reduce GHG emissions. Since then, the State and the California Air Resources Board (CARB) have established stricter targets for reducing GHG emissions. In response, the City of San Marcos update the CAP in 2020 to reflect these new requirements. The State also adopted SB 743 to change the way CEQA evaluates traffic, making Vehicle Miles Traveled (VMT) the new metric to promote development that is walkable, has access to transit or bicycle facilities, and/or implements other mitigation measures that discourage the use of single occupancy vehicles. To implement SB 743 and Strategy 3 of the San Marcos CAP, the City of San Marcos adopted the Transportation Impact Analysis Guidelines in 2020. These Guidelines identify High Quality Transit Areas, where VMT is considered low due to the availability of transit. The intent is to encourage urban housing and other appropriate uses within these High Quality Transit Areas that encourage transit use to potentially reduce GHG emissions. The planning area is located within the half-mile walkshed of the City's most westerly High Quality Transit Area.

The reduced demand for retail coupled with an increased demand for housing in California and the City and State's Climate Change goals have changed the planning area into a prime site for urban, transit-oriented housing.

1.6. Relationship to the San Marcos General Plan

As indicated in Section 1.4, the Specific Plan is a tool that allows for the systematic implementation of the City's General Plan, effectively linking the implementing policies of the General Plan to individual development proposals in a defined area. As such, the Specific Plan is required to provide a detailed statement of the relationship of the Specific Plan to the General Plan, including consistency between both plans and a comparison of goals, objectives, and policies. The following sections discuss the various elements of the San Marcos General Plan and compares the stated intent of each element to the development proposed by this Specific Plan and describes how applicable goals are met.

1.6.1. Land Use and Community Design Element

As stated in the introduction to the Land Use and Community Design Element, the goals and policies of the General Plan are designed to:

- Ensure land use diversity and balanced development that encourage an efficient and responsible relationship between land use, transit, open space, and areas of environmental sensitivity.
- Establish and maintain community connections that better connect people to places.
- Promote economic strength and stability by maintaining a strong local economy and employment base.
- Create a synergy between the business community and academia to promote San Marcos as the educational hub for North County.
- Encourage integration of high-quality and sustainable development through the establishment of development standards and land use patterns that encourage long-term environmental sustainability.
- Promote community design that produces a distinctive built environment with memorable places.
- Direct and sustain growth through management that ensures adequate provision of urban services.

The Specific Plan achieves this as follows:

- The Specific Plan ensures land use diversity and balanced development by taking an already graded site with no significantly environmental sensitives and proposes to utilize the property to its highest and best use. Current market demands and the demand for new housing make the property most ideally suited for housing. Density of homes is increased to maximize the efficient use of the property while at the same time providing a transition between high density rental apartments in the south and lower density single family homes to the north. These townhomes offer a "missing middle" housing type that is not widely available in this part of the City. Furthermore, the Specific Plan encourages an efficient and responsible relationship between land use and transit, by providing urban housing in proximity to transit, trails, and non-residential uses.
- The proposed development maintains community connection by remaining ungated with minimal walls to create a community to that is open to the surrounding neighborhood. Walkways, architecture, and landscaping are designed to maximize pedestrian connectivity and encourage walkability.
- The Gran Vista Specific Plan promotes economic strength and stability and a synergy with nearby academia by offering entry-level, for-sale, workforce housing. This type of housing that will support the College and local businesses by providing financially attainable housing opportunities for

employees and faculty. Proximity to transit will also benefit the economic strength of the entire City and Region by providing connection between this workforce housing and employment centers. Furthermore, the Specific Plan identifies long term maintenance and financing mechanisms for infrastructure and services to ensure the community does not become a fiscal burden to the City.

- New housing proposed by this Specific Plan will be high quality, sustainable development, designed to meet or exceed current building codes and standards. The California Building Code -includes the most stringent requirements in the United States for water, material, and energy efficiency; improved air quality; and more. The Specific Plan also implements the strategies of the City's Climate Action Plan to reduce GHG emissions by including elements that support transit use, active modes of transposition, and the use of electric vehicles. Proximity to transit and trails and the walkable design of the community have the potential to significantly reduce VMT for improved air quality.
- The Specific Plan provides a detailed set of architectural and landscape design guidelines to ensure a distinctive built environment with unique and memorable amenities and spaces.
- Infrastructure and service plans provided within this Specific Plan have been developed to ensure that adequate provisions for urban services are available. Financing for both the construction and long-term maintenance of necessary infrastructure and services has also been identified in the final chapter of this Specific Plan.

The Specific Plan planning area is located at the southerly edge of the College Area Neighborhood. The General Plan describes the College Area Neighborhood as having a diverse range of uses from rural residential uses in the north, including homes in the Santa Fe Hills Master Planned Community, and commercial and light industrial uses in the south. Palomar Community College is the most prominent use within this neighborhood.

General Plan identifies Focus Areas where changes are most likely to occur. Although the Specific Plan planning area is not within a Focus Area, it is immediately north of the Urban Core Focus Area - Mission Road Focus- Area 1 (FA1). The main component of this focus area is the Palomar College Transit Station. Based on proximity to this transit station, the vision for FA1 is to "create an identifiable business area that would help attract a diversity of businesses, potentially expanding the employment base to promote economic sustain¬ability within the City of San Marcos." The plan envisions a mix of businesses along with high quality housing and parks.

The Specific Plan implements the vision for both the College Area Neighborhood and Urban Core Focus Area - Mission Road Focus Area 1 (FA1) by providing a gradual and logical transition between the high-density apartments in FA1 and the single-family homes in Santa Fe Hills. Urban townhomes offer the "missing-middle" housing for this area. This type of housing also supports the viability of the FA1 business district by creating home ownership opportunities for employees who are first-time homebuyers.

1.6.2. Mobility Element

As stated in the introduction, the purpose of the Mobility Element is to strategically enhance and manage the mobility network as a critical component in continuing the City's vibrant commercial and industrial areas, its thriving residential neighborhoods, its diverse job and employment uses, and its unique student population. The Mobility Element focuses on maximizing the quality, comfort, safety, walkability, livability, and bikeability of the City's streets, sidewalks, trails, and multi-modal transportation system while incorporating key ingredient of sustainability.

The Mobility Element identifies North Las Posas Road as a six-lane arterial with Class II or III Bicycle Facilities and West Mission Road as a four-lane arterial with enhanced bicycle/pedestrian facilities. Both roadways have already been built-out to their full right-of-way as part of the previous development proposed on the site.

The Specific Plan further implements the mobility element as follows:

- Minimizing walls and requiring multiple pedestrian connections to maximize walkability.
- Including design guidelines that require pedestrian friendly architecture and landscaping that engage the public sidewalk along public roadways and internal pathways.
- Installing EV charging and bicycle parking to support the use of electric vehicle and active modes of transportation.
- Minimizing parking in accordance with the Climate Action Plan to prioritize transit use and active transportation over private vehicle use.

1.6.3. Conservation and Open Space Element

As stated by the General Plan, the purpose of the Conservation and Open Space Element is to identify natural, cultural, historic, and open space resources. Although the site does not include any of these resources, development of the Specific Plan planning area supports the preservation of these resources elsewhere in the community by reducing development pressure on other sites that do include these valuable resources.

The Conservation and Open Space Element also seeks to address air pollution, climate change, energy independence, water supply and water quality. Development proposed by the Specific Plan will be designed to current building codes and standards. The California Building Code includes the most stringent requirements in the United States for water, material, and energy efficiency; improved air quality; and more. The Specific Plan implements the strategies of the City's Climate Action Plan to reduce GHG emissions by including elements that support transit use, active modes of transportation (e.g. bicycles, walking, etc.), and the use of electric vehicles. Proximity to transit and trails and the walkable design of the community have the potential to significantly reduce VMT for improved air quality.

1.6.4. Parks, Recreation, and Community Health Element

According the General Plan, the purpose of the Parks, Recreation, and Community Health Element is to maintain and increase access to parks, trails, recreational facilities, and community service programs. In addition, it aims to provide a healthy and safe community by taking into consideration community health and family enrichment needs of community members, including older adults, children, persons with special needs, and residents of all ages.

The Specific Plan implements this Element by including an open space plan and an amenity package designed to address the specific recreational needs of the anticipated community demographics. Standards for both private open space and common recreational open space ensure an adequate amount of space is provided to support a high quality of life. Selected amenities cater to an urban lifestyle and consider not only families, but young singles and couples who are likely to be purchasing their first home within this community. Consideration for proximity to trails is also reflected through the provision of multiple connections, bicycle parking requirement, and landscaping and architecture designed to promote pedestrian comfort. New development is also required to pay a public facilities fee to fund its fair share of public park and recreational facilities and other public facilities within the City.

1.6.5. Safety Element

The Safety Element is designed to ensure -public health, safety, and welfare of residents and their property by identifying and planning for anticipated natural and human-caused safety issues including geologic and seismic hazards, flood, fire and more.

Hazards associated with the development proposed by the Specific Plan were evaluated as part of the CEQA process and no significant hazards were identified. Homes and landscaping will be designed, built, and installed to current safety codes and standards. Additionally, the Specific Plan includes development and design standards that incorporate Crime Prevention Through Environmental Design (CPTED) strategies such as facing front doors and windows toward walkways for natural surveillance, limiting the height of shrubs to avoid creating hiding spaces for criminals, and more. CPTED strategies consider design standards that deter criminal activity and build a sense of community between neighbors so that residents are encouraged to take ownership of their neighborhood, watch for and discourage crime, and protect each other.

1.6.6. Noise

The Noise Element Identifies potential problems and noise sources threatening community safety and comfort with the intent of limiting the community's exposure to excessive noise levels.

Noise impacts to new residents as well as noise impacts generate by the development of the Specific Plan were evaluated as part of the CEQA process. Mitigation to reduce those impacts to a less than significant level have been incorporated into the Specific Plan. Additionally, new development proposed by the Specific Plan is subject to the City's noise standards, which are consistent with the General Plan.

1.6.7. Housing

As required by State law, the City of San Marcos Housing Element identifies the housing needs of both the existing and projected population and ensures that the land use plan provides adequate capacity to provide safe, suitable, and affordable housing for City residents. The Housing Element is coordinated with each element to ensure comprehensive policies and goals throughout the General Plan. These policies and goals form a framework that the Gran Vista Specific Plan will follow to systematically implement a comprehensive housing development plan that is consistent with these goals and policies. The residential development proposed by Specific Plan will encompass approximately 7.6 acres and will include a maximum of 120 multi-family residential dwelling units for an approximate total density of 15.8 dwelling units per-acre (du/ac). This residential density equates to the Medium Density Residential 2 (MDR 2) General Plan land use classification, which allows for 15.1-20.0 du/ac. Homes proposed by the Gran Vista Specific Plan are designed as entry-level, market-rate housing with a range of units sizes and price points, creating opportunities for home ownership that will be attractive to varying income levels. The townhomes proposed also offer a style of home that is not widely available in this area of the City and provide a transition between single-family homes to the north and high-density apartments to the south. Therefore, the Gran Vista Specific Plan is consistent with the goals provided within the Housing Element of the General Plan.

1.7 CEQA Compliance

An Environmental Impact Report (EIR) was prepared for the Gran Vista Specific Plan in accordance with the California Environmental Quality Act (CEQA) and serves as a comprehensive environmental document for subsequent development within the planning area. The EIR examines potential environmental impacts to the planning area and makes determinations for mitigation measures to reduce impacts to below levels of significance. The EIR was certified concurrently with the Specific Plan by the decision-making body.

A Mitigation Monitoring and Reporting Program (MMRP), adopted in accordance with Public Resources Code Section 21081.6, ensures the proper implementation of the mitigation measures outlined within the EIR. All future development within the planning area is required to adopt and implement the mitigation measures specified in the MMRP, if applicable.

Subsequent development proposals within the Gran Vista Specific Plan planning area, if found by the City of San Marcos to be consistent with this Specific Plan and the impact analysis and mitigation measures found in the certified EIR, may be approved and implemented without further public environmental review according to California Government Code Section 65457. Prior to amendment to this Specific Plan and/or a Multi Family Site Development Plan review, the City of San Marcos shall determine if further environmental review and analysis is required to satisfy CEQA requirements.

2 - Land Use & Regulations

2.0. Overview

This chapter regulates the distribution and intensity of land uses and establishes development standards that will govern all future development within the Gran Vista Specific Plan planning area. These standards and guidelines provide a foundation for the community's character and sense of place that will ultimately result in an attractive and functional community.

2.1. Land Use

As illustrated in Figure 2.1. Land Use Plan, the 7.6-acre planning area is comprised of a single land use: Gran Vista Residential (GVR). The GVR land use allows for the development of up to 120 residential units with a maximum density of 15.8 dwelling units per acre (du/ac). This density is consistent with the Medium Density Residential 2 (MDR 2) General Plan land use classification, which allows for 15.1-20.0 du/ac. Unlike other areas within the City that are designated as MDR2, the GVR land use is intended to allow for more contemporary residential development that reflects the urban setting and lifestyle within a High-Quality Transit Area. Land use permit requirements, regulations, and development standards of this section shall be applicable to all existing and new uses, structures, modifications, additions, and activities within the GVR district.

2.1.1. Allowable Uses

Table 2.1. Gran Vista Residential (GVR) Use Classifications identifies the types of land use permits required to establish uses allowed within the GVR district, consistent with this Specific Plan. Allowed uses shall be for the express purpose of establishing and protecting the residential living environment envisioned by this Specific Plan. Residential uses are intended to be the primary permitted use. All other uses are intended to support the residential use. When indicated, please also refer to the sections identified under the "Additional Use Regulations" column for additional operational standards and regulations applicable to the use. When a use is not specifically listed, that use in not permitted; However, in accordance with Section 7.3.5. of this Specific Plan, the Development Services Director shall have the authority to determine whether the proposed use shall be permitted or conditionally permitted based on a finding of substantial conformance if the proposed use is similar to a use already listed in Table 2.1.

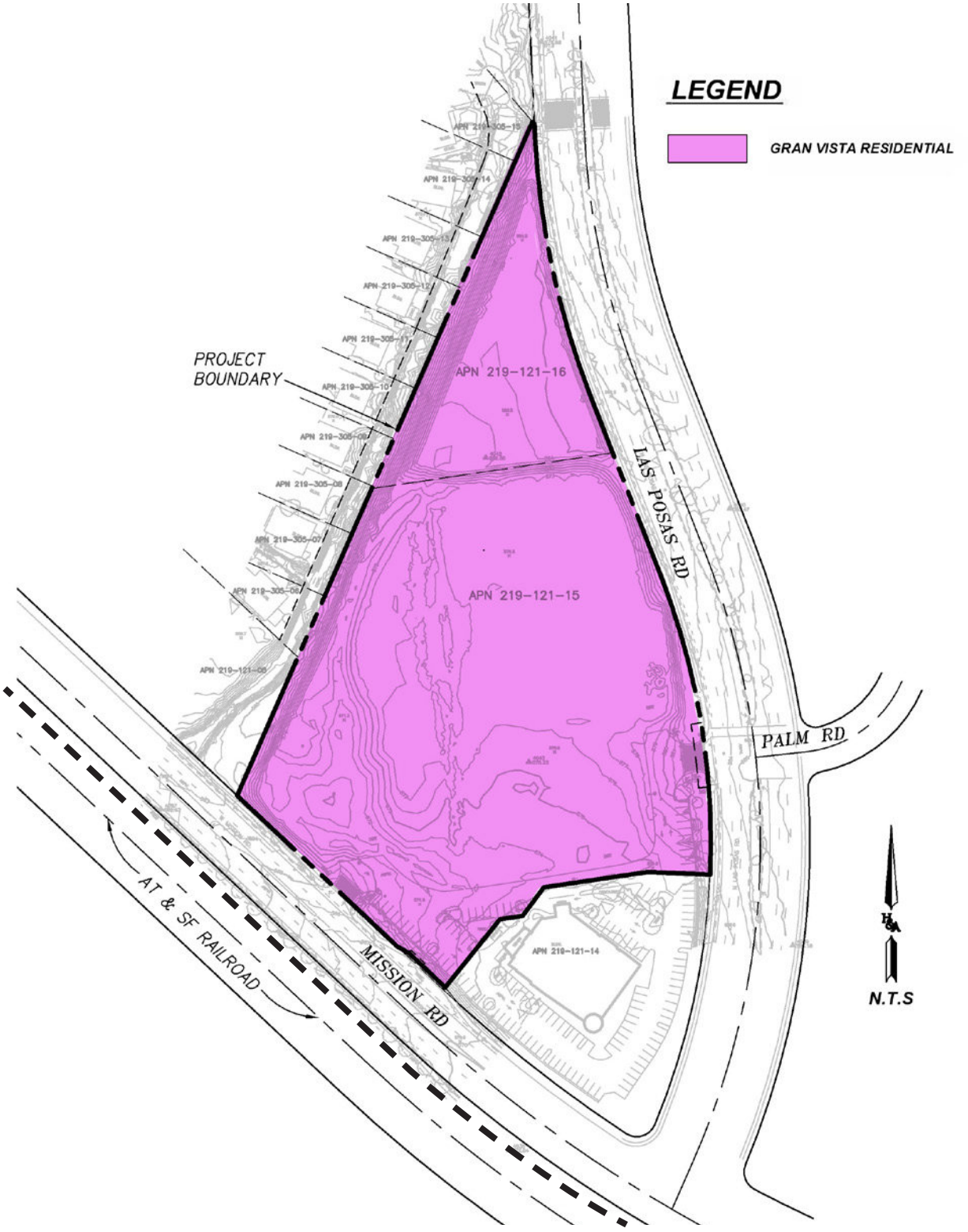


Figure 2.1. Land Use Plan

Table 2.1. Gran Vista Residential (GVR) Use Classifications.

Use	Permit Required	Additional Use Regulations
Single-family Attached	P	
Multifamily	P	
Open Space	P	Please refer to Section 2.2.2
Recreational Amenities	P	Please refer to Section 2.2.2.B.
Animal Keeping, Small and Large	P	As Permitted by the SMMC
Non-Public Antenna or Communication Facility	P	SMMC
Wireless Antenna Facilities	CUP	

Symbol:
P = Permitted use subject to compliance with all applicable provisions of the Gran Vista Specific Plan.
DP = Director's Permit (DP) is required for this use, subject to review and approval by the Director.
SMMC = San Marcos Municipal Code

Figure 2.2. Distribution of Allowable Uses and Table 2.2. Conceptual Distribution of Allowable Uses provides an illustration and summary of the amount of area dedicated to roadways, buildings, and various types of allowable uses proposed within the planning area.



Figure 2.2. Distribution of Allowable Uses

Table 2.2. Conceptual Distribution of Allowable Uses

Use	Area (Acres)	% of Total	Units (DU)
Single-Family Attached[1]	2.3	30%	120
Common Open Space with Grades 10% or Greater	1.0	13%	
Common Open Space with Grades Less than 10%	2.1	28%	
Private Drives	1.6	21%	
Private Drive Aisles	0.6	8%	
Specific Plan Total	**7.6**	**100%**	**120**

1. Includes ground floor private open space

2.1.2. Airport Overlay

The planning area is located within the Airport Influence Area – Review Area 2 as defined in the Airport Land Use Compatibility Plan (ALUCP) for McClellan-Palomar Airport. Maximum height requirements and the proposed land uses in the Specific Plan comply with the ALUCP. All permits, including building permits, for land uses and structures within the Specific Plan area shall be subject to Site Development Plan Review, to ensure consistency with the provisions of the Specific Plan and the ALUCP.

As a Condition of Approval, all new residential projects within the planning area shall record an overflight notification document, which shall be disclosed to all homeowners. The document shall include language consistent with the following:

> NOTICE OF AIRPORT IN VICINITY: This property is located in the vicinity of an airport, within what is known as an Airport Influence Area. For this reason, the property may be subject to some of the annoyances or inconveniences associated with proximity to airport operations (for example, noise, vibration, and odors). Individual sensitivities to those annoyances can vary from person to person. You may wish to consider what airport annoyances, if any, are associated with this property, and determine whether they are acceptable to you, before you complete your purchase.

2.2 Development Standards

Table 2.3. Development Standards provides a list of development standards that are applicable to all new development within the GVR designation. These standards include building setbacks, height limitations, open spaces requirements, and more.

Table 2.3. Development Standards

Use	Standards	Additional Standards/Notes
Density and Intensity		
Maximum Density	15.8 du/ac Max	Shall not exceed 120 units
Maximum Building Height	45 feet or 3 stories	Whichever is less; As measured from the finished adjacent grade to the top of the tallest roof or architectural feature.
Building Setbacks		
N. Las Posas Rd.	77 feet Min. from Centerline	
W. Mission Rd.	86 feet Min. from Centerline	
West Property Line	45 feet to PL and 5 feet minimum from top of slope	Top of slope shall be screened with landscaping to preserve the privacy of adjacent neighbors
Private Drive	5 feet minimum[1]	Measured from back of walk or from face of curb when no sidewalk is present
Private Drive Aisle (Alley)	3 feet minimum[1]	Measured from face of garage door
Building Separation	10 feet minimum[1]	Consistent with adopted Building Code based on building design
Parking		
Garage	2 per unit maximum	Please refer to Section 2.2.1
Guest	0.33 per unit maximum	Please Refer to Section 2.2.1
Bicycle	1 long term bike parking space per unit + 1 short term space for every 12 units	Please Refer to Section 2.2.1 and as defined by CalGreen
Open Space		
Private Open Space	250 SF patio/50 SF Balcony	Please refer to Section 2.2.2
Common Open Space	Area equal to 30% of livable ground floor area of all units	Please refer to Section 2.2.2
Walls and Fencing		Please Refer to Section 2.2.3
Landscaping		Please Refer to Section 2.2.4
Signage		Please Refer to Section 2.2.6
Other		
Refuse and Recycling		SMMC
Storage		SMMC

1. Soffits, vine trellises, upper-story cantilevers, and utility closets may encroach up to 3 feet
2. SMMC = San Marcos Municipal Code

2.2.1. Parking and Private Roadway Standards and Regulations

The purpose of this section is to regulate the provision of off-street parking and private roadway, drives, and drive aisles within the planning area. Parking standards have been developed in accordance with the City's Off-Street Parking Requirements and modified pursuant to the requirements of the Climate Action Plan.

A. General Requirements

1. Parking shall only be permitted in designated parking spaces and inside garages. No Parking shall be permitted in Private Drives, Private Drive Aisles, or driveways.

2. All circulation, ingress and egress, and off-street parking areas shall be surfaced with an asphalt or cement concrete paving, designed to withstand repeated vehicular traffic. Other paving material may be used, such as previous surfaces, subject to the approval of the Development Services Director and/or City Engineer.

3. All stormwater runoff shall be conveyed into a public storm drain or directed into planting areas. Storm drains shall be provided in accordance with the specifications of the City Engineer. Stormwater runoff shall be treated per the requirements of the latest NPDES permit for the San Diego Region and City of San Marcos BMP Design Manual prior to entering the City's municipal separate storm sewer system.

4. All guest parking spaces, Private Drives, Private Drive Aisles, pedestrian crossings, driveways and fire lanes shall be striped or otherwise designated to provide safe access and circulation. Pavement markings, signage, and other distinctions shall be maintained in a visible and legible manner.

B. Garages

The following standards shall apply to all private residential garages within the planning area:

1. Garages shall provide a minimum of two (2) parking spaces. Spaces may be provided in either side-by-side or tandem configurations.

2. Each interior garage parking space shall maintain an unobstructed dimension of 20 feet long and 10 feet wide with a minimal vertical clearance of seven (7) feet, except the front three (3) feet of a parking space located at the front of the garage may have a vertical clearance of four (4) feet.

3. Garages shall be designed to provide adequate storage for three (3) waste carts. Waste carts storage space shall not encroach into the required parking space area.

4. Garage spaces shall be used for parking and not storage, which shall be enforced through the Community's Covenants, Conditions, & Restrictions (CC&Rs)

C. Guest Parking

The following standards shall apply to all guest parking within the planning area:

1. A maximum of 0.33 guest spaces per unit shall be required. Calculations for the required number of spaces shall be rounded up to the nearest whole number.

2. Parking Space dimensions shall be provided as follows:

    a. Perpendicular guest parking spaces shall have a minimum dimension of nine (9) feet wide by 18 feet long. Bumper guards or wheel stops shall be provided in such a manner as to ensure that no portion of any parked vehicle shall touch any wall, fence, building or project beyond any lot lines bounding a parking area facility. In lieu of bumper guards or wheel stops, the paved parking space length may be decreased by up to two (2) feet by providing an equivalent vehicle overhang into landscape areas or paved walkways. Such overhang area shall not be considered as part of any open space requirement. In no case shall such overhang be considered part of a required walkway or sidewalk width.

    b. Parallel guest spaces shall provide a minimum dimension of nine (9) feet wide by 22 feet long. End spaces may be reduced to 18 feet long.

3. Guest parking spaces shall be evenly distributed throughout the planning area, designed to occur along Private Drives, or divided into small landscaped parking courts to avoid the creation of large parking lots.

4. Parking shall not be permitted within setback to North Las Posas Road and West Mission Boulevard and should be located behind buildings and interior to the planning area such that parking visibility is minimized from the public right-of-way.

5. To provide shade and reduce heat island effect, rows of new parking shall be broken up with tree planters provided at a minimum of one (1) tree for every five (5) parking spaces. Tree planters shall have a minimum interior dimension of five (5) feet. Trees shall be a minimum 24-inch box size and shall be designed to achieve a goal of fifty percent (50%) shade requirement within fifteen (15) years of planting. Landscape irrigation shall be provided per the requirements of the City of San Marcos Water Efficient Landscape Standards.

6. At least one (1) guest space shall be reserved for United States Postal Service and other delivery trucks. This delivery space shall be located in convenient proximity to grouped mailboxes.

7. Designated parking spaces for the disabled shall be provided in compliance with state law (Title 24) and the California Vehicle Code (Section 22507.8), including required number of parking spaces and design requirements.

D. Bicycle Parking

The following standards promote the use of bicycles and e-bikes as an alternative to single occupancy vehicle use in accordance with Specific Plan Objective 7:

1. Each home shall provide a minimum of one (1) secure and weatherproof bicycle parking space or as otherwise required by CalGreen, whichever is more stringent. Space may be provided within a garage, locker, or accessible indoor area.

2. Provide guest bicycle parking at a ratio of one (1) bike per 12 units or as otherwise required by CalGreen, whichever is more stringent. Guest parking shall consist of permanently anchored bicycle racks or other secure bicycle parking in a location readily visible to passers-by. Wave racks are not allowed.

E. Electric Vehicle Parking and Charging

The following standards implement Measure T-2 of the Climate Action Plan to support and promote the use of electric vehicles:

1. A minimum of six percent (6%) of the guest parking spaces required shall be equipped with EV charging stations or as otherwise required by CalGreen, whichever is more stringent. Calculations for the required number of spaces shall be rounded up to the nearest whole number.

2. Garages shall be equipped with electric vehicle charging infrastructure in accordance with CalGreen.

3. Charging stations/spaces shall be posted with signage indicating the space is only for electric vehicle charging purposes. Days and hours of operations shall be included if time limits or tow away provisions are to be enforced by the owner. Information identifying voltage and amperage levels or safety information must be posted.

4. Charging stations/spaces shall not interfere with on-site parking or pedestrian circulation.

5. Charging stations/spaces shall be maintained in functioning order in all respects.

2.2.2. Open Space

In accordance with the SMMC, new multi-family residential developments are required to provide both Private and Common Open Space:

A. Private Open Space

Private open space is defined as open space areas intended for the private use of individual dwelling units. Private Open Space areas shall be subject to the following requirements:

1. Private open space shall be directly accessible from the interior living space of the unit it is intended to serve.

2. Private open spaces shall be located on the same floor as the primary living area to maximize usability.

3. Private open space shall not be used for storage.

B. Common Open Space

Common open space areas are commonly owed for the benefit of all planning area residents and their guests. The following standards shall apply to all common open space areas to ensure that adequate landscaping and amenities are provided to support a high quality of life. Please also refer to Chapter 4.

1. An area equal to 30% of the total livable ground floor area of all units shall be provided as usable common open space.

2. Parking areas, private roads and driveways, private open space areas, and areas with slope exceeding ten percent (10%) shall not be considered usable open space.

3. Walkways and bike paths may be used in the calculation of common open space.

4. At least three (3) children's play area shall be provided within a common open space area. The children's play area shall meet the following requirements:

    a. A minimum area of 400 square feet of usable area.

    b. Effectively buffered and/or fenced from adjacent street and parking areas

    c. Equipped with at least two (2) of the following Elements: sandbox, climb bars/structure, a slide, swings, seesaw or other appropriate play equipment.

5. In addition to the children's play area, at least three (3) of the following recreational amenities shall be provided:

    a. Additional children's play area or tot lot

    b. Picnic space(s) with gas barbecue/outdoor kitchen

    c. Off-leash pet area/dog park

    d. Garden (community, meditation, or similar)

    e. Outdoor exercise equipment

    f. Ping pong table

    g. Lawn game(s) such as cornhole, bocce ball, horseshoes or similar

    h. Community outdoor fireplace

    i. Other appropriate uses as approved by the Director

6. Recreational amenities shall be located and/or designed to minimize noise and visual conflicts from adjacent properties.

7. Amenities shall be distributed throughout the site and should be selected to cater to diverse range of interests and lifestyles including pet owners, young families, singles and more. Spaces should be provided that offer opportunities to play, socialize, exercise, and/or relax.

2.2.3. Wall and Fence Regulations

The review of walls and fences shall be an integral part of any site plan, permit, or Site Development Plan Review application. Compliance with all wall and fence regulations contained herein shall be required. All retaining walls are subject to SMMC and City of San Marcos Engineering Standards.

a. Development within the planning shall be designed to minimize walls and fences to support an open and walkable community.

b. No walls or fences in excess of four (4) feet in height are permitted within the required setbacks to North Las Posas Road and West Mission Road. All other walls and fences shall not exceed six (6) feet in height. Decorative Pilasters shall be provided and spaced a maximum of 50 feet apart. Decorative Pilasters may exceed the maximum permitted height by up to one (1) foot. Taller walls and fences are permitted for retaining or sound attenuation purposes.

c. The height of all walls, fences, and architectural screening elements shall be measured from the finished grade at the base of the wall to the highest point of the element.

d. Where additional height is needed based on security or specific site operating requirements, additional wall/fence height may be approved through a DP, subject to evaluation of adjacencies and necessity.

e. Walls, fences, and architectural screening elements shall be compatible with the architectural treatment of the primary building on the parcel.

f. No wall, fence, or landscaping element shall interfere with intersection visibility, line of sight, or other safety issue.

g. Blank walls are prohibited. Where screening or security walls (excluding wrought iron or other "open" fence types) are located within ten (10) feet of a public right-of-way, landscaping shall be provided between the wall and the right-of-way to a minimum height of four (4) feet to minimize opportunities for crime and unsafe conditions.

h. Approved materials include wood, vinyl, stone, masonry, brick, block, stucco, wrought iron/steel, concrete. Comparable materials are permitted subject to approval of the Director.

i. Prohibited materials include barbed, razor, concertina, corrugated metal and plastic, tarps, and electrified wire of any kind or configuration. Chain-link fencing and similar material are prohibited along any public right-of-way regardless of setback unless required by a public agency. Where chain-link is required, it shall be black vinyl coated.

2.2.4. Landscaping Regulations

All open space areas shall be landscaped in accordance with the City of San Marcos' Water Efficient Landscape Standards. All required landscaping shall be permanently maintained in a healthy and thriving condition, free from weeds, trash, and debris.

Landscape screening shall be provided along at the top of the drainage channel slope to preserve the privacy of adjacent neighbors.

2.2.5. Lighting Regulations

Lighting fixtures shall be directed and shielded so as not to illuminate surrounding properties and to reduce glare. All lighting shall comply with the following standards, as verified through a photometric study as part of construction documents:

j. Parking areas shall be illuminated to levels that achieve a uniform ratio of three to one (3:1) (average to minimum) and maintain an average of one (1) foot candle, with a minimum of one-half (1/2) foot candle.

k. Perimeter lighting, not affiliated with the lighting of parking lots, shall not exceed one-half (1/2) foot candle at any point along the property line of the subject or adjacent parcel.

2.2.6. Signs

Signs are permitted within the Specific Plan planning area and shall be subject to the City of San Marcos sign code except as described herein. A permit shall only be required when the sign qualifies as a "structure" under the Building Code or SMMC.

Up to one (1) Monument Sign is permitted at each community entry. Monument signs shall be subject to the following requirements:

l. Each monument sign shall not to exceed six (6) feet in height. Any accent pilaster(s) may exceed this height by up to one (1) foot.

m. The sign face for each monument sign, exclusive of any decorative pilaster(s) or sign base, shall not exceed a maximum area of 50 square feet.

n. Monument signs shall be set back a minimum of five (5) feet from any property line, subject to Engineering Division approval.

o. Monument signs shall not interfere with intersection visibility, line of sight or other safety issue.

3 - Architectural Design

3.0. Applicability

Design guidelines are provided to supplement and enhance development standards and regulations as a means to ensure high quality design. Unlike development standards and regulations, design guidelines are intended to be more flexible to allow designers creativity in achieving the design intent and vision for the planning area. While designers are encouraged to adhere to the guidelines contained herein, they are also encouraged to pursue creative designs. Creative designs may not always fit exactly within the guidelines contained herein but are permitted when the Director determines that a particular design offers an equal or superior solution that supports the high-quality urban living environment envisioned by the Specific Plan.

3.1. Architectural Styles

The architectural style or styles of buildings within a community strongly define a community's character. To create successful communities, architectural design must embody methods that are flexible enough to meet the changing needs of the consumer market yet, must also be visually pleasing and complementary to the surrounding neighborhood. Gran Vista provides a transition between the traditional architectural styles founds in the single-family uses to the north, east, and west and the contemporary styles found in urban uses to the south. As such, the architectural style at Gran Vista should reflect a "transitional" style of architecture that draws inspiration from both traditional vernaculars as well as contemporary influences to blend with the existing fabric of the surrounding neighborhood. The architectural style proposed by the Gran Vista Specific Plan should be selected based on the historic and current popularity with homeowners in California.

The Gran Vista community is made up of multiple building types. This variation in building types provides diversity between buildings withing the planning area. The eight-plex (8-plex) building occurs over ten times within the community; therefore, additional variation is required and can be achieved through the design of at last two (2) architectural sub-styles. Examples of two (2) acceptable architectural sub-styles are provided below:

- Transitional Craftsman blends classic elements from the Craftsman vernacular with modern construction techniques. Simple massing with a combination of hipped and gabled roof forms are accentuated with stylistic features found in traditional craftsman homes such as decorative (faux) beams, stone or brick veneer at the ground floor, and stucco and board and batten wall materials.

- Transitional Farmhouse style blends classic elements from the Farmhouse vernacular with contemporary design features. Simple massing with hipped roof forms are accentuated with stylistic features found in a traditional Farmhouse homes such as vertical railing and double wood posts at decks, stucco with lap siding, and brick accents.

These substyles combined with a minimum of four (4) color schemes, similar to those presented later in this chapter, will work together to create diversity throughout the community.

It should be noted that architecture within the planning area should not be limited to only the styles presented herein. Additional transitional architectural sub-styles not represented in this chapter are permitted within the planning area so long as any proposed architecture is found to be an appropriate design by the City of San Marcos Development Services Department and consistent with design guidelines set forth in the sections below.

3.2 Floor Plans and Elevations

Floor plans should be designed to provide a variety of floor plans that offer different price points for varying income levels. Floor plans range from two (2) to three (3) bedrooms and have an office, niche, or flex space to support working from home. The Specific Plan proposes three (3) floor plans and four (4) building types. Floor plans area summarized in Table 3.1. Conceptual Floor Plan Summary and building types are summarized in Table 3.2. Building Type Summary. Final configurations will be approved by the City of San Marcos Development Services Department.

Table 3.1. Conceptual Floor Plan Summary

Plan No.	Square Footage	Bedroom Count	Garage Configuration	Unit Count
2532	1213	2	2-car, Side-by-Side	30
1633	1505	3	2-car, Tandem	45
1636	1802	3	2-car, Side-by-Side	45
Total				**120**

Table 3.2. Building Type Summary

Building Type	Plan 2532	Plan 1633	Plan 1632	Total Units per Building	Total Number of Buildings
401	2	1	1	4	2
601	0	3	3	6	2
801	2	3	3	8	30
1001	2	4	4	10	1
Total					**16**

The conceptual location for each building type is illustrated Figure 3.1. Conceptual Plotting Plan. Conceptual floor plans and two (2) conceptual transitional elevation sub-styles are illustrated in Figures 3.2.1. through 3.2.11. Sub-styles have Craftsman or Farmhouse influences expressed in contemporary interpretation. The "A" elevation has Farmhouse influences with a varying hip roof forms and composition shingle roofing materials. Primary wall materials are stucco with lap siding and brick accents. Additional details include vertical railing and double wood posts at decks. The "B" elevation has Craftsman influences with a combination of gable and hip roof forms and composition shingle roofing. Gables are accessed with decorative (faux) beams. Primary wall materials are stucco with board and batten siding with horizontal banding and stone accents. Colors create strong contrast to further articulate the massing of the building while being compatible as a theme throughout the community.

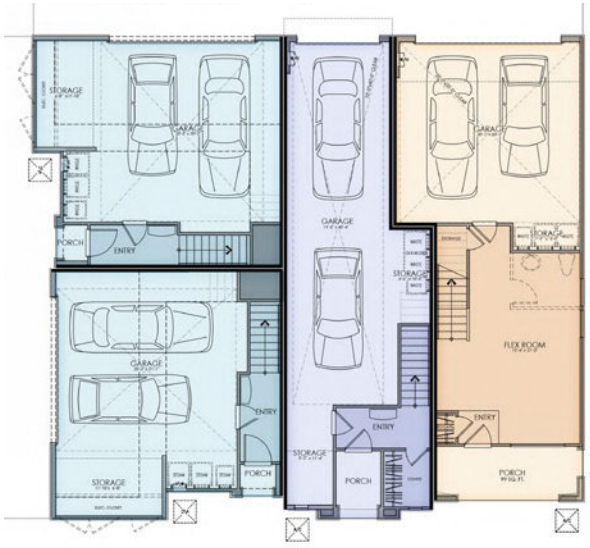
3.3 Massing and Scale

Massing and scale provide the visual identity between residential dwelling units and the environment. Those qualities help dictate the placement, size, and form for multi-family residential buildings within the planning area. Building type placement within the planning area was studied to achieve the best possible groupings as well as providing transition massing between the neighboring single-family homes and CVS, thereby enhancing the visual character of the neighborhood. Incorporation of the following design concepts should be considered for the architecture within the planning area:

- Utilize building-form elements, such as plane breaks, roof forms, and changes in material to define individual units.
- Vertically and horizontally articulate building design for both front and rear elevations.
- Break up long unbroken surfaces on front elevations by providing a change in plane at least every 25 feet.
- Break up long unbroken surfaces on rear elevations by provide second/third floor cantilevers over every other garage door.



Figure 3.1. Conceptual Plotting Plan



First Floor



Second Floor



Third Floor

Legend

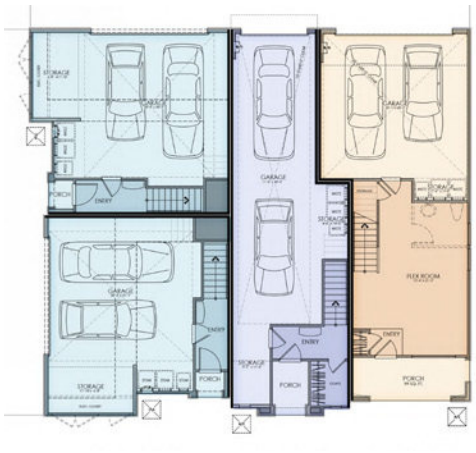
Plan 2532
- 1,213 SF Net
- 1,125 SF Gross
- 2 Bedroom
- 2.5 Bath

Plan 1633
- 1,505 SF Net
- 1,350 SF Gross
- 3 Bedroom
- 3 Bath

Plan 1636
- 1,802 SF Net
- 1,689 SF Gross
- 3 Bedroom
- 3 Bath
- Office
- Flex Room
- Adaptable Ground-Floor Bath (ADA)

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Figure 3.2.1. Conceptual Architecture - Floor Plans



First Floor



Second Floor



Third Floor

Figure 3.2.2. Conceptual Architecture - 4-plex Building Floor Plan

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Front



Rear



Right



Left

Figure 3.2.3. Conceptual Architecture - 4-plex Building Elevation



First Floor



Second Floor



Third Floor

Figure 3.2.4. Conceptual Architecture - 6-plex Building Floor Plan

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Front



Rear

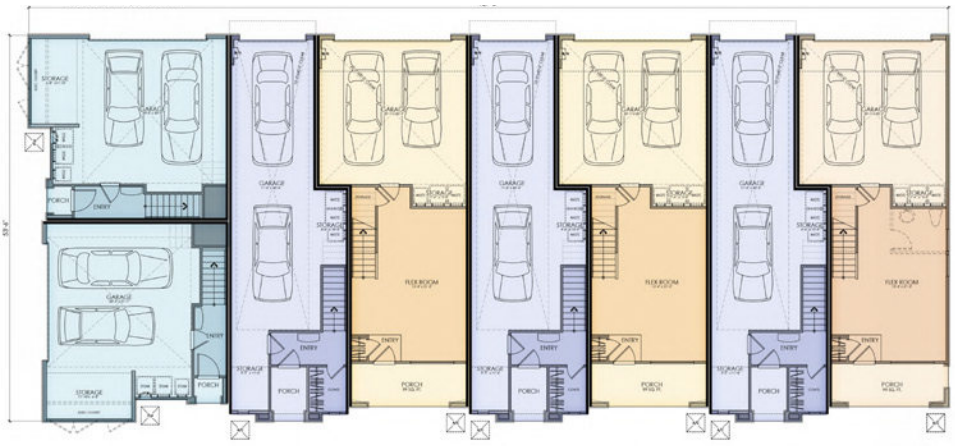


Right



Left

Figure 3.2.5. Conceptual Architecture - 6-plex Building Elevation



First Floor



Second Floor



Third Floor

Figure 3.2.6. Conceptual Architecture - 8-plex Building Floor Plan

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Front



Rear



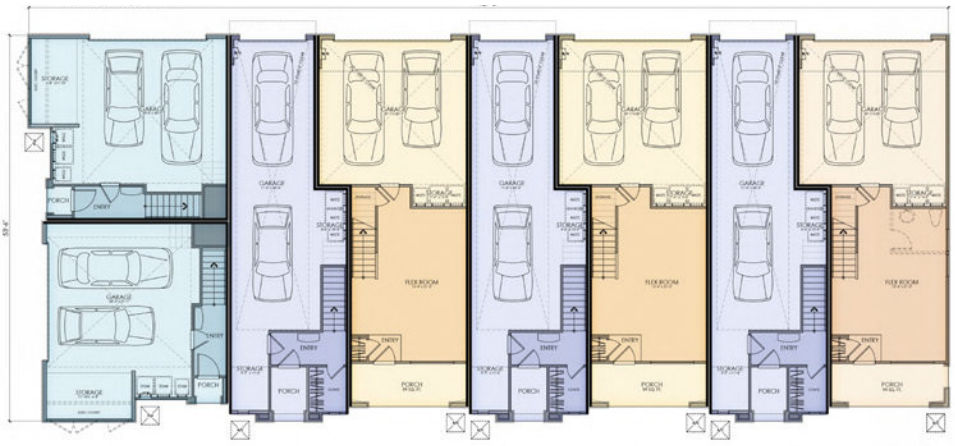
Right



Left

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Figure 3.2.7. Conceptual Architecture - 8-plex Building Elevation "A"



First Floor



Second Floor



Third Floor

Figure 3.2.8. Conceptual Architecture - 8-plex Building Floor Plan

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Front



Rear



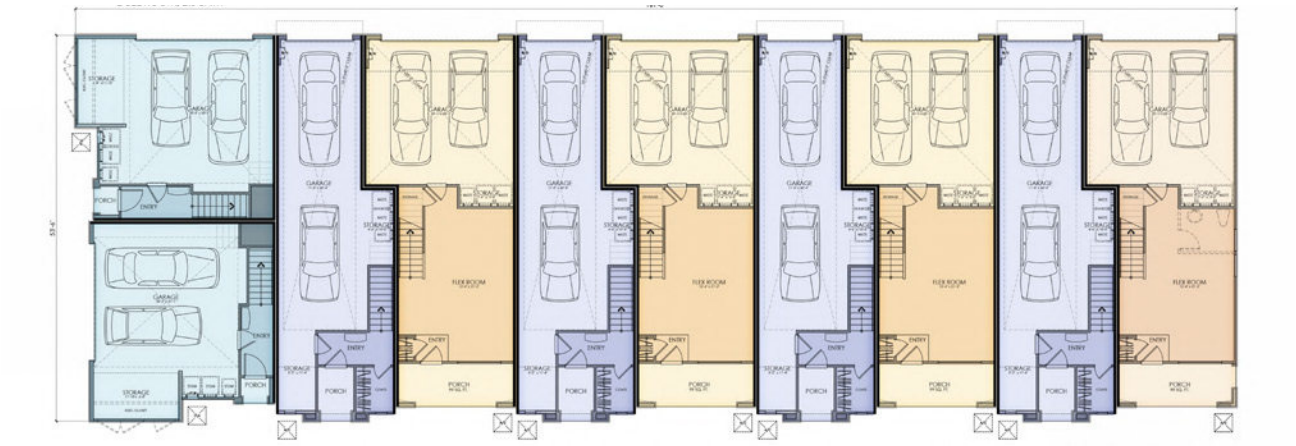
Right



Left

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Figure 3.2.9. Conceptual Architecture - 8-plex Building Elevation "B"



First Floor



Second Floor



Third Floor

Figure 3.2.10. Conceptual Architecture - 10-plex Building Floor Plan

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Front



Rear



Right



Left

Figure 3.2.11. Conceptual Architecture - 10-plex Building Elevation

3.4 Building Materials, Accents and Colors

Materials are a key factor in defining architectural styles, convey a sense of quality, and contribute to the community's character. Building color is an integral component in unifying buildings, creating variation of street scape, and building on the foundation of the community aesthetic. The following guidelines should be considered when sleeting materials and colors:

- Select material and colors that are appropriate for each facade, and contribute to enhancing the neighborhoods visual theme, match the theme of the specific style of home to which they are applied.
- Use materials and colors to accentuate changes in massing, define individual units, and complement architectural materials and features.
- Choose colors and materials that complement each other, complement neighboring developments, and add depth to the community.
- Avoid materials and colors that significantly clash with the surrounding neighborhood.
- Avoid the use of identical color palettes where possible for adjacent buildings,
- Use colors palettes to distinguish individual buildings within the planning area and improve the visual interest of streetscapes.
- Appropriate materials include wood, stone veneer, stucco, and brick. Metal accents and trims are acceptable within the planning area.
- Choose colors to achieve a reasonable representation of a particular architectural style lending authenticity to the final product.
- Accents colors should complement the palette of the main structure.

Figure 3.3.1 through 3.3.4 provide conceptual color and materials schemes chosen to accompany the architecture shown in Figures 3.2.1. through 3.2.11.; however, alternative materials and colors may be allowed so long as they are determined to be acceptable by the Development Services Department.



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Figure 3.3.1. Color and Material Scheme 1

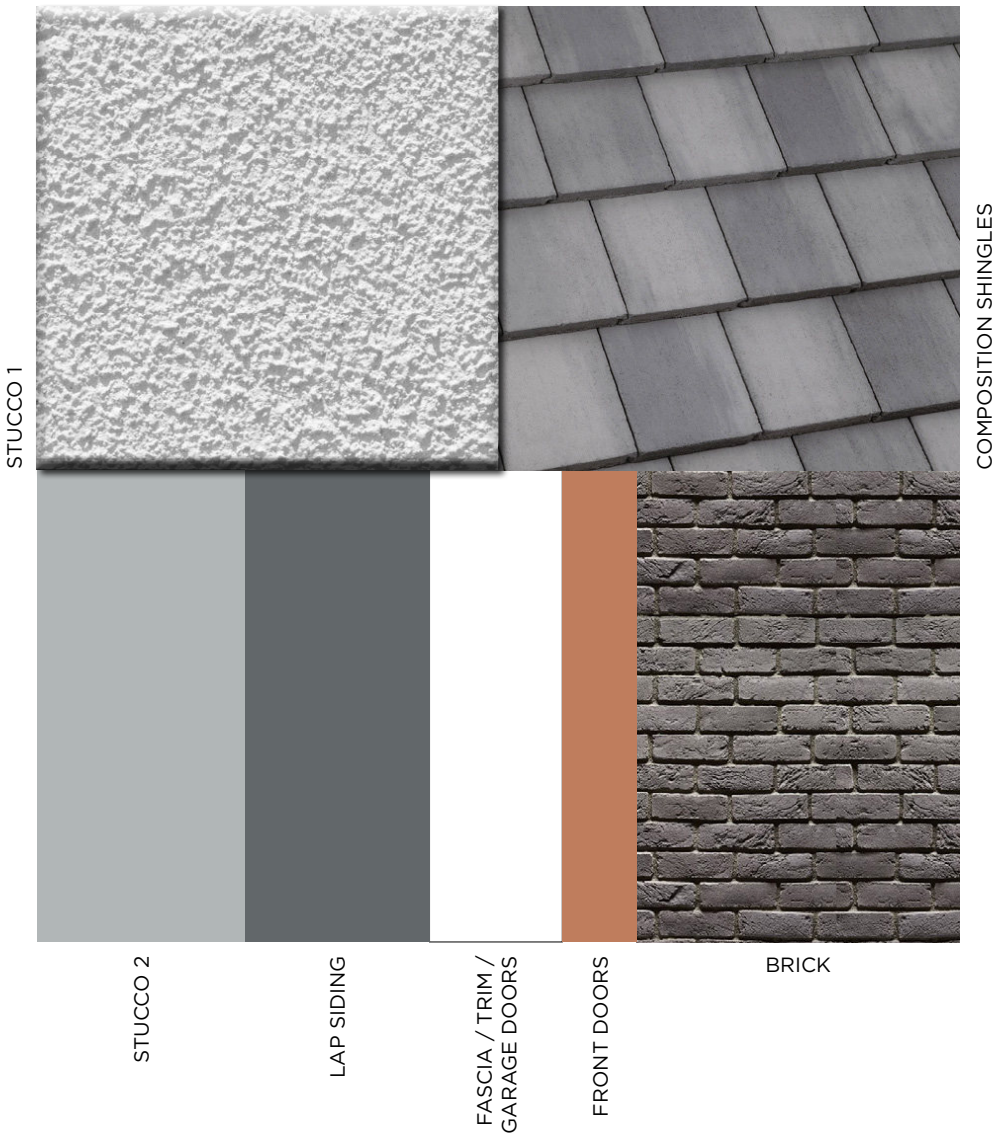


Figure 3.3.2. Color and Material Scheme 2

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Figure 3.3.3. Color and Material Scheme 3

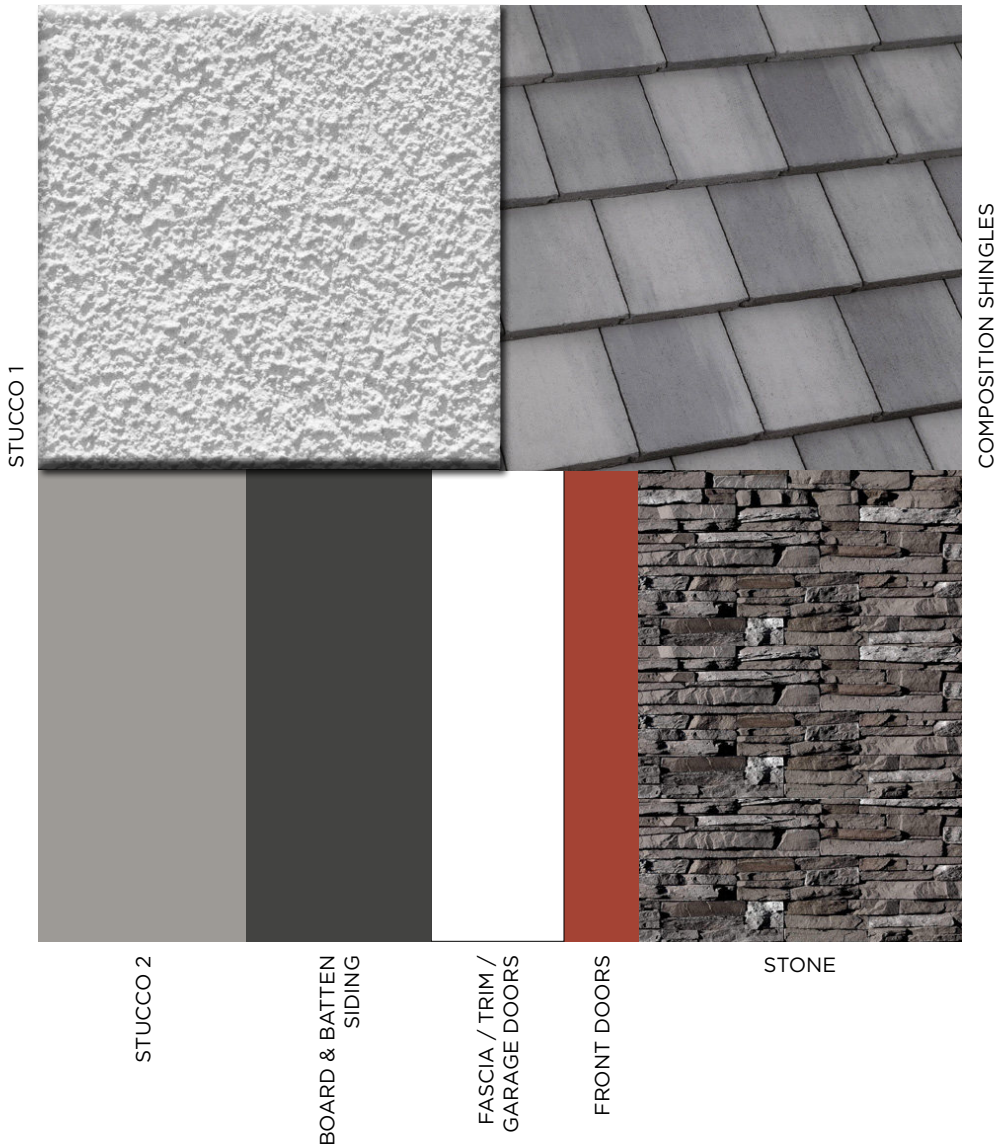


Figure 3.3.4. Color and Material Scheme 4

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4 - Open Space Design

4.0. Overview

Landscaping and amenities are important components in developing and maintaining a livable, enjoyable, and comfortable residential community. As such, Objective 2 of this Specific Plan seeks to "Create a highly connected and efficient system of sidewalks and pathways supported by pedestrian friendly architecture and landscaping to promot walkability and connect people to surrounding transit and destinations." Additionally, Obejctive 5 of this Specific Plan seeks to "Establish development standards and design guidelines that ensure distinctive architecture, landscaping, and recreational amenities that complement and enhance the existing surrounding neighborhood while providing a desirable living environment."

4.1 Types of Open Space

Figure 4.1. Conceptual Open Space Plan identifies the various types and distribution of open space proposed by this Specific Plan. As summarized in Table 4.1. Open Space Summary, open space has been subdivided into three (3) categories: private open space, open space with grades of 10% or greater, and common open space. Total open space for the planning area is approximately 154,743 square feet (3.55 acres), equal to approximately 47% of the Specific Plan planning area.

Table 4.1. Open Space Summary

Type of Open Space	Total Provided (SF)	% of Specific Plan Planning Area
Private[1]	17,550	5.3%
Open space with grades of $\geq$ 10%	44,548	13.5%
Common Open space	92,645	28%
Total	**154,743**	**46.8%**

1. Private open space is encompassed within the use area of single family attached per Table 2.2.

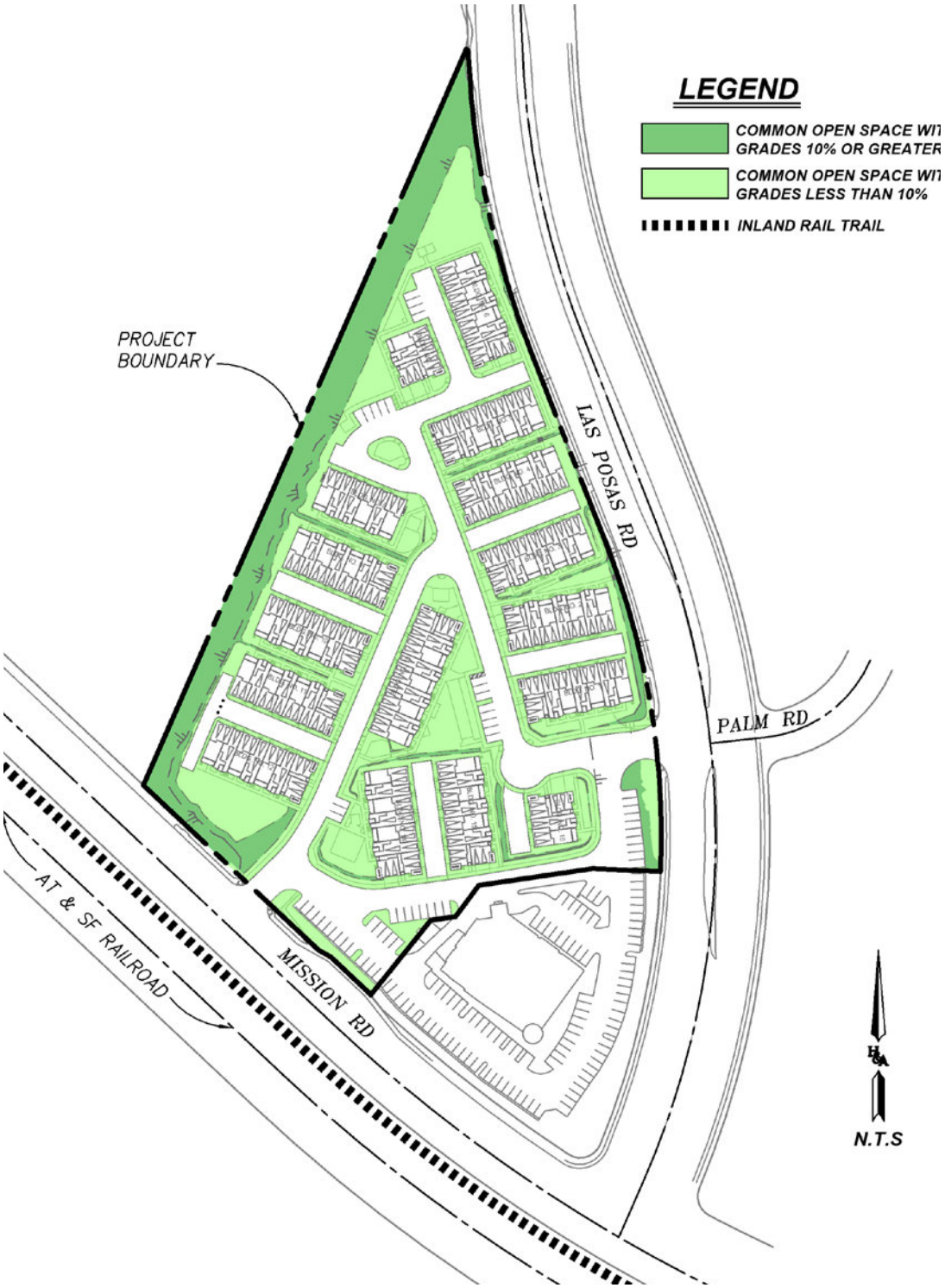


Figure 4.1. Conceptual Open Space Plan

4.1.1 Private Open Space

Private open space is defined as open space areas intended for the private use of individual dwelling units. Private open space should by directly accessible from the primary interior living space of the unit it is intended to serve to ensure the outdoor space is easily accessible and usable. Private open space has been provided in the form of a porch on the ground floor and a balcony on the second floor adjacent to the second-floor living, kitchen, and dining area. The size of each area is listed in Table 4.2. Private Open Space Summary.

Table 4.2. Private Open Space Summary

Plan No.	Porch (SF)	Balcony (SF)	Total SF per Unit	No. Of Units	Total SF for Project
2532	14	73	87	30	2,610
1633	35	99	134	45	6,030
1636	99	99	198	45	8,910
Total					**17,550**

4.1.2 Open Space with Grades of 10% or Greater

According to the City of San Marcos Zoning Ordinance, open space areas with grades of 10% or greater cannot be counted as usable open space. This category includes slopes along the channel and adjacent public roadways. Small slope areas also occur within the paseos that provide access to front doors of the homes. These spaces will be landscaped, commonly owned, and maintained by the Homeowners Association (HOA).

4.1.3 Common Open Space

Common open space includes usable open space areas with grades less than 10%, which encourage relaxation activities such as observing nature, bird watching, painting, photography, and picnicking as well as recreational open space areas such as tot lots, and barbecue areas, outdoor exercise equipment, dog parks, open laws spaces for informal play, and lawn games. This category of open space encourages an active lifestyle which promotes physical activity and community areas that include spaces for people to gather together and socialize.

Pursuant to Table 2.3. and the City of San Marcos Multifamily Residential Development Design Guidelines, an area equal to 30% of livable ground floor area of all units shall be provided as common open space. This equates to 24,431 square feet of common open space required as illustrated in Table 4.3. Common Open Space Summary. Calculations are based on conceptual architecture provided in Chapter 3. Since the main living areas for all floor plans occurs on the second floor, the common open space requirement has been calculated based upon the second floor's square footage. As illustrated in Figure 4.1. Conceptual Open Space Plan, the Specific Plan provides 92,645 square feet of common open space, which exceeds this requirement.

Table 4.3. Common Open Space Summary

Plan No.	Livable Ground Floor Area by Plan	Number of Units	Common Open Space Required (30% Ground Floor Area)	Common Open Space Provided
2532	589	30	5,301	--
1633	688	45	9,288	--
1636	729	45	9,842	--
Total		**120**	**24,431**	**92,645**

4.2. Amenities

The City of San Marcos Multifamily Residential Development Design Guidelines also provides standards for the minimum amount and type of amenities required. Figure 4.2. Conceptual Amenity Plan illustrates the proposed amenities within the planning area.

4.2.1 Children's Amenities

The SMMC provides specific requirements for children's amenities. A minimum of one (1) tot lot for every 25 dwelling units with a minimum of 400 SF of play for each tot lot is required. This would amount to approximately 4.8 tot lots with a total cumulative area of 1,920 SF. Tot lots are to be distributed throughout the planning area. Additionally, projects of 75 units or more must provide an additional usable recreation area and/or facilities that contain a level play area with a minimum area of 800 SF. The requirement for a children's play area plus required tot lots require a total area of 2,720 SF. Table 4.4. Children's Amenities summarizes the children's facilities proposed by the Specific Plan, which are illustrated in Figure 4.3. Conceptual Children's Amenities. Due to the urban character and type of homes proposed within this community, households within the planning area are anticipated to have fewer young children than typical and will include more singles and young couples without children. Therefore, the Gran Vista Specific Plan provides one (1) children's play area and two (2) tot lots with a total combined area of 5,811 SF of multi-age tot lots and play areas. Although the open space provided in this Specific Plan deviates slightly from the SMMC, the Specific Plan provides more overall square footage that would otherwise be required and includes amenities that maximize the potential usage by a broader range of household types.

Table 4.4. Children's Amenities

Facility	Required	Provided
Children Play Area	800 SF	3,434 SF
Tot Lots		
Tot Lot 2	120 du/25 x 400 = 1,920 SF	1,047 SF
Tot Lot 3		1,330 SF
Total	**2,720 SF**	**5,811 SF**



Figure 4.2. Conceptual Amenity Plan

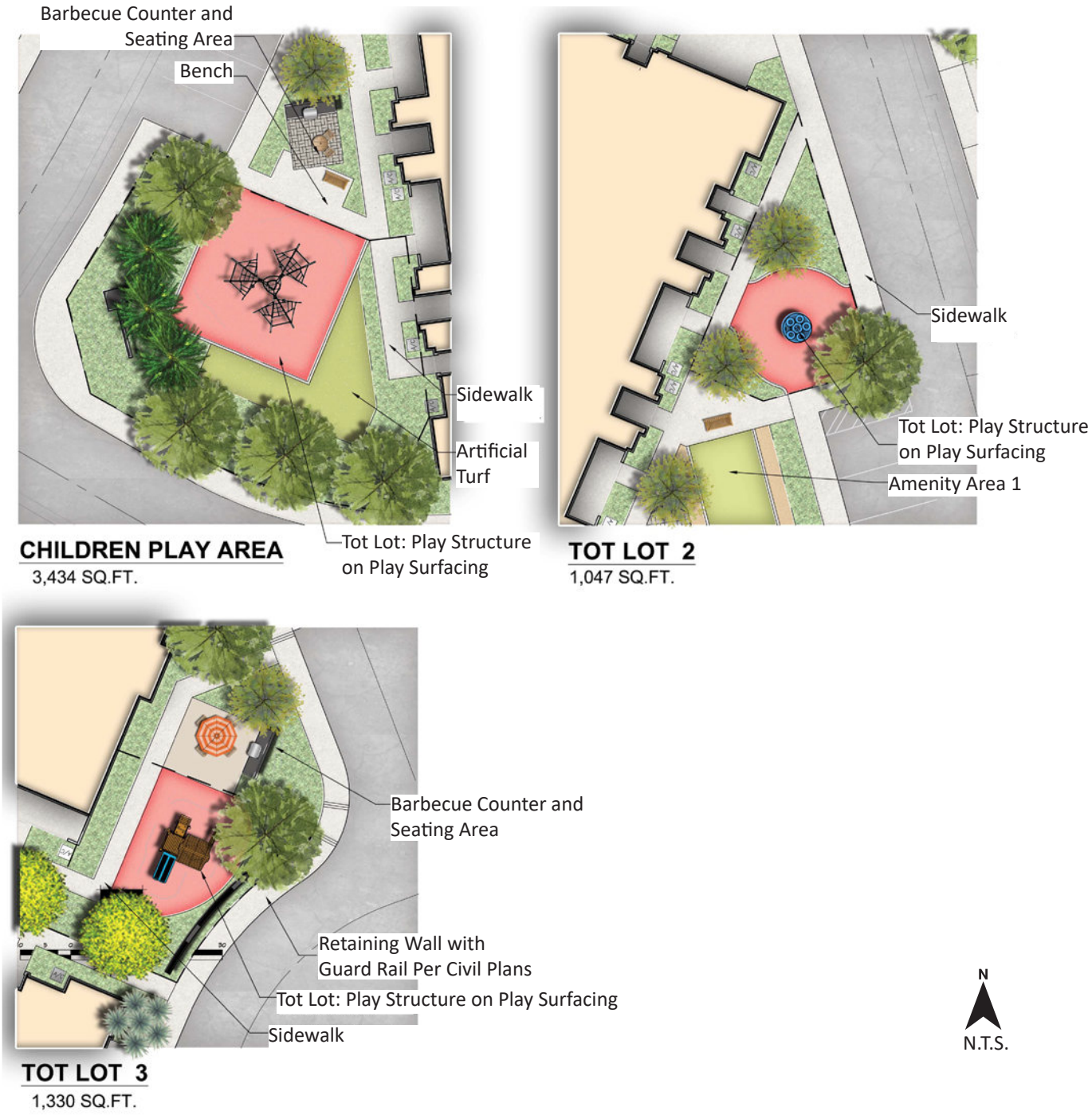


Figure 4.3. Conceptual Children's Amenities

4.2.2. Other Amenities

The SMMC also requires at least three (3) on-site amenities. The list of amenities provided in the SMMC is limited and includes facilities that are traditionally associated with more suburban types of development. In urban infill communities such as Gran Vista, amenities shown in Figure 4.2. Conceptual Amenity Plan are provided to be more flexible in design to allow for a wider range of activities that can appeal to a more diverse demographic including families, singles, and couples without children. For example, in lieu of a community room, which can only serve a single large group at a time, four (4) barbecue areas ranging from large to small are provided throughout the planning area. These spaces can accommodate large groups, such as an HOA meeting, and smaller get-togethers simultaneously. These barbecue areas are also located near children's amenities and other activity spaces to encourage social gathering. In lieu of another playground, an off-leash dog area provides space for dogs to run and play freely, accommodating the needs or residents and families with pets. Formal sport courts are limited to a single sport. Instead, multiple flexible spaces are provided to accommodate a variety of for lawn games such as cornhole and bocce ball or other informal activities such as frisbee, badminton, or similar. Additional amenities include a community garden and exercise stations scattered throughout the planning area to support healthy eating and active lifestyles. These various amenity spaces are detailed in Figures 4.4. through 4.6.

Although the standards for amenities vary from the SMMC, the Specific Plan provides more overall square footage than would otherwise be required and allows a broader range of amenities and experiences that can be used by a wider range of age groups and household types. This diversity and flexibility maximized opportunities for families and friends to interact with each other.

4.3. Walls and Fences

Walls and fences should be designed with a consistent design throughout the community to maintain a feeling of cohesiveness and quality. Wall and fence designs should also complement the adjacent architecture. Figure 4.7. Conceptual Wall and Fence Plan illustrates the location of walls and fences and includes a detail of a conceptual fence design that is consistent with the design theme for the community.

4.4. Lighting

Lighting should be designed to meet the standards in Chapter 2 while also enhancing the aesthetic of the community. The following guidelines apply to lighting within the planning area:

- Provide lighting fixtures with a consistent design throughout the planning area and that are complementary to the design theme of the community.
- Design lighting at a pedestrian scale and to promote safety and security for residents walking at night.
- Lighting attached to buildings should include fixtures that are appropriate to the architectural style of the building.
- Shield lighting to direct light downward, avoid light trespass on surrounding properties, and reduce glare.

Figure 4.8. Conceptual Lighting Plan illustrates lighting designs for the planning area.

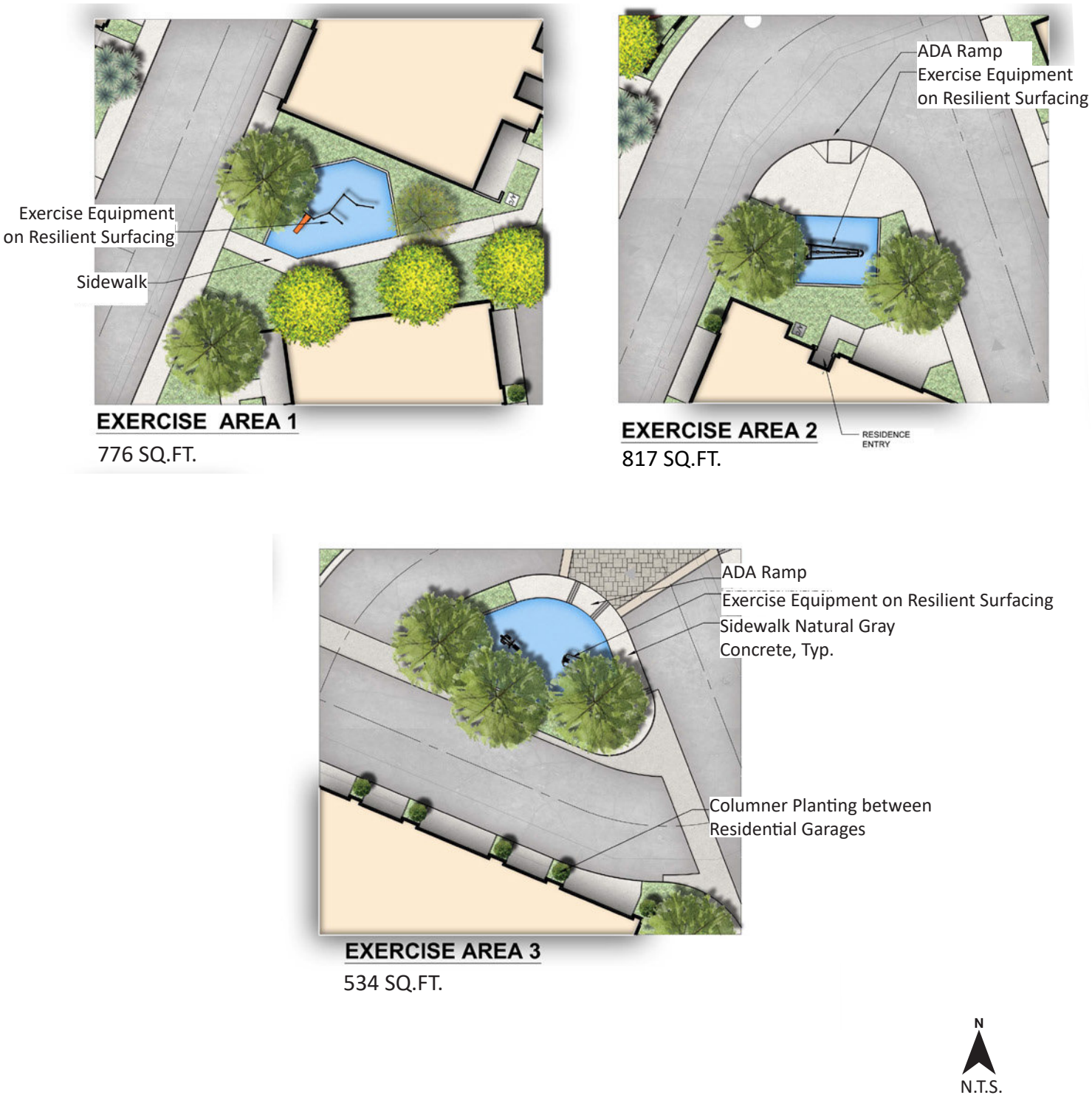


Figure 4.4. Conceptual Exercise Areas

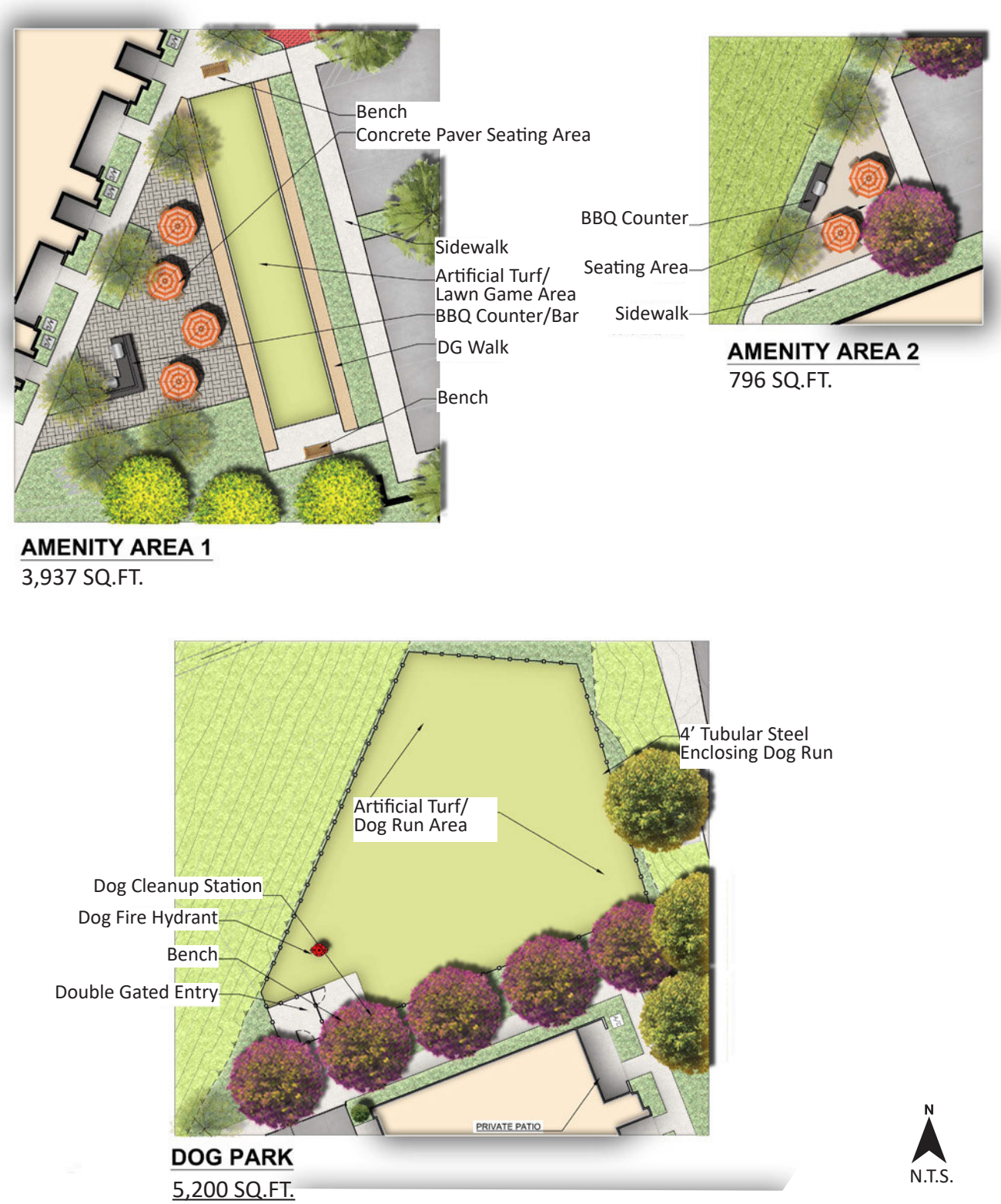


Figure 4.5. Conceptual Dog Park and Amenity Areas

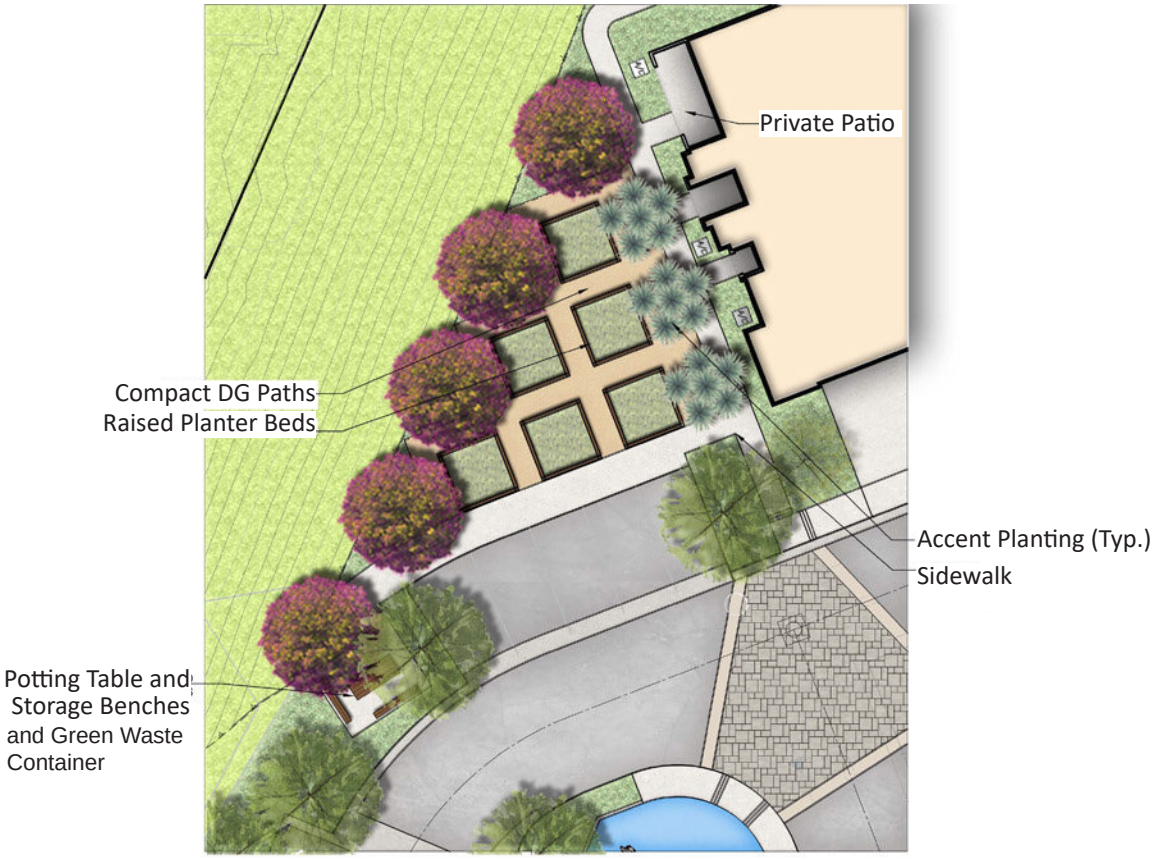


Figure 4.6. Conceptual Community Garden and Turf Play Area

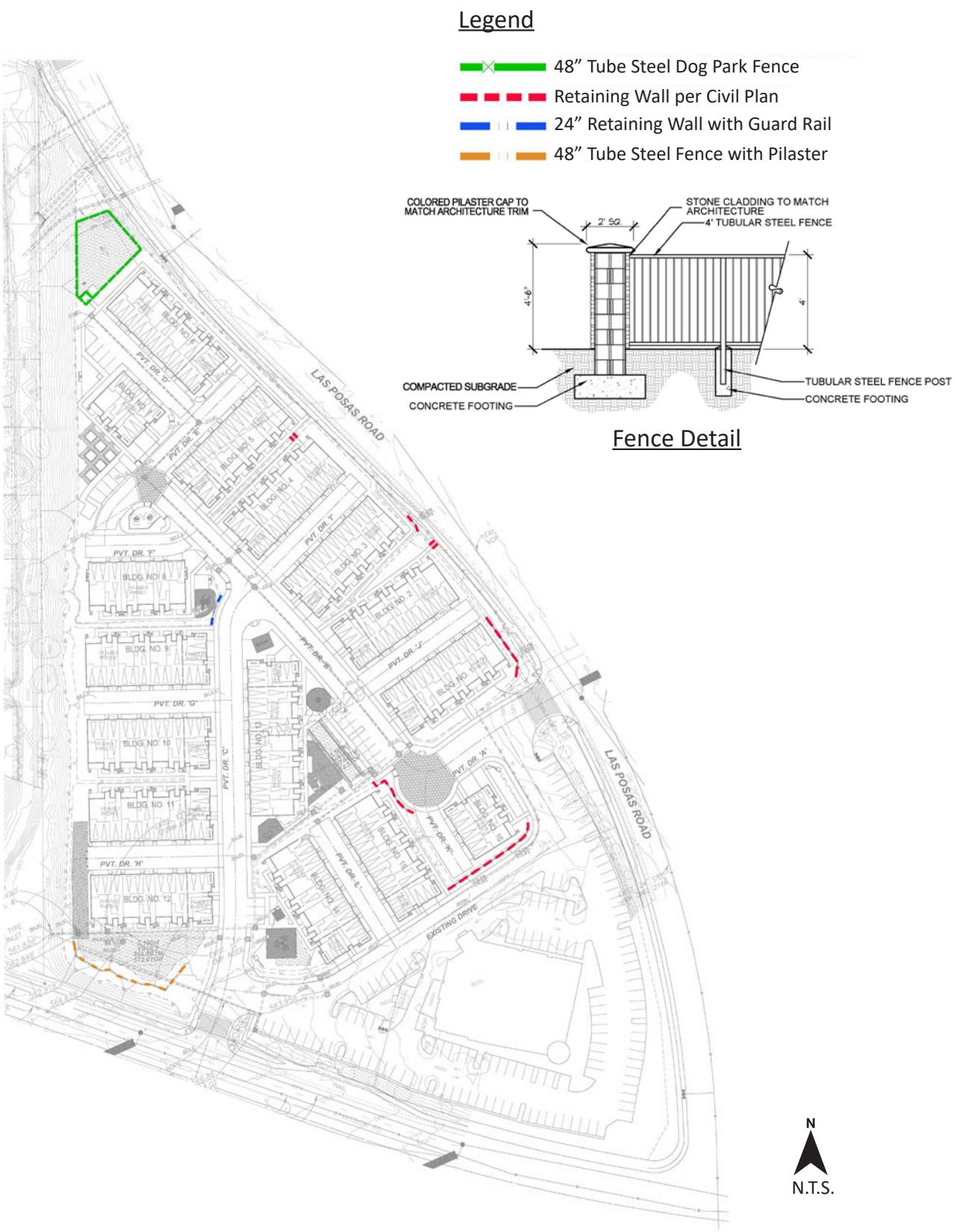


Figure 4.7. Conceptual Wall and Fence Plan



Figure 4.8. Conceptual Lighting Plan

4.5. Signs and Entries

Monument signage announces entry into a community and provides a first impression for visitors. Signage should reflect the design theme of the community and be accentuated with landscaping and lighting. Materials should complement the adjacent architecture by incorporating similar or complementary colors and materials in the monument design. Entry designs should also consider the existing enhanced paving that occurs at both entries. Enhanced paving at entries should be maintained or replaced if necessary to provide an attractive entry for both the Gran Vista community and CVS. Please refer to Figure 4.9. Conceptual Monument Sign for an example of appropriate monument signage.



Figure 4.9. Conceptual Monument Sign

4.6. Landscaping

Along with architecture, landscaping helps form an identity and theme for development. Landscaping works together with the architecture to create an attractive neighborhood, which is both functional and water efficient. To assure development of a cohesive community, the following landscape guidelines have been provided. A landscape concept for the project can be seen on Figure 4.10. Illustrative Landscape Plan. Developers and/or builders should use the following information when designing and selecting materials and lighting within the planning area. All landscaping shall comply with the City's Model Water Efficient Landscape Ordinance and the City of San Marcos Landscape Manual. Final landscape design shall be approved by City of San Marcos Development Services Department.

Table 4.5.1. and 4.5.2 provides plant material palette for developer/builder to use when selecting landscape materials for various locations such as entries, streetscapes, and common open space areas. Plant materials selected for the planning area should be chosen based on a multitude of factors and should strengthen the overall character of the community. This palette utilizes drought tolerant and California native plant palettes. Plants have been chosen for their appropriateness to the planning area design, local climate tolerance, soil conditions, and level of maintenance intensity. The selected plants are well suited to the local soils and have proven to flourish within the project area's climate. The plant materials are tolerant of a wide range of temperatures and require very little water consumption. No invasive plant species shall be used. All street trees planted within 10 feet of public improvements shall have root barriers. Plant palettes should be considered fluid and subject to change, with final approval determined by the City of San Marcos Development Services Department. Alternative plants and trees similar in tolerance and water usage to the conceptual list provided may be approved with a Minor Deviation (see Section 7.2.6.).



Figure 4.10. Illustrative Landscape Plan

Table 4.5.1. Planting Palette - Trees

TREES			
LATIN NAME	COMMON NAME	MATURE HEIGHT AND SPREAD	PLANTING SIZE
COLUMNAR			
PITTOSPORUM TENUIFOLIUM 'SILVER SHEEN'	SILVER SHEEN TAWHIWHI	H 12' x S 6'	15 GAL
PODOCARPUS MACROPHYLLUS 'MAKI'	MAKI PODOCARPUS	H 9' x S 4'	15 GAL
COMMON AREA/ACCENT			
ALOE BAINESII	TREE ALOE	H 25' x S 10'	24" BOX
CHILOPSIS LINEARIS	DESERT WILLOW	H 25' x S 20'	24" BOX
DRACAENA DRACO	DRAGON TREE	H 25' x S 20'	24" BOX
OLEA EUROPAEA 'SWAN HILL' TM	SWAN HILL OLIVE	H 25' x S 20'	24" BOX
PARKINSONIA X 'DESERT MUSEUM'	DESERT MUSEUM PALO VERDE	H 25' x S 20'	24" BOX
RHUS LANCEA	AFRICAN SUMAC	H 25' x S 20'	24" BOX
SLOPE			
ARBUTUS X 'MARINA'	MARINA STRAWBERRY TREE	H 25' x S 25'	15 GAL
PLATANUS RACEMOSA	CALIFORNIA SYCAMORE	H 60' x S 30'	15 GAL
QUERCUS AGRIFOLIA	COAST LIVE OAK	H 50' x S 40'	15 GAL
STREET TREES			
CINNAMOMUM CAMPHORA	CAMPHOR TREE	H 40' x S 30'	24" BOX
RHUS LANCEA	AFRICAN SUMAC	H 25' x S 20'	24" BOX
PALMS			
PHOENIX DACTYLIFERA `MEDJOOL`	MEDJOOL DATE PALM	H 50' x S 40'	12` BTH
WASHINGTONIA FILIFERA	CALIFORNIA FAN PALM	H 50' x S 20'	12` BTH

Table 4.5.2. Planting Palette - Shrubs and Groundcover

SHRUBS			
LATIN NAME	COMMON NAME	MATURE HEIGHT AND SPREAD	PLANTING SIZE
MEDIUM SHRUBS			
BOUGAINVILLEA X `LA JOLLA`	BOUGAINVILLEA		5 GAL/1 GAL
CALLISTEMON V. `LITTLE JOHN`	DWARF WEEPING BOTTLEBRUSH		5 GAL/1 GAL
CARISSA M. `TOMLINSON`	TOMLINSON NATAL PLUM		5 GAL/1 GAL
LIGUSTRUM J. `TEXANUM`	WAX LEAF PRIVET		5 GAL/1 GAL
ROSMARINUS O. `TUSCAN BLUE`	TUSCAN BLUE ROSEMARY		5 GAL/1 GAL
ACCENT SHRUBS			
AGAVE ATTENUATA	FOXTAIL AGAVE		5 GAL/1 GAL
AGAVE VILMORINIANA	OCTOPUS AGAVE		5 GAL/1 GAL
ALOE GLAUCA	BLUE ALOE		5 GAL/1 GAL
ANIGOZANTHOS X 'BUSH GOLD'	BUSH GOLD KANGAROO PAW		5 GAL/1 GAL
DASYLIRION WHEELERI	GREY DESERT SPOON		5 GAL/1 GAL
EUPHORBIA INGENS	CANDELABRA TREE		5 GAL/1 GAL
SMALL SHRUBS			
ALOE STRIATA	CORAL ALOE		5 GAL/1 GAL
CARISSA MACROCARPA 'TUTTLEI'	TUTTLE NATAL PLUM		5 GAL/1 GAL
DIANELLA C. `CASSA BLUE`	CASSA BLUE FLAX LILY		5 GAL/1 GAL
DIANELLA T. `VARIEGATA`	FLAX LILY		5 GAL/1 GAL
SLOPE SHRUBS			
ARCTOSTAPHYLOS HOOKERI	HOOKER'S MANZANITA		5 GAL/1 GAL
CEANOTHUS PROSTRATUS	MAHALA MAT		5 GAL/1 GAL
CISTUS X PURPUREUS	ORCHID ROCKROSE		5 GAL/1 GAL
ENCELIA CALIFORNICA	CALIFORNIA ENCELIA		5 GAL/1 GAL
LANTANA MONTEVIDENSIS	TRAILING LANTANA		5 GAL/1 GAL
RHUS INTEGRIFOLIA	LEMONADE BERRY		5 GAL/1 GAL

GROUNDCOVER			
LATIN NAME	COMMON NAME	MATURE HEIGHT AND SPREAD	PLANTING SIZE
BACCHARIS PILULARIS 'TWIN PEAKS'	TWIN PEAKS COYOTE BRUSH		FLAT
MYOPORUM PARVIFOLIUM	TRAILING MYOPORUM		FLAT
ROSMARINUS OFFICINALIS `PROSTRATUS`	DWARF ROSEMARY		FLAT
SENECIO MANDRALISCAE	BLUE CHALK STICKS		FLAT
TURF			SOD

5 - Circulation & Transportation

5.0. Overview

The Circulation Plan facilitates the safe and efficient movement of vehicle, bicycles, and pedestrians while promoting connectivity and minimizing traffic impacts. Within the planning area, Private Drives and Private Drive Aisles are designed to provide direct and attractive shared access for vehicle and bicycles. Walkways are aligned to create convenient, safe, and comfortable pedestrian connections from individual homes to recreational amenities, sidewalks, and nearby uses.

The planning area and the CVS parcel share two (2) common access points: a driveway at the signalized intersection of North Las Posas Road and Palm Road serves as the primary entry to the planning area and a driveway on West Mission Road that include a left-turn in and right-in/right-out traffic movements serves as a secondary entry to the planning area. Both driveways have been improved with enhanced paving and landscaping. Shared use of these driveways is controlled through Covenant, Conditions, and Restriction (CC&Rs) that cover all three (3) properties.

5.1. External Roadways & Entries

Three (3) external public roadways provide access to the planning area. North Las Posas Road forms the planning area's easterly boundary. Palm Road intersects with North Las Posas Road at the project's main entrance. This main entrance is signalized. West Mission Road forms a portion of the planning area's southerly boundary and provides additional access to the site. Each of these roadways is described in greater detail in the following sections.

5.1.1. North Las Posas Road

The Mobility Element identifies North Las Posas Road as a six (6) lane arterial with Class II or III Bicycle Facilities. Along the planning area's frontage, North Las Posas Road has been full built to the 6-lane Prime Arterial Standard, which includes six (6) lanes of vehicular traffic (three (3) lanes in each direction); an 18-foot center landscape median with designated left-turn pockets at the intersection of Palm Road; Class II bike lanes in each direction; and five (5) foot sidewalks separate from the curb by a four (4) feet of landscaped parkway on both sides. North Las Posas Road serves as a primary entry into the Santa Fe Hills Subdivision to the north.

5.1.2. Palm Avenue/Primary Access

Palm Avenue is a Local Street that provides access to a church and a rural residential neighborhood to the east of the planning area. The intersection of Palm Avenue and North Las Posas Road is signalized and includes pedestrian crosswalks on the north, east and west sides of the intersection. No crosswalk is provided on the south side of the intersection. The west leg of this intersection consists of a driveway that serves as the primary entrance to the planning area. This entry has been improved with enhanced paving and landscaping as part of the CVS development. Additional landscape enhancements are proposed as part of the Landscape Plan and are described in Chapter 4 of this Specific Plan.

5.1.3. West Mission Road

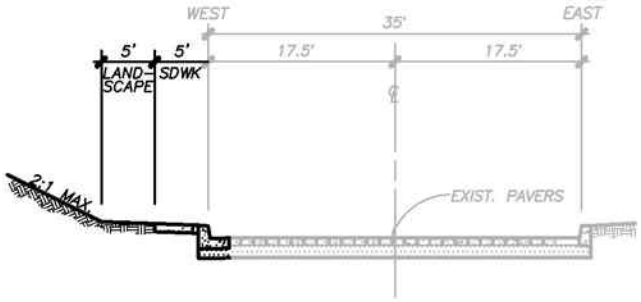
The Mobility Element identities West Mission Road as a four (4) lane arterial with enhanced bicycle/ pedestrian facilities. Along the planning area's frontage, West Mission Road has been fully built to the 4-lane Major Arterial Standard, which includes four (4) lanes of vehicular traffic (two (2) lanes in each direction); a center median; Class II bike lanes on the north side; and a five (5) foot contiguous sidewalk. A small portion of sidewalk is currently missing from the frontage near the bridge crossing at the southwest corner of the planning area. The project will provide this missing portion of sidewalk by extending the existing sidewalk around an existing utility pole to the project boundary. In lieu of sidewalk and bike lanes, the south side of the roadway includes the Inland Rail Trail and the SPRINTER rail lines, which are both described later in this Chapter. At the westerly edge of the planning area, the median along West Mission Road consists of a painted two-way (2-way) turn lane, which then transitions to a constructed median with a left turn pocket at the secondary entry to the planning area. The median physically restricts turning movements at the planning area's driveway access to only allow for right-in, left-in, and right-out turning movements. Left-out turning movements are not permitted. A bus stop pull-out area is located on the north side of the roadway, immediate east of the planning area driveway, in front of the CVS parking lot.

5.2 Internal Vehicle Circulation

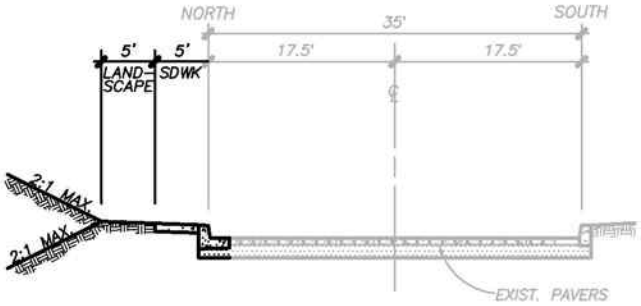
The internal circulation system for the planning area consists of a combination of Private Drives and Private Drive Aisles. Private Drives and Private Drive Aisles have been designed to accommodate the level of traffic generated by the project in a safe and efficient manner. Figure 5.1. Conceptual Vehicular Circulation Plan identifies the location of Private Drives and Private Drive Aisles within the planning area. The following provides a description and standard details for Private Drives and Private Drive Aisles.



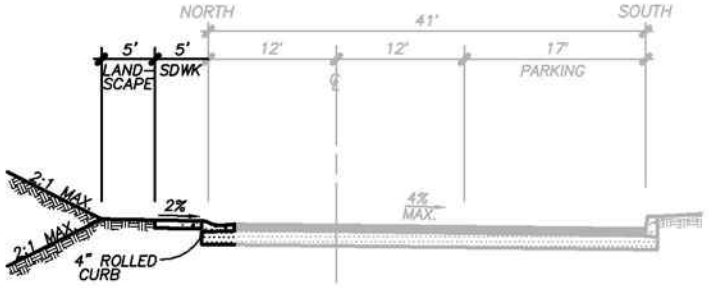
Figure 5.1. Conceptual Vehicular Circulation Plan



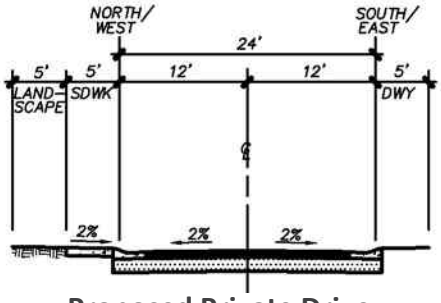
Existing Entrance
West Mission Road



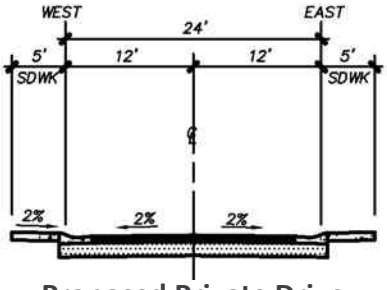
Existing Entrance
North Las Posas Road/Palm Ave.



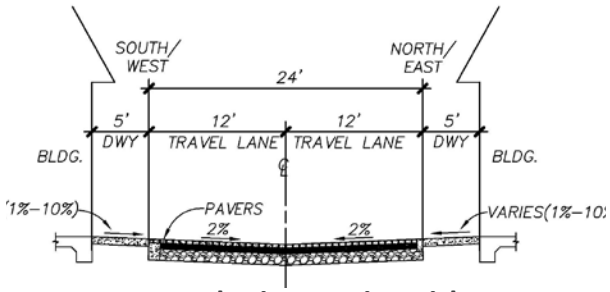
Existing CVS Edge



Proposed Private Drive
Sidewalk One Side



Proposed Private Drive
Sidewalk Both Side



Proposed Private Drive Aisle

Figure 5.2. Typical Private Drive and Drive Aisle Cross Sections

5.2.1. Private Drives

As illustrated in Figures 5.2. Typical Private Drive and Drive Aisle Cross Sections, Private Drives are low-speed streets designed with a minimum curb-to-curb width of 24-feet. This width is adequate to accommodate vehicles, emergency vehicles, and other service vehicles. This cross section allows for two (2) lanes of travel (one (1) in each direction) as well as adequate back-up space where parking spaces are providing. Parking stalls are provided along Private Drives to accommodate guest parking in accordance with the parking regulation in Chapter 2. Parking is only permitted in designated parking stalls, which are required to be adequately marked for guest parking.

Generally, Private Drives provide sidewalk on at least one (1) side of the street. Walkways adjacent to Private Drives consist of 5-foot wide pathways and make up an internal system of pathways further described in Section 5.3. The low design speed also allows Private Drives to be shared with bicycles as further described in Section 5.4. Landscaping along Private Drives consist of adjacent common area open space landscaping as described in Chapter 4.

5.2.2. Private Drive Aisles

Private Drive Aisles provide access to private garages. As illustrated Figures 5.2. Typical Private Drive and Drive Aisle Cross Sections, Private Drive Aisles are designed with a minimum width of 24-feet. A minimum dimension of 30-feet is required between garages to provide adequate back up for vehicles exiting private garages. Parking is prohibited in Private Drive Aisles.

5.2.3. Emergency Vehicle Access

Emergency Vehicle Access is provided on Private Drives as illustrated in Figure 5.3. Emergency Vehicle Access Plan. Private Drive widths, curb return radii, and turn-arounds have been designed in accordance with City of San Marcos Fire Department Standards.

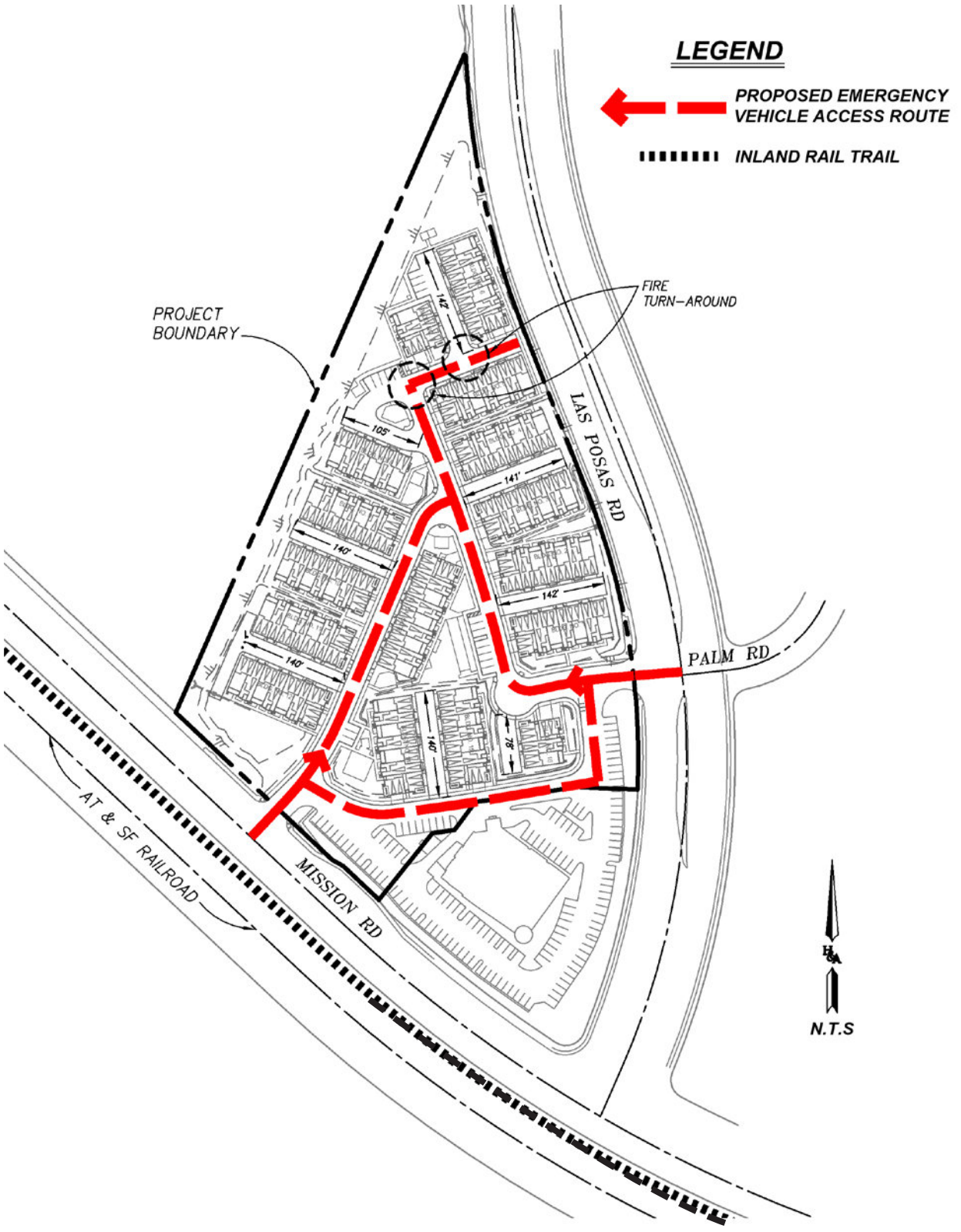


Figure 5.3. Emergency Vehicle Access Plan

5.3. VMT Reduction

According to the United States Environmental Protection Agency (EPA), transportation accounted for 29% of greenhouse emission in the United States during 2019. Light duty vehicles such as cars, vans, sport utility vehicles (SUVs), and pickup trucks, made of 59% of those GHG emissions. In effort to reduce GHG emissions, the State of California enacted SB 743, which changed the way traffic impacts are evaluated. Prior to July 1, 2020 SB, Level of Service (LOS) was used to evaluate the traffic impacts by measuring the number of cars on the road during peak driving times. LOS was typically at its worst in high-density areas, which meant urban infill development often resulted in unavoidable and significant impacts even though this type of development typically resulted in fewer GHG emissions per capita. The State sought to prioritize and promote infill development near transit and services or in areas with high walk and bike scores to encourage people to choose alternative modes of travel. By enacting SB 743, VMT became the new metric for evaluating transportation impacts. By reducing the total amount of driving, GHG emissions would also be reduced. Reducing VMT is achieved in a variety of ways. The following VMT reduction measures are provided within this Specific Plan.

- Work From Home - Floor plans are designed with office space or a niche large enough to accommodate a desk so residents have the option of working from home. Homes are equipped with Category 6 Ethernet cable to allow for higher internet speeds and greater bandwidth. Offices and niches are designed for easy internet set-up and model homes are staged to demonstrate how work from home is possible. By providing adequate working space, residents are encouraged to work from home rather than commute to work when possible, potentially reducing VMT.

- Walkability – The site's proximity to transit and services make walking a viable alternative to driving. The Specific Plan is designed to providing safe, efficient, convenient, and comfortable walking paths throughout the community that make walking more appealing. Walkability is described in more detail in Section 5.4. Pedestrian Circulation.

- Bicycle Facilities - Adjacency to existing Class II Bike lanes on both North Las Posas Road and West Mission Road as well as proximity to the Inland Rail trail makes biking a feasible substitute for vehicle use. The Specific Plan includes bike parking standards that exceed City bicycle parking standard to encourage bicycle use. Bicycle Facilities are described in more detail in Section 5.5. Bicycle Connectivity.

- Proximity to transit – The planning area is less than a quarter mile from Palomar College Transit Center, which provides access to four (4) BREEZE bus lines and the SPRINTER hybrid rail. Both forms of transit provide daily service with multiple stops each day. These transit options are described in more detail in Section 5.6. Transit.

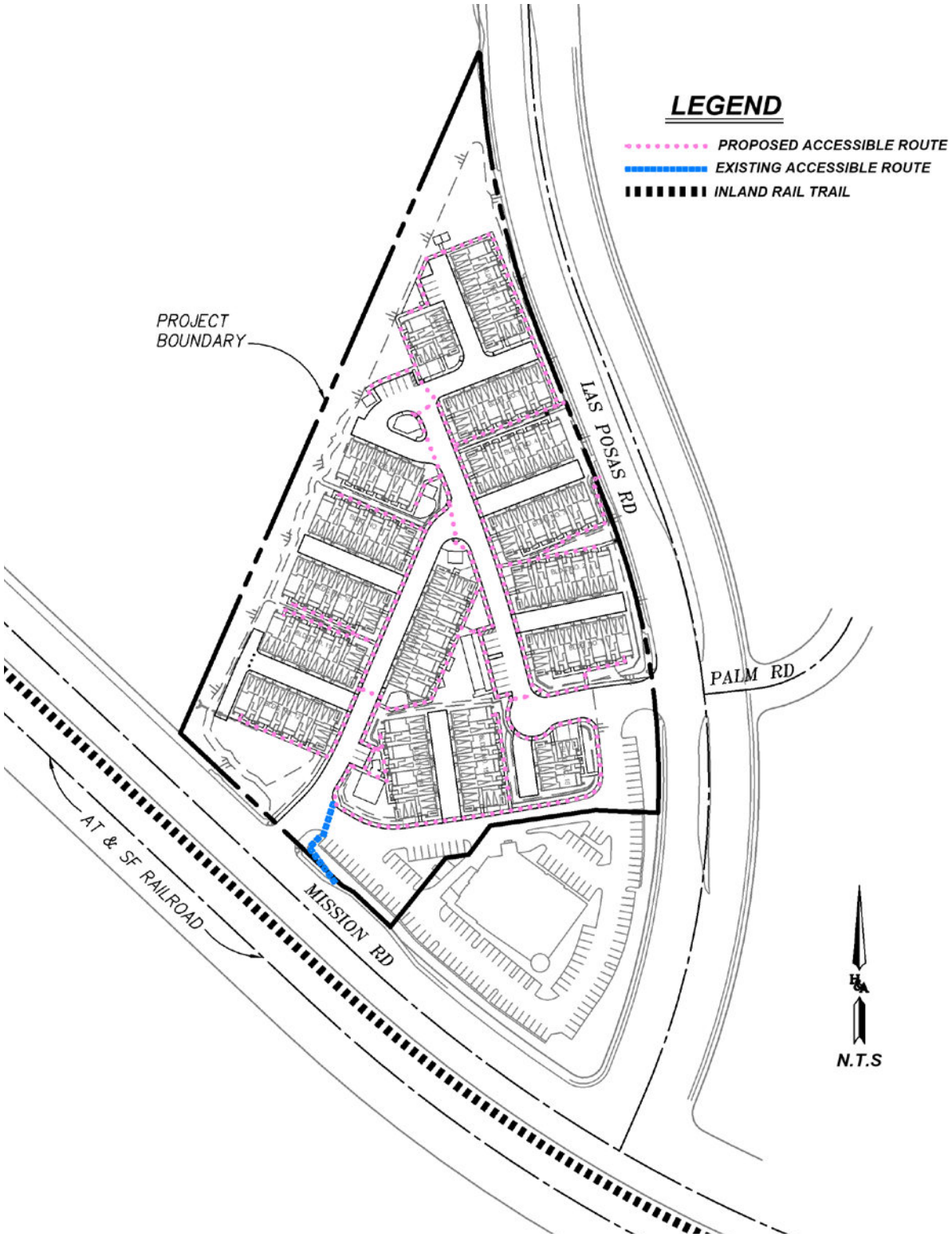


Figure 5.4. Pedestrian Circulation

5.4. Pedestrian Circulation

The planning area is located within walking distance of numerous uses, services and facilities that make Gran Vista a walkable, transit-oriented community. The adjacent CVS offers a range of everyday products, including limited groceries, a stone's throw away from new residential homes. The site is also a six (6) minute walk from Palomar College Transit Center, which provides access to regional bus and rail transit as described in Section 5.6. Transit. Nearby parks include El Dorado Park, Cerro de las Posas Park and Cerro de las Posas Park. Assigned elementary and middle schools are both located less than a mile away with existing sidewalk along the both routes. The high school is accessible via a 20-minute bus ride, which is accessible at the stop across West Mission Road.

To further enhance the walkability of the site and in accordance with Specific Plan Objective 2, Figure 5.4. Pedestrian Circulation Plan establishes a highly connected and efficient circulation system of pathways supported by pedestrian friendly architecture and landscaping. Buildings have been arranged within the planning area to create direct and frequent walkway connections throughout the planning area and to adjacent public sidewalk along North Las Posas Road and West Mission Road. Architectural elevations include windows and front doors that face sidewalks and pathways to provide natural visual surveillance, deter crime, and create a safer walking experience. Landscaping along walkways combines a variety of colors and textures for visual interest and trees offer shade for pedestrian comfort. Walkways are designed to provide access in accordance with the Americans with Disability Act (ADA) and to promote walkability and connect people to surrounding transit and places.

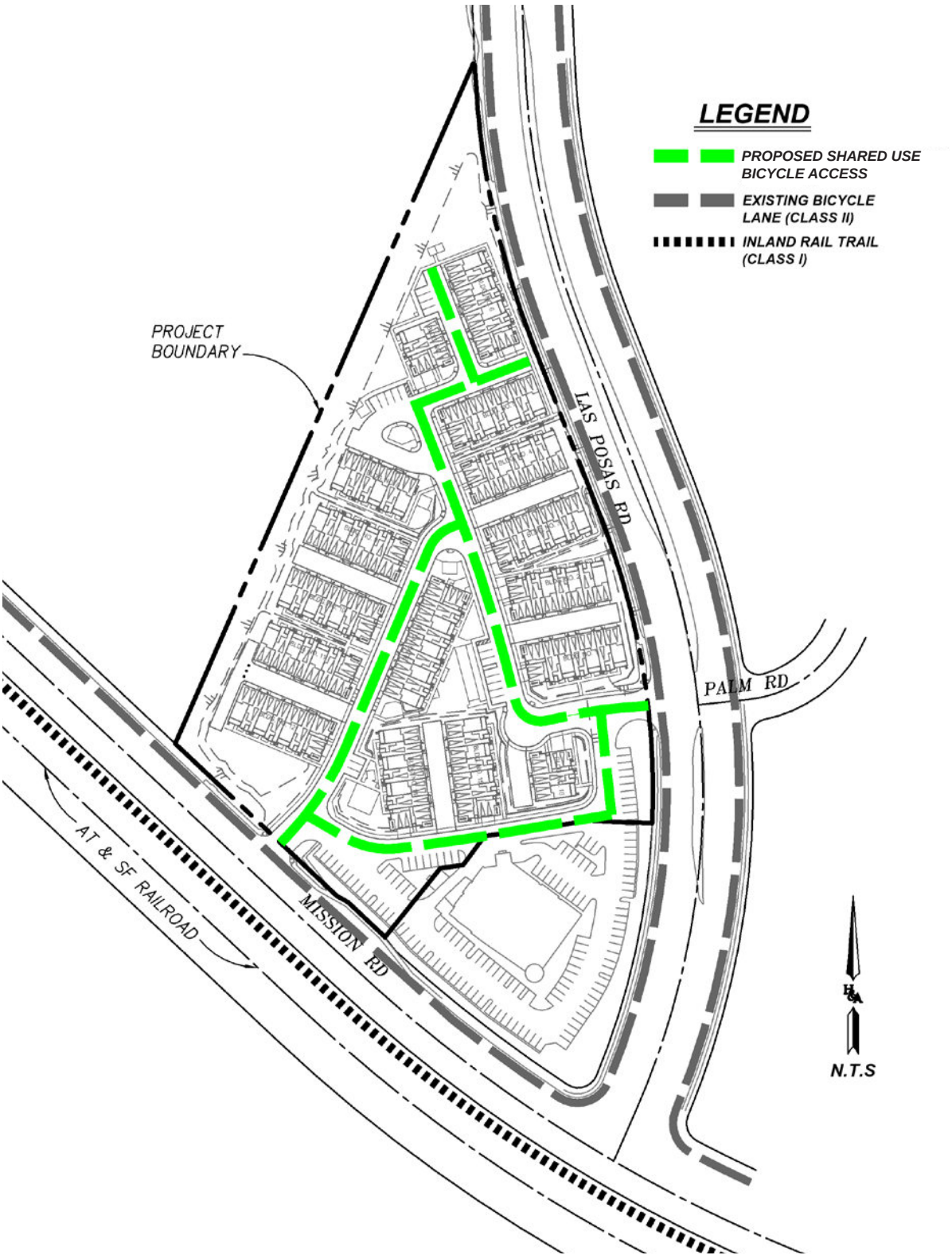


Figure 5.5. Bicycle Circulation

5.5. Bicycle Connectivity

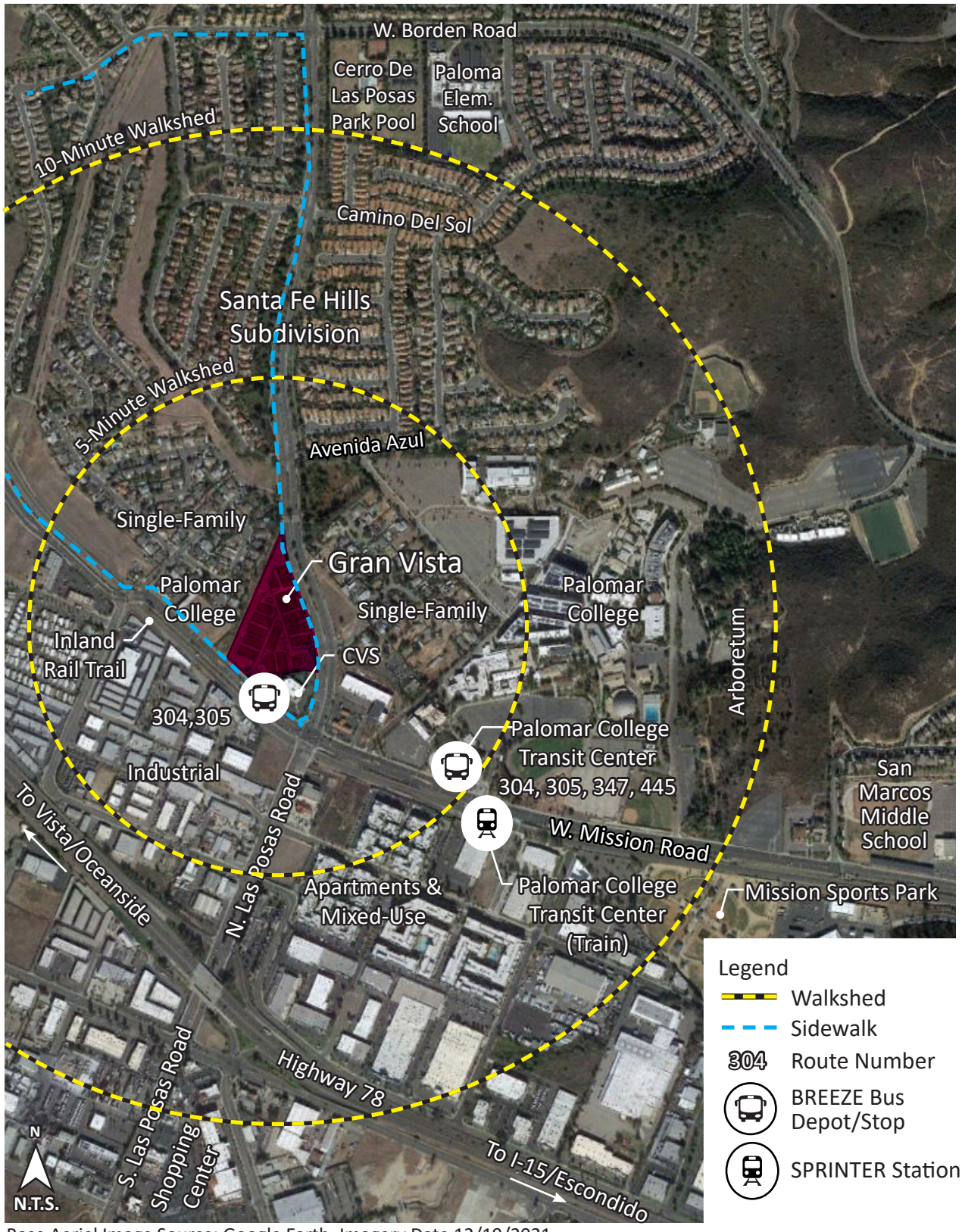
Bicycling is supported by the Specific Plan by creating a network of low-speed Private Drives that can be shared by both bicycles and cars and through the provision of adequate bicycle parking that exceeds City and CalGreen standards. Figure 5.4. Bicycle Circulation Plan illustrates the bicycle access within the planning area that connect to existing Class II bike lanes on North Las Posas Road and West Mission Road. These facilities also connect to the nearby Inland Rail Trail, located along the south side of West Mission Road. The Inland Rail Trail is a proposed 21-mile Class I bikeway that connects the cities of Oceanside, Vista, San Marcos, and Escondido, and a portion of the unincorporated County of San Diego. The trail is physically separated from vehicular traffic and is located between the roadway and the SPRINTER rail line.

5.6 Transit

Riding public transit helps to decrease traffic congestion, reduce GHG emissions, and improve air quality. As illustrated in Figure 5.6. Transit Facilities, transit is readily available within walking distance to the planning area. An existing bus stop is located on West Mission Road, immediately in front of CVS. Additionally, the Palomar College Transit Center is located less than a quarter mile and (6) minute walk from the planning area on West Mission Road, at the entrance to Palomar College. The station serves as the transit hub for the North County Transit District, offering bus and train service as described below.

BREEZE bus service is provided by North County Transit District and includes 30 routes between Oceanside and La Jolla, as far east as Escondido. The bus stop in front of the planning area serves routes 304 and 305. Palomar College Transit Center serves as the terminus of all BREEZE bus lines that run through San Marcos, including routes 304, 305, 347, and 445. These routes connect to other transit Centers within the system, offering connectivity to all major destination and other transit systems within North County, connections to South County transit systems, and the greyhound bus station in Escondido.

The Palomar College Transit Center also provides a two (2) platforms at the train station with access to the SPRINTER hybrid Train. The SPRINTER is operated by North County Transit District, offering service to commuters every 30 minutes. The line extends between Oceanside and Escondido and provides connections to three (3) commuter rail lines: The Coaster, Metrolink Orange County Line, and Metrolink Inland Empire-Orange County Line. The SPRINTER also connects to Amtrak's Pacific Surfliner regional rail line.



Base Aeriel Image Source: Google Earth; Imagery Date 12/19/2021

Figure 5.6. Transit Facilities

6 - Grading, Utilities, & Services

6.0. Overview

The Grading, Utilities & Services chapter identifies the design of drainage and utility infrastructure, services, and facilities needed to support development proposed by the Gran Vista Specific Plan. Providing adequate drainage utilities, services, and facilities is required to provide a functional, safe, healthy, and well-rounded community and to ensure that new development minimizes impacts to existing service providers and does not become a burden to the City. This section will define the scope of utility improvements, services, and facilities needed to provide a comprehensive development including water, wastewater, stormwater drainage and detention, electricity and natural gas, telephone and cable services, schools, community facilities, police and fire protection, and solid waste disposal. Details on the financing and maintenance of utilities, services and facilities are provided in Chapter 7. Table 6.1. Utility and Service Providers identifies the utility and service providers anticipated for the planning area.

Table 6.1. Utility and Service Providers

Utility	Provider
On-site Drainage and Detention	Developer/Builder; HOA
Potable Water, Wastewater	Vallecitos Water District
Stormwater or municipal separate storm sewer system	City of San Marcos
Irrigation	Developer/Builder; HOA
Electricity & Natural Gas	San Diego Gas and Electric
Telecommunications	Cox Communications
Public Schools	San Marcos Unified School District
Public Parks, Recreation, and Open Space	City of San Marcos
Library Services	San Diego County Library
Fire Protection	San Marcos Fire Department
Police Protection	County of San Diego Sheriff's Department
Solid Waste Disposal	EDCO Waste & Recycling

The design, distribution, capacity, size and extent of utility infrastructure, facilities, and service improvements is dependent upon the increased population resulting from development of new housing within the planning area. According to the State Department of Finance, the estimated average number of persons per household as of January 2021 is 3.08 . This means that the 120 homes proposed by the Specific Plan will result in approximately 370 new residents in the City of San Marcos. The following chapter explains how the Specific Plan will accommodate these additional residents through the provision of additional utilities, services, and facilities.

6.1. Grading

The planning area was previously graded for commercial uses and currently consists of two (2) development pads. This project proposes to clear and grub remaining vegetation within the planning area and alter grading to further define drainage courses and create pads for each residential building. Private Drive and Private Drive Aisle sections to subgrade, and each recreation and amenity areas. As illustrated in Figure 6.1. Conceptual Grading Plan, this raw grading effort will generate a total volume of 9,335 cubic yards of cut and 9,335 cubic yards of fill, resulting in balanced earthwork that does not require any import or export of dirt. Dirt spoils from foundations and utility trenches will be handled independent of the volumes described above. Cut and fill areas are illustrated in Figure 6.2. Cut and Fill Map. The proposed grading plan has been designed to maintain the current drainage pattern of the planning area, with a high point at the north end of the site and a low point near the southwest corner of the property. Final and precise grading activities include taking roads, lots, and landscape areas to finish grades with final surface, hardscape, and planting installations and preparation of the ground for any foundations for proposed residential and community buildings.

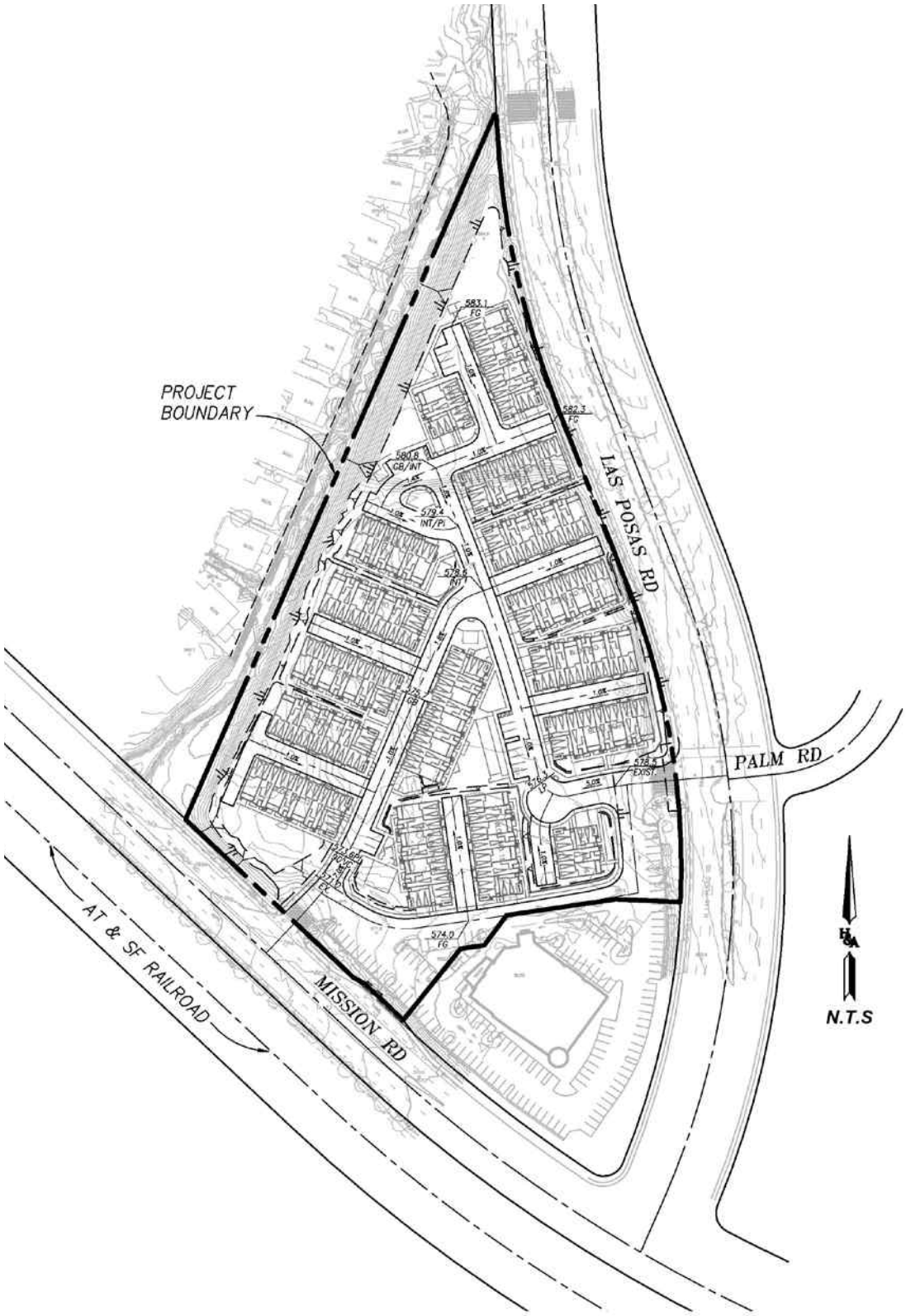


Figure 6.1. Conceptual Grading Plan

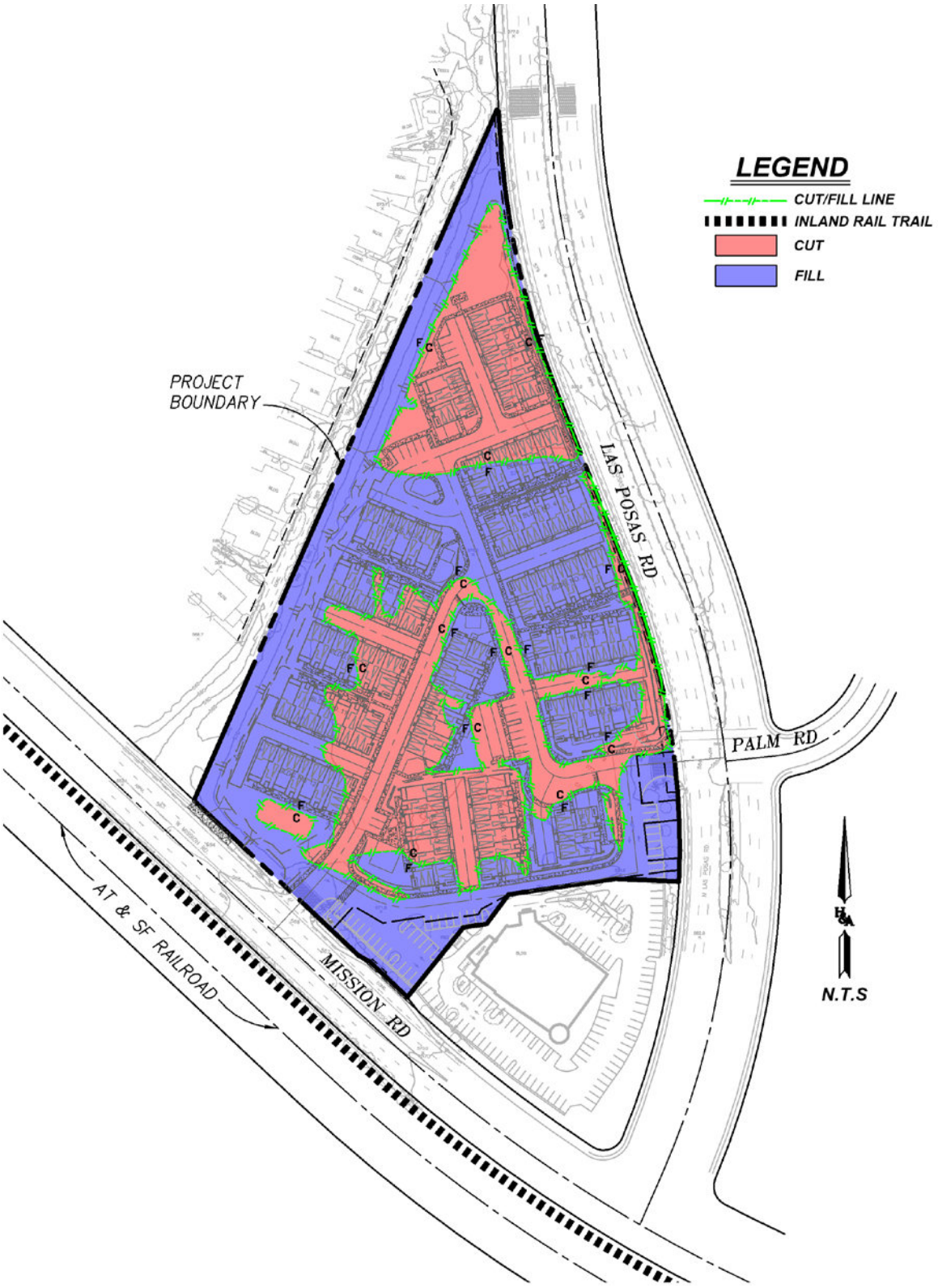


Figure 6.2. Cut and Fill Map

6.2. Stormwater Drainage and Treatment

Statewide rules and regulations require stormwater runoff to be appropriately captured and conveyed into treatment systems, so that water runoff does not increase water flows onto adjacent properties or properties downstream, which could potentially cause erosion, flooding, and damage. The planning area has carefully studied stormwater flows and designed the grading plan to direct all surface runoff to catch basins in Private Drives and Private Drive Aisles. Once captured, water is conveyed through a series of 18 to 24-inch pipes to two (2) underground vaults, located below common open space areas. Within these underground vaults, water is passed through a series of mechanical filters to remove pollutants prior to being discharged. After cleaning, water is stored and discharged at a rate equal to or less than existing water flows to the existing headwall to minimize any downstream impacts. Treated water is conveyed through an existing outfall into the adjacent channel that forms the northwesterly edge of the site. Figure 6.3. Conceptual Storm Drain System illustrates the storm drain infrastructure proposed for the planning area.

6.3. Water

Water service for potable residential use and fire service to the planning area will be provided by Vallecitos Water District (VWD). As part of the development of the Specific Plan, a study was conducted by VWD to confirm that adequate capacity exists to serve the water needs and fire flow capacity of the proposed development.

As illustrated in Figure 6.4. Conceptual Water System, the distribution of potable water to each home is provided by a series of 8-inch public pipes and related infrastructure, The proposed system connects to an existing 8-inch pipe in North Las Posas Road. Pipes are located within Private Drives and Private Drive Aisles to create a loop system that serves the entire planning area. Individual service to homes is provided by a lateral from the main pipe to the water meter for each home. A dedicated Fire Main will provide fire service to a series of new and existing fire hydrants as well as the to the individual units for firefighting purposes. There are two (2) existing fire hydrants on site that are already in service and will remain in place.

In accordance with current Building Code, all buildings will be equipped with fire sprinklers and water conservation features such as water efficient faucets and shower heads and high-performance toilets. Homes will be Water Sense Certified to meet United States Environmental Protection Agency (EPA) standards.

Irrigation for the site will tie into the proposed loop system. Irrigation of landscaping throughout the planning area is required to comply with the City of San Marcos Water Efficient Landscape Ordinance (WELO) and the City of San Marcos Landscape Manual.

6.4. Wastewater

Wastewater service to the planning area will also be provided by VWD. Studies conducted for the planning area determined the approximate flows of wastewater from the development. Based on those conclusions, a system of pipes was designed as shown in Figure 6.5. Conceptual Wastewater System. Preliminary sewer design concluded an 8-inch PVC sewer main will be needed to adequately service individual homes and community areas discharging wastewater. Pipes will be located underneath Private Drives and Private Drive Aisles. The system will collect wastewater and direct flows into an existing 15-inch pipe in North Las Posas Road.

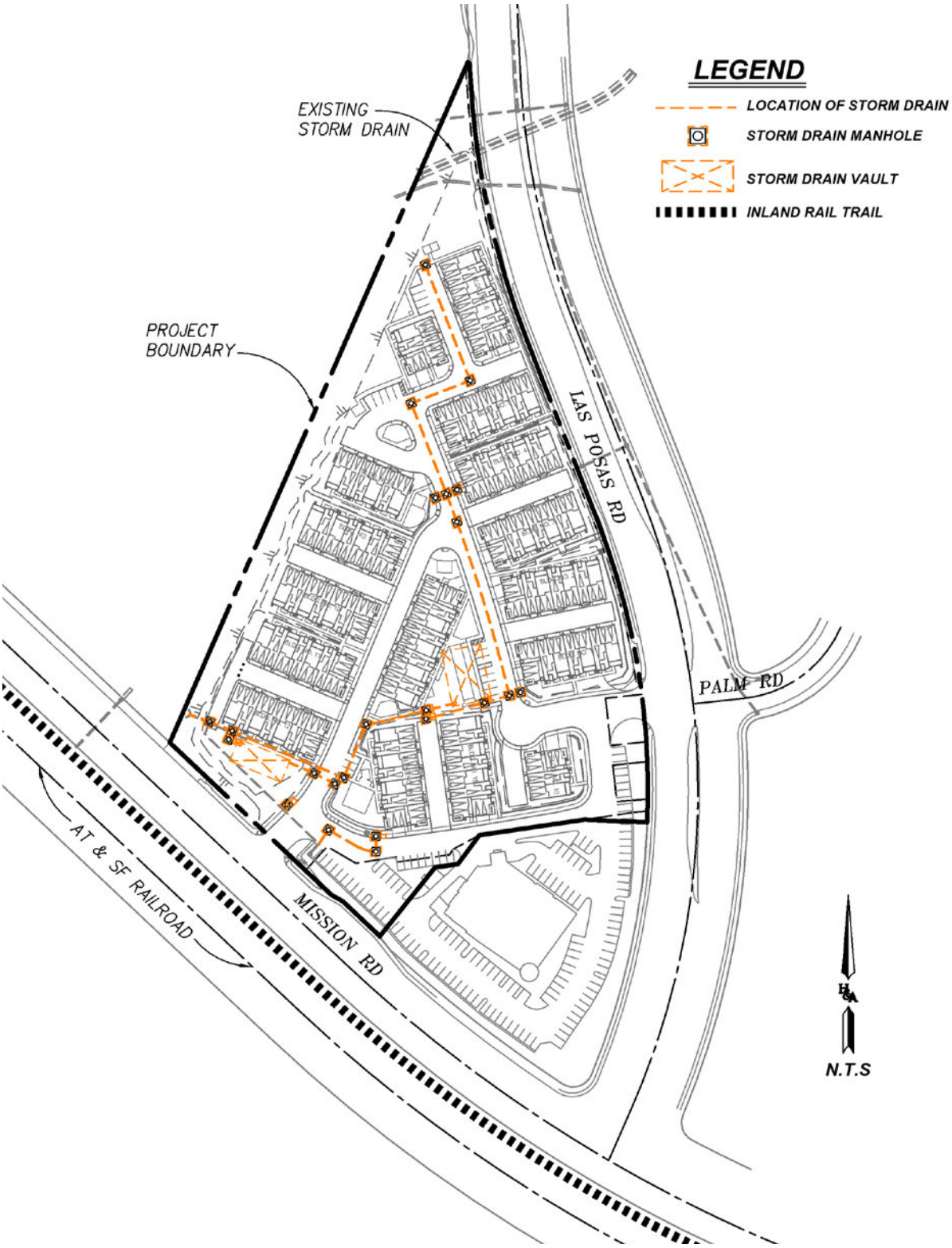


Figure 6.3. Conceptual Storm Drain System

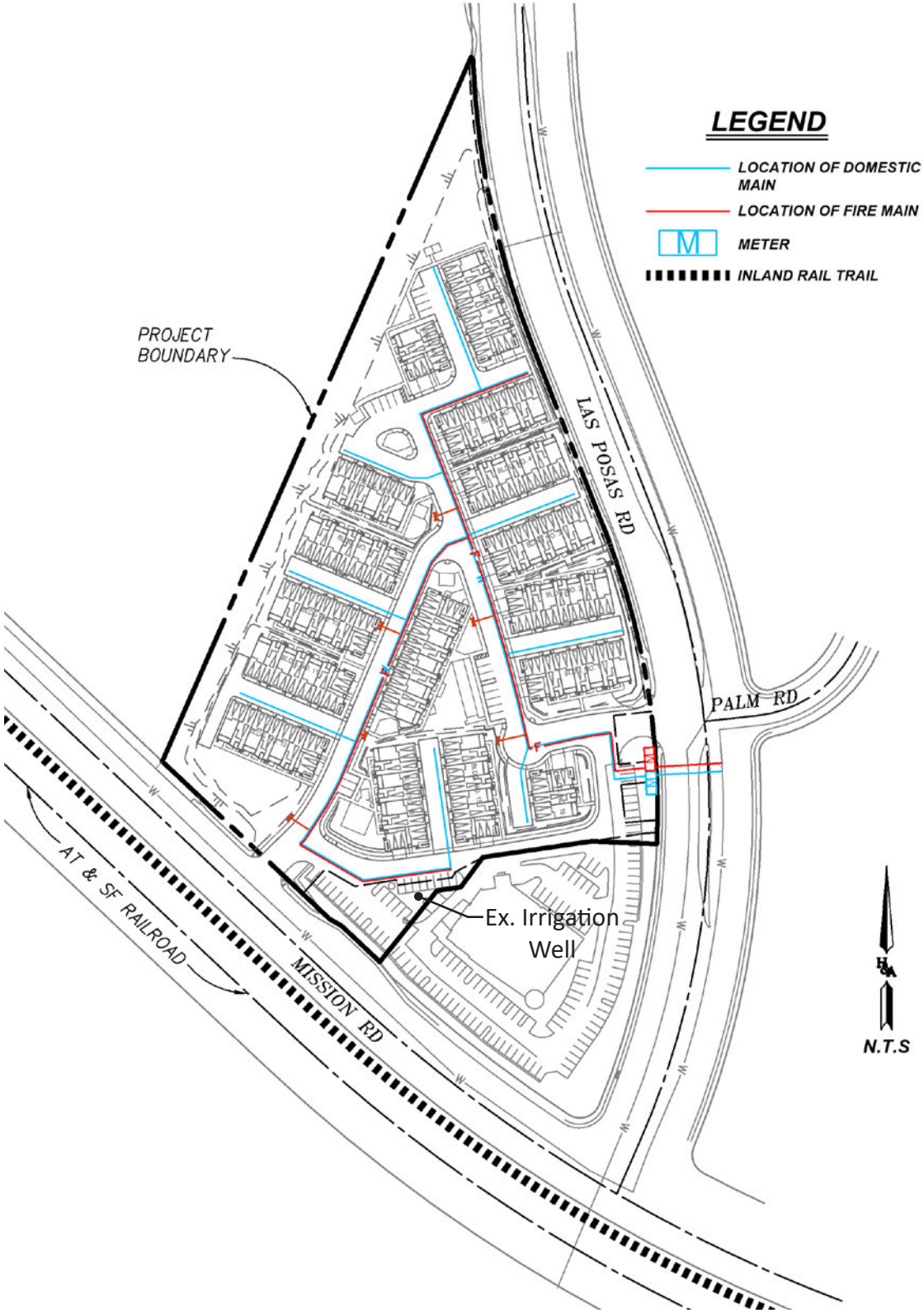


Figure 6.4. Conceptual Water System

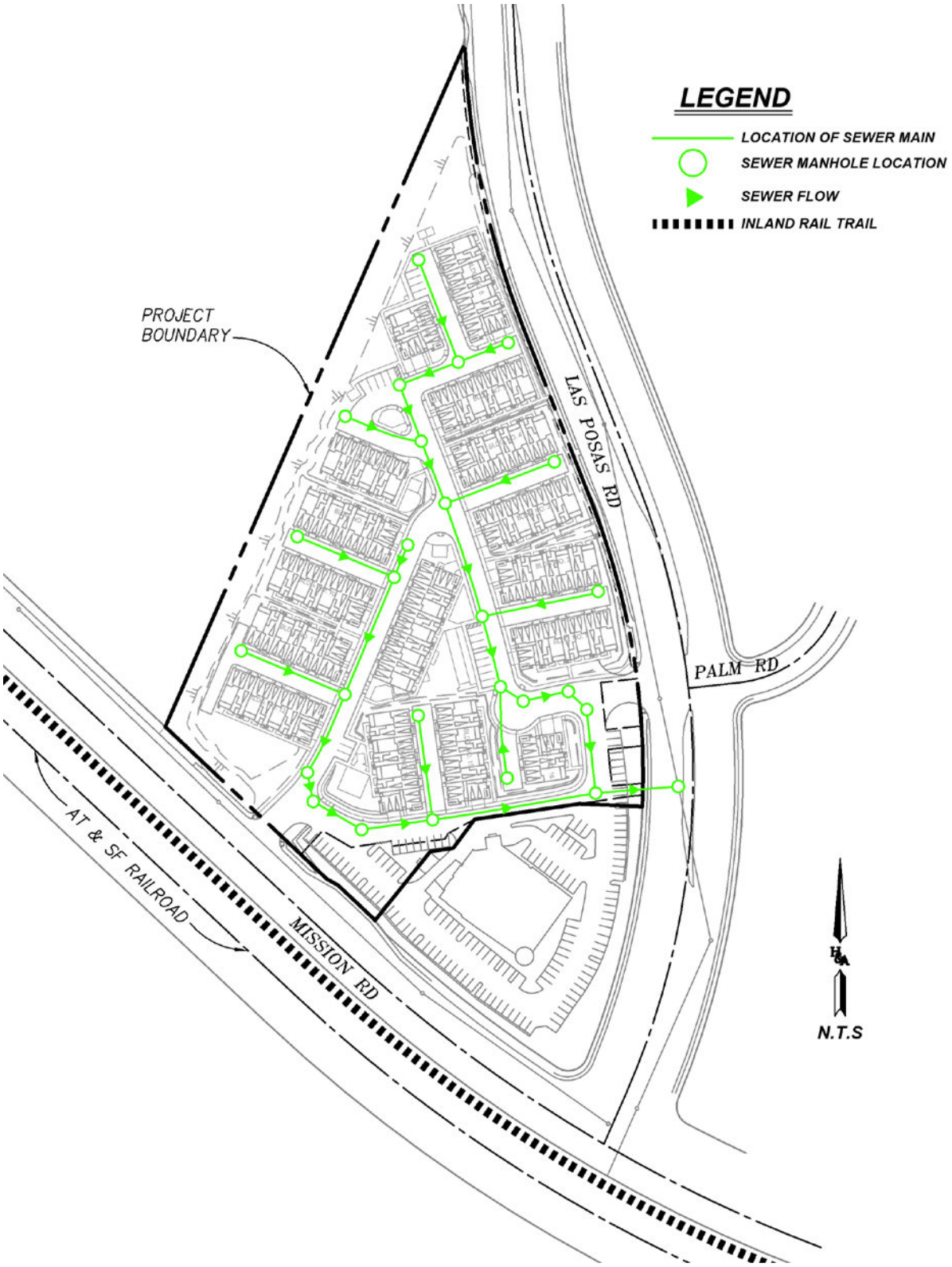


Figure 6.5. Conceptual Wastewater System

6.5. Dry Utilities

Dry Utilities include electricity, gas, and telecommunication to each home and are described in detail in the following sections.

6.5.1. Electricity

Electrical service will be provided by San Diego Gas & Electric (SDG&E). The project area will connect to an existing 12KV line in a vault on North Las Posas Road. The builder/developer of the planning area will be required to hire a contractor to provide all trenching, backfill, substructures, conduits, and transformer pads necessary for electrical utility installation work. Should SDG&E find installation of extra facilities are required for system reliability, it shall be the responsibility of the builder/developer to perform the related work aforementioned in this section. SDG&E shall be responsible for the installation of necessary cables, connectors, and pad mounted equipment as required.

In accordance with current Building Code, all buildings will be equipped with photovoltaic panels to provide solar energy to the homes. In addition, homes will include energy conservation features such as spray foam insulation, thermal breaks, low-e windows, advanced thermostats, energy star appliances, and sealed insulated ducts. Homes will be Energy Star Certified to meet EPA standards.

6.5.2. Gas

SDG&E maintains a 4-inch gas distribution system within North Las Posas Road and a 3-inch gas distribution system within West Mission Road. The gas lines will be extended to and through the planning area through the same joint trench alignment as electric and telecommunication facilities. Use of gas will be limited to gas cooktops and tankless water heaters.

6.5.3. Telecommunication

Telecommunication includes telephone, cable, and internet services, which will be provided through Cox Communications and AT&T. Telephone, cable, and internet connections will be available to each home and residents will be able to choose to connect to cable and telephone via a number of packages offered through both providers. Homes will be equipped with Category 6 cable to allow for higher speeds and bandwidth that support working from home. AT&T currently provides FTTP, fiber to the premise, which allows for higher bandwidth for multiple users allowing seamless streaming for work-from-home employee, distance learning children, or gaming family.

6.6. Schools

The San Marcos Unified School District provides educational instruction for children residing within the City of San Marcos. Table 6.2 Schools identified the assigned public educational facilities for the various age groups of children within the planning area.

Table 6.2. Schools

Age Range	Assigned School
Elementary School	Paloma Elementary School
Middle School	San Marcos Middle School
High School	Mission Hills High School

Elementary school students will be assigned to Paloma Elementary School located at 660 Camino Magnifico. Paloma Elementary is located approximately one (1) mile north of the planning area.

Middle school age students will be assigned to San Marcos Middle School located at 650 West Mission Road. San Marcos Middle School is located approximately one (1) mile east of the planning area.

All high school students will be assigned to Mission Hills High School, which is located approximately three (3) miles from the planning area at 1 Mission Hills Court. Bus Route 305 can be accessed directly in front of the planning area and provides access to the high school. Buses run every 30 minutes and the ride takes approximately 20 minutes.

The developer/builder will offset the expected increase in students through monetary contributions in the form of school district development fees paid to the San Marcos Unified School District.

6.7. Parks, Recreation, and Open Space

The Gran Vista Specific Plan incorporates 110,195 square feet (2.53 acres) of usable common and private open space (excluding open space with grades of 10%) to meet the everyday recreational needs of new residents within the planning area. Providing recreational amenities on site reduces the demand on city parks and open spaces but does not fully address the full range of resident's recreational needs. Per the SMMC, which is consistent with the Quimby Act, a total of 5 acres of park space is required for every 1000 residents generated by a proposed project, which equates to approximately 1.85 acres of parkland for this Specific Plan. The developer will be required to pay in-lieu fees as opposed to the developing or dedicating 1.85 acres of new public park space to the City of San Marcos. These fees will be used by the City to construct new public park space and recreation facilities or to maintain or improve existing public park and recreation facilities.

6.8. Library Services

The planning area is served by the San Diego County Library System. The San Marcos branch is located at 2 Civic Center Drive and is approximately two (2) miles from the planning area. Bus Route 305, which can be accessed directly in front of the planning area, provides direct access to this library. The San Marcos branch offers a variety of services to the public including book and music rentals, computer access, as well as literary programs and other programs beneficial to the community. The developer and/or builder for the Gran Vista Specific Plan will offset the expected increase to library facilities and services through the payment of Development Impact Fees.

Additional library resources are provided to the public through the colleges located in San Marcos. Palomar Community College library is located near the center of the campus on Comet Circle, approximately half a mile from the planning area. Palomar Community College library provides free access to materials with valid picture identification and proof of current mailing address. Purchase of an annual Community Borrower Card allows the public access to borrowing privileges to cover the cost of staffing and services.

6.9. Fire Protection

The Gran Vista Specific Plan is located within the San Marcos Fire Protection District boundary. The San Marcos Fire Department (SMFD) will provide fire protection for urban and wildland fires and emergency services to the entire planning area. SMFD services San Marcos with four (4) stations, the closest of which is located at 180 West Mission Road, approximately 1.7 miles from the planning area. This fire station houses an engine, truck, brush engine, ambulance, and battalion chief. The developer and/or builder for the Gran Vista Specific Plan will offset its expected increase to fire department facilities and services through the payment of Development Impact Fees.

6.10. Police Protection

The County of San Diego Sheriff's Department provides contracted law enforcement services to the City of San Marcos and the surrounding unincorporated areas. Police protection is provided from a station located at 182 Santar Place, approximately 3.2 miles from the planning area. Community law enforcement services are provided year-round, 24-hours a day. The Sheriff's Department offers a variety of services to help keep the community safe. Deputies are responsible for general patrol services including traffic enforcement, suppression of drug activities, and response to theft and gang-related crimes. The San Marcos station has the only ASTREA (Sheriff's Aviation) landing pad in the County providing assistance to ground units and extending the range deputies can patrol. Additional services to the community include detective units responsible for crime investigations, the Community Oriented Policing and Problem Solving (COPPS) program assigned to investigate community quality of life issues, crime prevention units, crime analysis, and senior volunteers, as well as various administrative services. Child Protective Services, Adult Protective Services, and Juvenile Probation all operate out of the San Marcos Station. Together, these services offer the planning area comprehensive law enforcement to help maintain community safety. The developer and/or builder for the Gran Vista Specific Plan will offset its expected increase to department facilities and services through the payment of Development Impact Fees.

6.11. Solid Waste Disposal

Solid waste collection and recycling services to the planning area shall be provided by EDCO Waste & Recycling. Non-recyclable waste, including general trash and green materials, is collected and transported to the Sycamore Sanitary Landfill in Santee. Recyclable materials are transferred to the Escondido Resources Recovery Transfer Station for further processing. Household hazardous waste can be disposed free of charge for residents of San Marcos at the Vista HHW Collection Facility at 1145 E. Taylor Street or the Poway HHW Collection Facility at 12325 Crosthwaite Circle. Service and facility fees for solid waste collection and recycling will be paid monthly by each resident.

7 - Implementation & Administration

7.0. Overview

This chapter of the Gran Vista Specific Plan is essential to establishing a thorough review process for proposed discretionary entitlements and permits as well as the financing and construction of improvements necessary to implement this Specific Plan. Sections within this chapter form the procedures for review of entitlements and modifications or amendments to the Specific Plan (i.e., administration authority of the Specific Plan, descriptions of the entitlements to be processed concurrently with this Specific Plan, compliance with CEQA, and substantial conformance and amendments to the Specific Plan). Those rules, regulations, and processes outlined within this chapter govern the lead agency's implementation of development within the planning area. In addition to the Gran Vista Specific Plan implementation, several discretionary entitlements will also be processed concurrently. This section provides a detailed description of the financing and mechanisms needed for implementation and long-term maintenance of the Specific Plan and should be the primary document consulted when questions arise concerning future development or development changes within the planning area. As the lead agency, The City of San Marcos is responsible for the administration of the Gran Vista Specific Plan and as such is responsible for ensuring the rules and procedures described herein are implemented in a consistent manner with all City rules, regulations and policies.

7.1 Implementation & Financing

This section describes the phasing of development and the various options for financing the construction and maintenance of improvements proposed by the Gran Vista Specific Plan. A financing plan is required to ensure improvements proposed by the Specific Plan are implemented in a successful manner, mechanisms are established for the long term maintenance of the community, and funding is provided to provide adequate City services such that the community does not become a fiscal burden to the City. The financing plan establishes specific methods of financing to achieve the goals and policies set forth in this Chapter. Financing mechanisms for each improvement shall be timed with established conditions of approval, and site plan and/or design review approval. The following descriptions provide information of possible methods, which could be employed to finance improvements within the planning area. It should be noted there may be other sources not listed below which would fulfill any mandates for the financing of improvements.

7.1.1. Phasing

Subsequent approvals needed to implement this Specific Plan include a tentative condominium map, multi-family site development plan, final map, grading plan, improvement plans, and building permits. Once these subsequent approvals are acquired, the project will be constructed in two (2) phases.

Phase One (1) involves preparing the site for vertical construction. The first phase will consist of clearing and grubbing the site of all vegetation, rough grading the land to bring elevations within a few inches of the final design, installation of wet and dry utilities, roadway improvements, and finish grading to shape the final contours and establish building pads. Phase One (1) is anticipated to be completed within six (6) months after Tentative Map Approval.

The second phase will involve vertical construction which entails pouring foundations and sidewalks, construction buildings, and installing landscaping and amenities. Phase Two (2) may be broken down into subphases depending upon market conditions and the availability of materials. Phase Two (2) is anticipated to be completed within one (1) year after the completion of Phase One (1).

7.1.2 Financing Improvements

The developer/builder shall be responsible for their fair share of financing construction of any public improvements as well as the entirety of private infrastructure improvements required to support development within the planning area. Improvements may include, however, may not be limited to, construction of internal and adjacent streets, water lines, sewer lines, and storm drains, and electrical and gas power delivery systems. The developer/builder can use a combination of financing mechanisms to achieve the required construction and maintenance of facilities and improvements; however, the developer/builder shall be ultimately responsible for all fair share costs identified with implementation of development within planning area, including but not limited to, costs associated with infrastructure construction, compliance with any mitigation measures identified within the EIR conditions of approval, or any other associated requirements which may need to be fulfilled.

A. Developer Funded Options

Most of the on-site facilities to be constructed will be financed and constructed entirely by the developer/builder. Some examples of these types of improvements are on-site private streets, utility connections from main trunk lines, and storm drain facilities. In the case of electricity connections, the developer/builder may be required to use the electricity providers' construction crews or contractors provided from an approved list determined by the energy provider. In those cases, correspondence will occur between the parties to establish the funding method, at a cost to the developer/builder, to finance those improvements.

B. Circulation Improvements

The Gran Vista Specific Plan proposes a comprehensive circulation plan, which includes private road improvements and may be required to provide public road improvements, public utility upgrades or other infrastructure improvements. Development within the planning area is contingent upon the financing and maintenance of both private internal streets and external public road improvements, public streetscape improvements, and any mitigation measures for traffic impacts identified in the traffic study produced for the EIR. Internal private streets will be financed in whole, by the developer or builder. Improvements to public external roads, right-of-way areas, landscaped medians, and landscaping adjacent to the project's frontage identified by the City of San Marcos may be financed and constructed by the developer and/or builder.

C. Special Assessment Districts

Special assessment districts may be used by the City of San Marcos to pay for improvements within a defined area so long as the property owner votes to allow the assessment to proceed. Once an approval vote has been made, the City has the authority to form the special assessment district by the authority of the Improvement Act of 1911, and the Municipal Improvement Act of 1913. The property owners will bond to pay for improvements such as streets, storm drains, sidewalks, landscape and lighting, water and sewer services, and other similar public improvements.

D. Community Facilities Districts and Mello-Roos

The City of San Marcos may use a Community Facility District and require Mello-Roos to finance public improvements for the planning area. The Mello-Roos, Community Facilities Act of 1982 allows the City to establish special districts and to levy special taxes and issue tax exempt bonds to finance those improvements. Mello-Roos do not require municipalities to show any specific special benefit to assessed properties, therefore they may be used to finance a broad range of general improvements such as police and fire facilities, libraries, parks, and any improvements which may benefit specific properties.

E. Other Funding Sources

The developer/builder may secure other sources of funding to construct and maintain public and private facilities such as government grants, private developer coalitions, or various bonds not specifically mentioned above.

7.1.3. Financing Public Services

The orderly development of the planning area requires the procurement of sufficient funding for public facilities and services. The following summaries provide detail on financing of facilities and services for the planning area required to be available at the time of need. The following sections provide information on specific financing options and implementation methods for facilities and service within the planning area.

A. Emergency Services and Facilities

The planning area is within the San Marcos Fire Protection District. To offset impacts to fire and paramedic services and facilities the developer/builder will pay fees to the City of San Marcos. Service to the planning area shall be provided by the San Marcos Fire Department (SMFD). The developer will pay its fair share contribution to the City of San Marcos' CFD for fire service to the planning area. Future homeowners will be assessed annual fees for this district with increases as determined by the City.

The County of San Diego Sheriff's Department, under contract with the City of San Marcos, will provide police protection services to the planning area. The builder/developer shall pay its fair share contribution to the City of San Marcos' CFD for law enforcement service. Future homeowners will be assessed annual fees for this district with increases as determined by the City.

B. Schools

The Gran Vista Specific Plan planning area is located within the San Marcos Unified School District (SMUSD). Impacts to SMUSD will be mitigated by a per square foot fee paid by the developer to the school district and based on total residential dwelling unit square footage.

C. Parks and Public Facilities

All categories of common open space located within the planning area will be financed and constructed by the developer. Maintenance responsibilities of all common area landscaping and amenities shall be the responsibility of the Homeowners Association. The developer/builder will pay in-lieu fees and Public Facilities Fees to offset the projects impacts to City-owned parks and other public facilities.

7.1.4 Financing Maintenance & Responsibilities

Improvements within the public right-of way and all public utilities within the planning area will be maintained by the City or the applicable utility provider as described in Chapter 6. Maintenance will be funded through taxes and other fees levied by these entities.

Maintenance of all other improvements within the Specific Plan, including but not limited to private streets and alleys, dry and wet utilities, parking areas, common area landscaping and amenities, drainage vaults and facilities, irrigation well, and buildings will be the responsibility of the Homeowner's Association and CVS in accordance with adopted Covenant, Condition, and Responsibilities (CC&Rs). The Homeowner's Association will also be responsible for enforcing rules and regulations related to parking and other issues as defined within the CC&Rs. The CC&Rs and any revisions shall be in conformance with the requirements of this Specific Plan and shall include language to this effect.

7.2. Administration

Any future development within the planning area may be subject to further review and subsequent discretionary permits and approval from the City of San Marcos Development Services Department. Application, fee, and processing requirements shall be in accordance with the City's regulations, unless modified by this Specific Plan. Applications for subsequent development projects or public improvements and other activities will be reviewed by the Development Services Department using established procedures to determine consistency with the Gran Vista Specific Plan and all pertinent development standards, design standards, and mitigation measures identified during the environmental review process, as well as other applicable conditions of approval adopted as part of this Specific Plan.

Review and analysis of a subsequent project permit(s) may trigger conditions of approval that the City determines to be reasonably necessary to ensure the applications and or plans achieve compliance with this Specific Plan. Procedures to amend the Gran Vista Specific Plan are also detailed in this section, should the applicant or City staff determine changes to the project would trigger an amendment to this Specific Plan in order to remain compliant with the adopted Specific Plan.

7.2.1 Specific Plan Authority

California Government Code §65450 in conjunction with the City of San Marcos Zoning Ordinance Chapter 20.535, authorizes the City's legislative body to prepare and adopt Specific Plans. The Gran Vista Specific Plan is to be adopted by Ordinance by the San Marcos City Council and used as the primary guiding document for review of all subsequent discretionary entitlements within the confines of the planning. As a regulatory document, successful implementation of a development project within the planning area is contingent upon meeting the land use and associated design, development, and infrastructure standards, and other policies outlined herein. The Gran Vista Specific Plan establishes development design, infrastructure, and implementation parameters and incorporates those standards through reference of applicable Zoning Ordinance or other appropriate standards and provisions, or the SMMC, to establish specific zoning standards, which govern all development within the planning area. Any proposed development and design activities within the Gran Vista Specific Plan planning area must be consistent with the established parameters of this Specific Plan. Should any requirements contained herein of the Gran Vista Specific Plan conflict with the SMMC, the Gran Vista Specific Plan shall be the primary document used to resolve the conflict. If the Gran Vista Specific Plan is silent on any issues, the SMMC, or other applicable adopted City standard(s) shall be referred to for regulations and standards.

7.2.2. Responsibility for Administration

Several entities may/shall be responsible for the administration and enforcement of the Gran Vista Specific Plan. The City of San Marcos' Development Services Department is the primary agency responsible for the implementation, administration, and enforcement of the Gran Vista Specific Plan. The homeowner's association or other comparable group established for the Gran Vista Specific Plan planning area shall be responsible for the enforcement of private property and open space easement requirements pursuant to standards identified herein as well as any covenants, conditions, and restrictions (CC&R's) developed separately from this Specific Plan.

7.2.3. Severability

If any section, subsection, sentence, clause, phase, or portion of this Specific Plan, or any future amendments or additions, is for any reason held to be invalid or unconstitutional by the decision of any court or competent jurisdiction, such decision shall not affect the validity of the remaining portions of this Specific Plan or any future amendments or additions.

7.2.4. Ambiguity

If ambiguity arises concerning the appropriate classification of a particular use or regulation within the meaning or intent of this Specific Plan based on established or unforeseen circumstances, including technological changes in processing or application of materials, the Director shall have the authority to interpret the regulation based on understanding of the Specific Plan. Applicants may appeal the Director's interpretation to the Planning Commission for review and interpretation, which shall be final; thereafter, such interpretation shall govern.

7.2.5. Substantial Conformance

Substantial conformance means that any proposed activity, construction and development complies with the Gran Vista Specific Plan, adopted mitigation measures, and project conditions of approval, where no additional units (except accessory dwelling units), property, or parcels beyond that provided by the Specific Plan or approved map are involved, approved minimum lot sizes are maintained, proposed construction is consistent with the architectural guidelines provided in the Specific Plan, no grading beyond substantial conformance limits is proposed, and no new significant environmental impact is created. Additionally, uses that are not specifically listed but are similar to those already listed in Table 2.1. may be considered in substantial conformance. The Director or their designee shall make a determination of substantial conformance prior to the issuance of any permits or approval of plans. No written determination is required provided that plans submitted to the City for approval exhibit substantial conformance with the Gran Vista Specific Plan. Plans found not to be in substantial conformance shall not be approved and shall be revised or a Specific Plan amendment shall be required.

7.2.6. Minor Deviations

To provide flexibility in the development and permitting process, minor deviations to approved plans in conjunction with an approved permit may be authorized by the Director without a Specific Plan Amendment. Examples of Minor Deviations include the following:

- Modifications to the site plan, architecture, landscape treatments, wall and fence design, lighting, and signage which are generally consistent and compatible with the plans contained herein and provide an equal or superior design aesthetic and quality.
- Changes in the location, size, or type of common area amenities.
- Final facility sizing and alignment for water, sewer, and storm drain improvements (with concurrence from the City Engineer)
- Removal of unnecessary utility infrastructure or design changes to utility infrastructure (with concurrence from the City Engineer)
- Minor adjustment to the alignment, width, or grade of public or private streets within the planning area grading that are generally consistent with the Specific Plan and the exhibits herein (with concurrence from the City Engineer and Fire Department)
- Deviations that are of a similar magnitude to those listed above, which are deemed minor by the Director and conform to the objectives of this Specific Plan

Minor deviations shall be limited to actions that will not:

- Constitute a substantial change in the permit.
- Adversely affect adjacent property or adjacent property owners.
- Violate any Specific Plan Objectives or Development Standards.
- Increase of land/site coverage by more than ten percent (10%) by any increase in building size or number of structures.
- Result in an increase or decrease of more than ten percent (10%) of the:
    - Gross area of any private or common opens space.
    - Size of any building or structure or of the total land area covered by any building or structure.
    - Building/structure height or depth
    - Area of any slope.

7.2.7 Specific Plan Amendments

Amendments to the Specific Plan may be necessary respond to changes in housing market trends and the economy. Applications that are not in substantial conformance and do not qualify for a minor deviation will require an amendment to the Specific Plan. Amendments may be processed either administratively through the Director's review or through the Planning Commission. The applicant may submit an application to the City of San Marcos' Development Services Department, which may include maps, text, and or technical studies describing the nature and intent of minor modifications. Upon submittal, the Director will make a determination as to the applicability of the amendment process. No amendment shall be approved that is not consistent with the General Plan.

A. Minor Amendments

Minor Amendments include minor changes to the Specific Plan, that may be reviewed and approved by the Director for the City of San Marcos. Minor amendments may include the following:

1. Correction or revisions to text to resolve ambiguity pursuant to Section 7.2.4.

2. Additions, deletions, or modifications to Table 2.1. Gran Vista Residential (GVR) Use Classifications, which are consistent with the objectives of the Specific Plan, provided that density, intensity, and traffic, are not increased.

3. Modifications to design guidelines for architectural and open space features, materials, landscape treatments, wall and fence design, lighting, and signage which are consistent and compatible with the surrounding area and neighborhood. Changes should provide an equal or superior design aesthetic and quality.

4. Revisions to the site plan that are generally consistent with the Specific Plan and the exhibits herein and do not result in any of the following:

    - An increased number of units
    - Additional environmental impacts not previously addressed in the project EIR
    - Conflicts with final conditions of approval in City issued permits, regulations, and approvals or as issued by other agencies with jurisdiction over the project
    - Expansion or contraction of the outer geographic boundaries of the Specific Plan
    - Deviations of more than 20% from Table 2.2. Conceptual Distribution of Allowable Uses

5. Modifications to the Specific Plan that are of a similar magnitude to those listed above, which are deemed minor by the Director and conform to the objectives of this Specific Plan.

Should the Director determine a proposed revision does not meet the criteria for a Minor Amendment, a Major Amendment shall be required. The Director may delegate his/her administrative decision to the Planning Commission. The applicant may also appeal the Director's decision to the Planning Commission in accordance with the appeals procedures set forth in the SMMC.

B. Major Amendments

If no mechanism can be applied from the defined parameters listed previously in this chapter or as determined by the Director, a major amendment to the Specific Plan shall be required. The City of San Marcos shall process all formal Specific Plan Amendments in accordance with the SMMC. Additional environmental review may be required unless the proposed changes do not warrant additional environmental review in accordance CEQA.

7.2.8. Environmental Review

The Environmental Impact Report (EIR) certified concurrently with the Gran Vista Specific Plan shall serve as the primary environmental document for all subsequent discretionary entitlements within the planning area. Pursuant to Government Code Section 65456, any residential development project, including any subdivision, or any lab use permit that is undertaken to implement and is consistent with a Specific Plan for which an environmental impact report has been certified is exempt from the requirements of CEQA. However, if after adoption of the Specific Plan, substantial changes are proposed to the project that would result in additional impacts not already analyzed by the EIR, the exemption does not apply unless and until a supplemental environmental impact report is prepared and certified in accordance with CEQA. After a supplemental environmental impact report is certified, the exemption specified in this subdivision applies to projects undertaken pursuant to the Specific Plan. Subsequent determinations of the level of environmental review for discretionary approvals will be determined by the City of San Marcos on a project-by-project basis in accordance with the California Environmental Quality Act (CEQA) Guidelines.

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